

**HEALTHY HABITS
START
EARLIER THAN
YOU THINK**



**active
healthy
kids**
CANADA

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

2010

**START YOUNG.
START STRONG.**



2010 Active Healthy Kids Report Card on Physical Activity for Children and Youth

Active Healthy Kids Canada relies upon its strategic partners, who play a critical role in the research, content development and communication of the Report Card:



Research Institute
Healthy Active Living and Obesity Research
Institut de recherche
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* 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 2010 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth

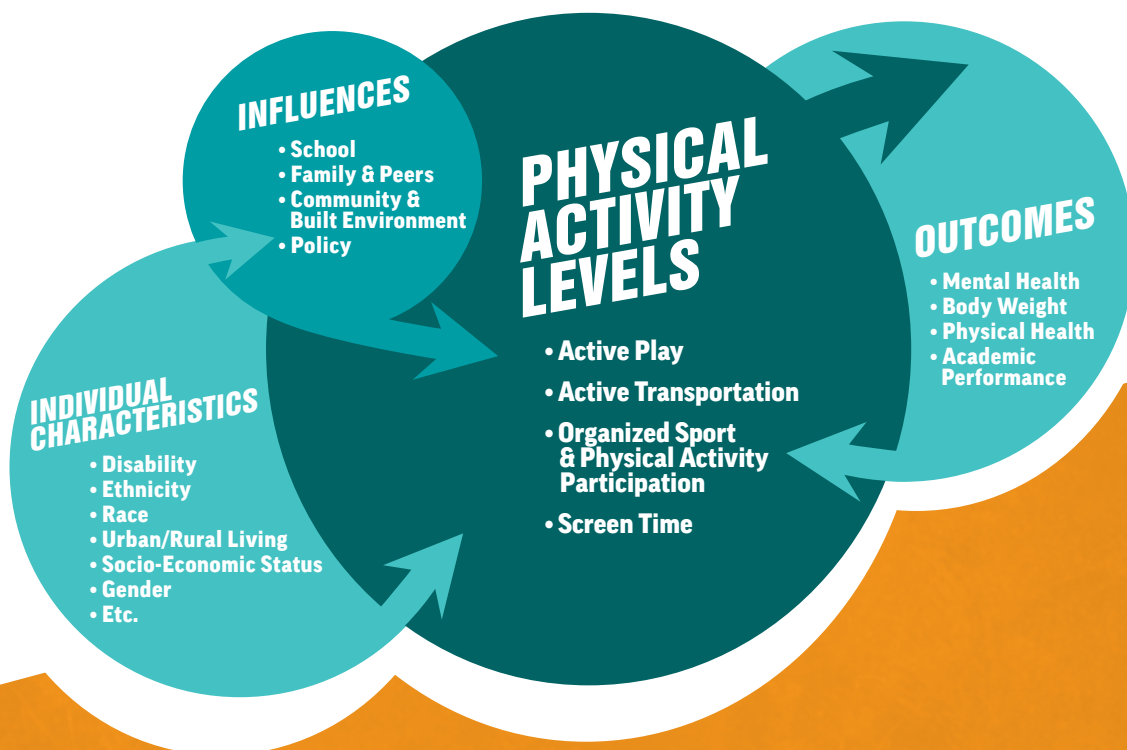
Active Healthy Kids Canada is a national organization with a passionate, informed voice providing direction to policy-makers and the public on how to increase, and effectively allocate, resources and attention toward physical activity for Canadian children and youth.

The 2010 Report Card marks the 6th annual overview of the many factors impacting the poor state of physical activity in this country. To overcome a societal problem of this magnitude, all levels of government, non-governmental organizations, researchers, corporations and foundations need to be engaged in a collaborative effort to improve the physical activity profile of the country.

Our hope is that the Report Card will support effective program and message development, as well as enhanced policy creation and implementation, and will identify areas that require further work and action.

The figure below summarizes the complexity of understanding physical activity in children and youth by identifying key sources of disparity (individual characteristics), indicators where we need to take action (influences) and the outcomes associated with physical activity levels (outcomes). This serves as the framework by which the Report Card is organized.

The Report Card starts off by highlighting the importance of physical activity among our nation's youngest population. It considers the outcomes associated with physical activity (noting psychosocial outcomes in particular this year) and explores recently released data on the declining fitness of the nation. The Report Card then transitions into an evaluation of 17 indicators across 5 broad areas of influence: physical activity levels, school, family and peers, community and the built environment, and policy and funding.



INTRODUCTION AND REPORT CARD DEVELOPMENT TEAM



Vancouver 2010

We congratulate all of the Canadian athletes who competed in the Vancouver 2010 Olympic Games, and we recognize the Canadian Government for investing in elite sport through the Own the Podium initiative. The majority of Canadians feel that the 2010 Olympics have had a positive impact on Canadian unity, pride and participation in active living.¹ It is our hope that the Games will provide lasting inspiration for Canadians to get outside and get active, and that the support they need to make this happen will be in place for them.

Start Young. Start Strong.

The 2010 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth seeks to call attention to the need to ensure that the youngest members of our society get an active start in life.

Our evaluations tell us that the Report Card serves to promote media coverage and informs public debate, policy development and implementation, research proposals, academic publications, local and international research conferences, communications campaigns, funding decisions and general discourse.

Our aim is to always provide knowledge that can mobilize action. Considering the overall Report Card findings and this year's focus on the early years, many of us can take action and provide the "power to move kids":

Policy-makers – Invest in healthy active living for children 5 years and younger. Ensure child care policies and programs mandate daily physical activity indoors and outdoors; target parents and caregivers with messaging and incentives to get kids active and to be active with their kids, while reducing kids' TV and computer time.

Health Care and Public Health Professionals – Promote physical activity, active play and reduced screen time as part of early years programs that support parents of young children with healthy growth and development – particularly regarding attachment, speech and language, nutrition and healthy active living. Ensure safe outdoor spaces for children to play.

Recreation Leaders in the Community – Develop resource plans that include playground supervisors to help alleviate parental concerns about safety (something that appears to be a key barrier to get kids outside to play). Work in partnership with schools to provide this supervision on school grounds in out-of-school hours.

School Administrators and Educators – Mandate daily physical education taught by specialists and foster daily physical activity as part of a comprehensive healthy schools approach to the overall educational day. Work in partnership with public health and community recreation leaders to supplement school-day programming and provide physical activity opportunities after school.

Early Childhood Administrators, Educators and Assistants – Deliver training and provide resources to provide a minimum of 90 minutes of daily active playtime that involves free-time active play and structured activities. Encourage kids to play outdoors whenever possible.

Parents – Keep TVs out of bedrooms, institute daily screen time limits (especially for very young children), and provide opportunities for active outdoor play.

ACTIVE HEALTHY KIDS CANADA

Report Card on Physical Activity for Children and Youth

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Getting a Good Start – Physical Activity in the Early Years

This year, Active Healthy Kids Canada is taking a closer look at an age group that has typically not received a great deal of attention in the realm of physical activity and health. The burgeoning obesity epidemic, coupled with the known challenges of treating obesity, has led to increased interest and efforts on the prevention of obesity. In addition, the early years have been identified as a critical period for growth and acquisition of motor skills that are needed to be physically active throughout life.² Health practitioners and researchers are looking earlier and earlier in the lifespan to determine when interventions should take place to effectively instill healthy lifestyle habits and prevent obesity. A new wave of research is even considering the influence of the fetal environment on healthy active living outcomes during infancy and childhood. (Refer to the **Family** indicator for more information.)

Obesity in the Early Years

Sadly, overweight and obesity are becoming more and more common among preschool-age children in Canada. Two independent reports from separate regions in Canada indicate that the prevalence of obesity in children aged 2 to 5 years is between 8 and 11%.^{3,4} National surveillance data show that 15.2% of 2- to 5-year-old children are overweight, and 6.3% are obese.⁵ This reality should be high on public health agendas given that obesity in infancy persists through the preschool years,⁶ and children who become obese before the age of 6 are likely to be obese later in childhood.⁷ Obese children have a 25 to 50% increased risk of being obese as adults,⁸ and it is estimated that overweight 2- to 5-year-old children are 4 times more likely than their healthy-weight peers to become overweight as adults.⁹

Canada is Failing on the International Stage

On an international scale, Canada is failing its youngest citizens. Each year, UNICEF publishes a Report Card to explore and monitor the performance of the Organization for Economic Co-Operation and Development (OECD) countries in securing the rights of their children. The 2008 UNICEF Report Card, titled "The Child Care Transition," focused on the shift from parents raising children to out-of-home child care, while considering the scientific evidence demonstrating that loving, stable, secure and stimulating relationships with caregivers in the earliest months and years of life are critical for every aspect of a child's development.¹⁰ These two points sound alarms for policy-makers and citizens of all OECD countries. The poignant question being asked is whether the current child care transition represents an advance or a setback for our children and for tomorrow's world. OECD countries were assessed on 10 indicators ranging from training of child care staff to national investment in the early years and provision of parental work leave policies. Canada achieved an acceptable grade in only one indicator, and tied for last place with Ireland. **What was the key criticism on Canada? The delay of "substantial public investment in education until children reach the age of 5."**¹⁰

Screen Time Influences Start Early

Infants and toddlers were once thought to be immune to environmental influences such as watching TV, playing video games, using computers and being cocooned indoors. However, evidence is emerging that these influences are impacting infants and toddlers, and the implications of this are potentially more damaging to a young child's development when compared to exposure that does not begin until later in childhood. **In 1971, the average age at which children began to watch TV was 4 years; today, it is 5 months.¹¹ More than 90% of children begin watching TV before the age of 2 in spite of recommendations to the contrary.¹²** The National Longitudinal Survey of Children and Youth (NLSCY) shows a troubling picture for preschool-age children in Canada. Data from 2004-2005 indicate that 27% of children aged from 2 to 3 years, and 22% of children aged from 4 to 5 years, are watching more than 2 hours of TV per day. Researchers caution that the flashing lights, quick edits and auditory cuts used in TV shows may be overstimulating developing brains and therefore negatively affecting language development, attention span and cognitive development.¹² **When infants are put in front of a TV at an early age and thereby not encouraged to explore and learn from their own environment, there could be long-term consequences in development.**

No studies to date have demonstrated benefits associated with early infant screen exposure; the majority of evidence suggests the potential for harm.¹² U.S. sales for DVDs for baby viewing are in the vicinity of \$500 million per year.^{13,14} According to a report in the *New York Times* in 2003, 32% of American babies aged 6 months to 2 years had at least 1 *Baby Einstein* video. By 2007, controversy about the educational nature of baby DVDs hit the mainstream, with widespread media reports about how their overuse may slow down acquisition of vocabulary in infants 8 to 16 months of age.^{11,15} A group called the Campaign for a Commercial-Free Childhood lodged a complaint with the U.S. Federal Trade Commission alleging the marketing of the products as educational tools was misleading, and in conflict with the American Academy of Pediatrics recommendations of no screen time for infants under 2 years.¹⁶ In 2008, a class-action lawsuit was also threatened for unfair and deceptive marketing practices. While Disney's *Baby Einstein* Company states publicly that it never claimed its products were educational,¹⁷ they did respond to public pressure by offering a refund to all U.S. and Canadian customers who purchased *Baby Einstein* DVDs between June 5, 2004 and September 4, 2009. As the controversy over early-childhood screen time exposure mounts, new e-parenting products continue to surface, with the *Globe and Mail* reporting that the iPhone is the "on-the-go pacifier for a new legion of tech-savvy parents" and that 4 of the 10 best-selling education apps in the iTunes store are designed for children under 4 years of age.¹⁸

Early Childhood Education and Child Care Settings – Kids Need to Move More

Research indicates that the child care facility has a very strong influence on young children's physical activity levels,¹⁹⁻²¹ making this an important setting to help young children obtain adequate levels of daily movement.^{22,23} Physical activity levels in child care settings are low,^{19,24} and a very recent review of all studies using accelerometers to assess physical activity in the early years (13 studies, 96 child care facilities, >1900 children) concluded that **physical activity levels within child care facilities are typically very low, and levels of sedentary behaviour are typically high.²⁵** In fact, long periods of inactivity in this age group are common, with one study reporting that 89% of the day was spent being sedentary.²⁶

A Knowledge Gap – Physical Activity in the Early Years

There is limited research exploring the relationships between physical activity and healthy development in the early years. This is likely due to the assumption that physical activity during the early years occurs naturally and thus does not require concerted attention.² Consequently, we currently have a poor understanding of how much physical activity is needed in the early years and what types of activity are best. **Physical activity and its importance to health in the early years represent a knowledge gap in Canada and around the world.**

Why Physical Activity is Important for Healthy Development in the Early Years

Although limited, the research that does exist supports physical activity as a key player in healthy child development and potentially in the prevention of obesity later in life. As little as an additional 60 minutes per week of physical activity has been associated with improved bone properties,^{27,28} aerobic fitness²⁹ and motor skills^{24,29-31} in young children, but further research is needed to further explore these relationships. The majority of the evidence points to the role of physical activity during these years on improving motor skill development, a key factor in the likelihood of participation in physical activity during later childhood and adolescent years.³²⁻³⁴ **If for no other reason, the fact that promoting physical activity during the early years enhances motor skill acquisition should be enough to support the need for physical activity in this age group.**

What Should Be Done to Increase Physical Activity Levels in the Early Years?

Canada has physical activity guidelines for school-aged children and youth (6 to 14 years) and adults. Until very recently little, if any, attention was paid to physical activity guidelines for children under the age of 6. In the context of the global childhood obesity epidemic and increasing evidence of lifestyle habits being imprinted early, countries are scrambling to review existing evidence to provide evidence-informed recommendations for physical activity in this previously understudied age group. Various initiatives are underway to develop guidelines for physical activity in the early years. **The key differences in this age group compared to initiatives for older children are a focus on facilitating unstructured play and the importance of getting children outdoors.** Children who spend more time outdoors and who are provided with appropriate play equipment are more active than children kept indoors.^{26,35} A summary of the guidelines proposed thus far is outlined in Table 1.



Table 1:
Summary of guidelines relating to physical activity and inactivity in infants, toddlers and preschool-age children.

Age	Structured Physical Activity	Unstructured Physical Activity (i.e., Play)	Inactivity, Sedentary Time and Screen Time	Environment and Supervision
INFANTS (<1 YEAR)	<p>Encourage physical activity from birth in order to develop muscular strength and connections between brain and muscles^{36,37}</p> <p>Provide daily opportunities; time is necessary to learn movement skills³⁶</p> <p>Encourage parents to attend classes about promoting physical activity during infancy and to attend parent-infant play groups³⁸</p> <p>Provide objects, toys and games that encourage infants to move and do things for themselves³⁸</p>	<p>Promote physical activity for infants in a way that considers their natural activity patterns, which are typically spontaneous and intermittent²</p> <p>Promote gross motor play and locomotor activities that children find fun²</p> <p>Promote exploration of the environment³⁹</p> <p>Provide a safe, nurturing and minimally structured play environment⁴⁰</p> <p>Develop outdoor activity and unstructured exploration under the supervision of an adult (e.g., walking in the neighbourhood or park, free play)⁴⁰</p>	<p>Ensure that children younger than 2 years do not spend any time viewing television or other electronic media (DVDs, computer and electronic games)^{37,41,42}</p> <p>Attempt to replace screen time with interactive activities that promote brain development such as singing, talking, playing and reading together⁴¹</p> <p>Avoid prolonged periods of time where children are in restrained seating such as in a high chair, small playpen, porta-cot, pram or stroller (except when the child is sleeping, of course)^{36,37}</p>	<p>Provide access to safe settings that meet or exceed safety standards, that facilitate physical activity and do not restrict movement for prolonged periods of time³⁹</p>
TODDLERS (1-3 YEARS)	<p>Encourage toddlers to accumulate 30 minutes of structured physical activity daily³⁹</p> <p>Encourage physical activity throughout the day in line with the natural intermittent and spontaneous activity patterns of this age group³⁷</p> <p>Ensure that the activities are fun and occur primarily through physical activity play but also as part of games, transportation, leisure and planned activities³⁷</p>	<p>Ensure that toddlers get 60 minutes and up to several hours of daily, unstructured physical activity³⁹</p> <p>Provide a safe, nurturing and minimally structured play environment⁴⁰</p> <p>Develop outdoor activity and unstructured exploration under the supervision of an adult (e.g., walking in the neighbourhood or park, free play)⁴³</p>	<p>Ensure that toddlers get no more than 60 consecutive minutes sedentary time except when sleeping³⁹</p> <p>Ensure that children younger than 2 years of age do not spend any time viewing television or other electronic media (DVDs, computer and electronic games)^{37,41,42}</p>	<p>Provide access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large muscle activities³⁹</p>
PRE-SCHOOLERS (3-5 YEARS)	<p>Encourage preschoolers to accumulate 60 minutes of daily structured physical activity³⁹</p> <p>Encourage activity that helps child develop competence in movement skills that are building blocks for more complex movement tasks³⁹</p> <p>Ensure that activities are appropriate for each child's developmental level and physical health status⁴³</p> <p>Avoid accelerating motor development to maximize subsequent sports ability⁴³</p> <p>Assess readiness to participate in organized sports on an individual basis from age 6 onwards^{37,38,43}</p> <p>Focus on participation and not competition⁴³</p>	<p>Encourage preschoolers to accumulate 60 minutes and up to several hours of daily, unstructured physical activity³⁹</p> <p>Emphasize physical activity as a lifelong activity of healthy living⁴³</p> <p>Promote free play and the development of fundamental motor skills⁴³</p> <p>Promote unstructured play at home, in school, in child care settings, and throughout the community⁴⁴</p> <p>Ensure that free play is fun and allow for exploration and experimentation with adequate safety measures in place⁴³</p> <p>Include few variables and instruction in unorganized play⁴³</p> <p>Encourage this age group to walk tolerable distances instead of using a pram or stroller⁴³</p>	<p>Avoid periods of 60+ consecutive minutes of sedentary activities except when sleeping³⁹</p> <p>Limit media time to no more than 1 to 2 hours per day of quality programming^{23,37,41,42,44,45}</p> <p>Remove TV sets from bedrooms^{37,41}</p> <p>Encourage alternative activities such as reading, athletics, hobbies and creative play⁴¹</p> <p>Reduce sedentary transportation by car and stroller⁴³</p>	<p>Provide access to play spaces and equipment outdoors. Encourage adult facilitation (including modelling)³⁶ that provides skill-learning experiences and contingent feedback about those experiences²</p> <p>Provide access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large muscle group activities³⁹</p> <p>Encourage parents to act as role models by participating in regular physical activity themselves^{38,43}</p>

Consensus: "All children aged 1 to 5 years should participate in at least 2 hours of physical activity every day, accumulated over many sessions and as part of play, games, transportation, and recreation."³⁷

Declining Fitness in Canadian Children and Youth

Childhood obesity and inactivity have been at the forefront of child health concerns in Canada in recent years,^{14,46-52} with compelling evidence that childhood obesity is rising^{5,53} and that inactivity is the norm.^{14,49-52,54} In January 2010, Statistics Canada released troubling data on the fitness of children and youth.⁵⁵ The data are from the Canadian Health Measures Survey (CHMS), the most comprehensive health survey ever conducted in Canada, with a primary aim of obtaining direct and objective measures of health indicators on a nationally representative sample of Canadians aged 6 to 79 years. For the first time since the Canadian Fitness Survey in 1981, we have an update on changes to the fitness of Canadian children and youth over a single generation.

Why is Fitness Important?

Quite simply, fitness is associated with participation in physical activities,⁵⁶ reduced risk of obesity⁵⁷⁻⁶⁰ and improved motor skill development.³⁴ The latter is postulated to be a key factor in the likelihood of participation in physical activity and sport in children and youth.⁶¹⁻⁶³ In other words, if Canadian children and youth have poor fitness levels, then we have reason to believe they are physically inactive and at risk for becoming overweight or obese.

The CHMS data show that fitness levels have declined significantly and meaningfully since 1981, regardless of age or sex. Figure 1 provides an example of the fitness transformation of a typical 12-year-old boy and girl between 1981 and 2007-2009. In 2007-2009, a 12-year-old boy was, on average, about 5 centimetres (2 inches) taller than his 1981 counterpart and weighed 6.4 kilograms (14 pounds) more. His waist circumference was 1.3 centimetres larger, hip circumference 6.0 centimetres larger, and his body mass index (BMI) had increased by 1.1 kg/m². His grip strength declined by 5 kilograms, and his flexibility score decreased by 5.1 centimetres. In 2007-2009, a 12-year-old girl was, on average, about 2.8 centimetres (1.1 inches) taller than her 1981 counterpart and weighed 4.9 kilograms (11 pounds) more. Her waist circumference was 5.6 centimetres larger, hip circumference 4.8 centimetres larger, and her BMI had increased by 1.1 kg/m². Her grip strength declined by 3 kilograms, and her flexibility score decreased by 3.8 centimetres.⁵⁵

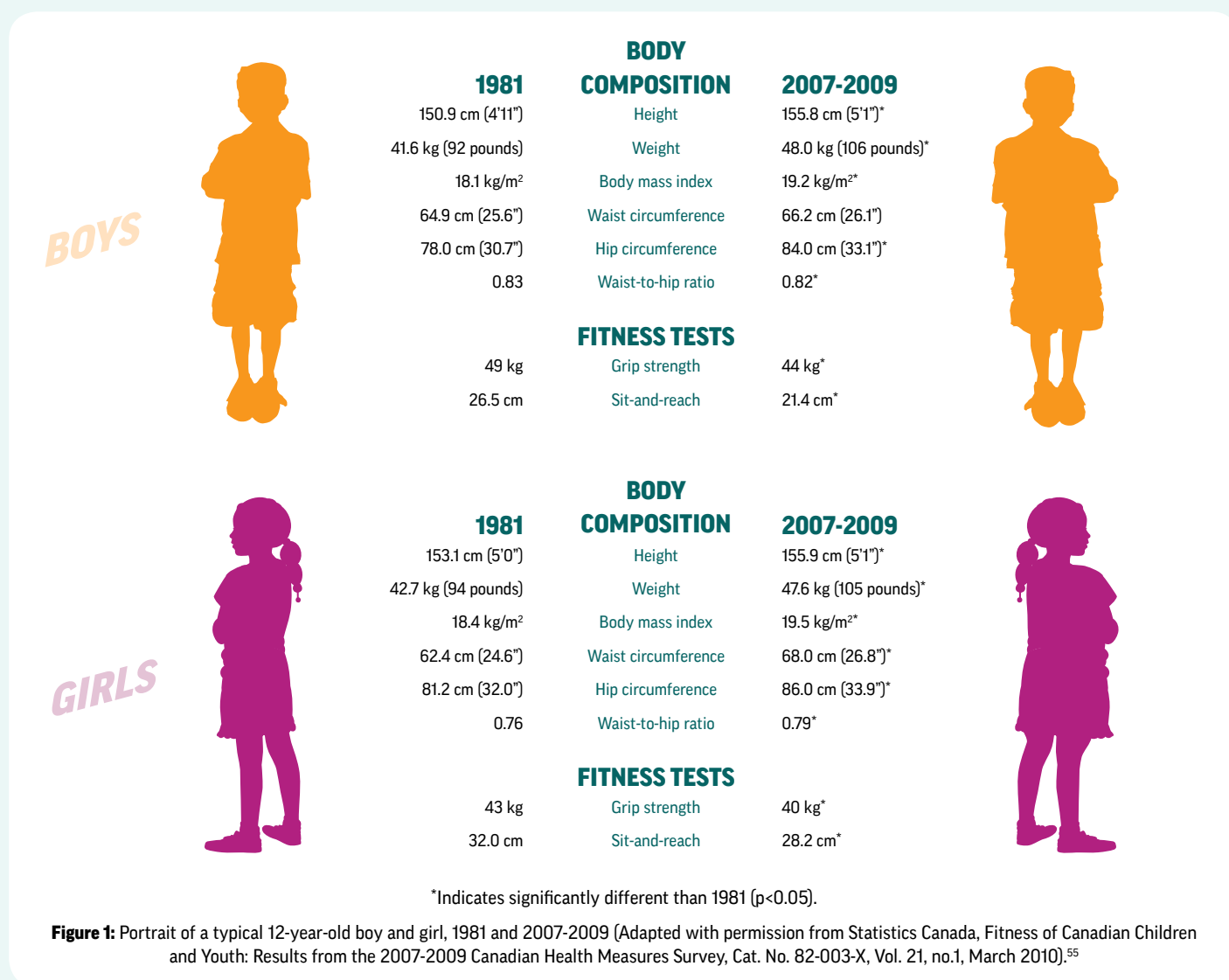


Figure 1: Portrait of a typical 12-year-old boy and girl, 1981 and 2007-2009 (Adapted with permission from Statistics Canada, Fitness of Canadian Children and Youth: Results from the 2007-2009 Canadian Health Measures Survey, Cat. No. 82-003-X, Vol. 21, no.1, March 2010).⁵⁵

Why is Physical Activity Important? Focus on the Psychosocial Outcomes of Physical Activity

The relationships between physical activity, or the lack thereof, and a range of psychosocial outcomes including body image, self-esteem and self-efficacy are reviewed here. Broadly, research has shown physical activity to be associated with improved psychological well-being, reduced depression and anxiety levels,^{64,65} reduced peer victimization,⁶⁶ and improved self-esteem.⁶⁷ However, it is important to consider that this relationship can go both ways. In other words, although physical inactivity may lead to reduced psychological well-being, a poor mental health profile may reduce motivation to be physically active in the first place.^{66,68,69} Large school-based healthy active living interventions initiatives have been shown to increase physical activity in students, and are associated with a higher incidence of feelings of being more relaxed and confident⁷⁰ as well as a lower incidence of emotional problems, even at one year follow-up.⁷¹

Physical Activity and Body Image

Body image refers to our personal relationship with our body, especially our beliefs, perceptions, thoughts, feelings and actions that pertain to our body size and shape.⁷² It is important for children to develop a healthy body image, because body image influences how we feel about ourselves, our eating behaviour, physical activity and overall quality of life. While this is a concern for both boys and girls, there is evidence suggesting that girls struggle more with developing a healthy body image.^{73,74} One would expect that physical activity would be consistently associated with enhanced body image in children and youth because it can reshape the body and help with weight control; however, the research in this area is inconsistent. Some research has shown a positive relationship between physical activity and body satisfaction,^{75,76} while others have found no relationship between physical activity and body image,⁷⁷ and one study even found that physical activity was associated with greater body dissatisfaction.⁷⁸

Physical Activity, Perceived Physical Competency, Self-Efficacy and Self-Esteem

Physical competency, also known as physical self-perceptions or physical self-esteem, plays an important role in the development of a physically active lifestyle for children and youth. Low scores on perceived physical competency are consistently associated with reduced physical activity, and high scores on perceived physical competency are predictive of more regular and frequent physical activity in children.^{79,80} Similarly, research on physical self-efficacy, which is the belief or confidence that one is capable of performing a physical behaviour, is a strong predictor of physical activity behaviour and enjoyment of physical activity among children and youth.^{81,82} Thus, it is not surprising that interventions designed to increase physical activity have been shown to increase physical competency and self-efficacy for physical activity, which is important as this is likely to lead to even more physical activity, creating a positive cycle.⁸³⁻⁸⁶

Self-esteem, generally defined as how one feels about oneself as a person, is an important barometer for physical and psychological health. Systematic reviews evaluating the effects that physical activity interventions have on self-esteem in children and youth show that improved self-esteem from physical activity is one of the most consistently reported psychological benefits of physical activity.^{67,87} Most of these studies have been short-term, so the long-term benefits of exercise or physical activity on self-esteem in children and youth remain unknown and need further study.

TV Viewing, Computer and Video Gaming (Screen Time) and Mental Health

Very little research has examined the psychological effects of TV viewing and computer gaming (collectively referred to as screen time). One of the most studied topics is the effect of observing violence on TV, and studies have consistently shown that the more violence viewed on TV, the greater likelihood that children will behave aggressively.^{88,89} Similarly, playing violent video games has also been associated with more aggressive behaviour,⁹⁰ as well as attention problems and reduced school performance.⁹¹ In fact, TV exposure early in childhood is associated with later attentional problems and reduced cognitive ability,^{92,93} and increased likelihood of bullying.⁹³ Research has shown that increased TV viewing, computer play and cellphone text messaging reduces sleep time in children and adolescents, and results in greater feelings of fatigue.^{94,95} This suggests that not only does screen time reduce the time available for physical activity, but the resulting fatigue from reduced sleep may contribute to further reduced physical activity levels. Moreover, heavy media use in the form of TV viewing and playing computer games is associated with skipping meals and replacing meals with high-calorie and high-fat snack foods, and eating faster during meals to get back to enjoyable screen time,^{96,97} which may contribute to the childhood obesity epidemic. Several studies have shown that increased TV viewing is associated with several high-risk behaviours such as younger age at initiating smoking⁹⁸ and sexual intercourse,⁹⁹ and consumption of sweetened alcoholic drinks.¹⁰⁰

Summary

There is mounting evidence that physical activity improves physical competency and global self-esteem, and is helpful in the short-term management of anxiety and depression in children and youth. The relationship between physical activity and body image is not as strong as one would expect, but there is some evidence that increasing physical activity is associated with improved body image in normal-weight and overweight children and teens. TV viewing and computer game playing, also referred to as screen time, is associated with a host of negative psychological consequences such as increased aggression, reduced academic achievement and cognitive functioning, reduced sleep time and earlier initiation of high-risk behaviours. It is worth noting that when used appropriately in moderation and monitored by parents, TV viewing and educational computer games can enhance academic achievement, and reduce disruptive behaviours and improve psychological profiles in children and youth.

PHYSICAL ACTIVITY AND INACTIVITY

INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
PHYSICAL ACTIVITY LEVELS	F	<ul style="list-style-type: none"> Overall, 12% of children and youth are accumulating enough physical activity to meet Canadian guidelines (CFLRI CAN PLAY 2007-2009). Only 5% of adolescent girls are meeting Canadian physical activity guidelines (CFLRI CAN PLAY 2007-2009). 	<ul style="list-style-type: none"> Policy-makers, funders and programmers should pay particular attention to including the children and youth most in need of help when it comes to physical activity. Those who are: <ol style="list-style-type: none"> 1) overweight or obese, 2) adolescent girls, 3) from an Aboriginal community, 4) living with a disability, 5) from a low-income family or low-education household. <p>Interventions need to be sure to target those most in need.</p>
ORGANIZED SPORT AND PHYSICAL ACTIVITY PARTICIPATION	C	<ul style="list-style-type: none"> Income disparities have consistently lowered the grade for sport participation since the inception of the Report Card. Despite being aimed at lower-income families, the Canadian Fitness Tax Credit appears to be yielding more benefit for middle- and upper-income families. Children involved in organized sport and physical activity programs have higher overall levels of physical activity.²³⁴ 	<ul style="list-style-type: none"> Often physical activity interventions reach those who already have support to be physically active and already engage in physical activity, rather than those most in need. Research indicates that governments, foundations, sponsors and non-governmental organizations need to target resources to participants who are not in "supportive" households, and should target households that require support to overcome barriers associated with income, transportation, work schedules, etc.¹⁰¹ Health promoters should take note that sport participation rates in the younger generation are decreasing rapidly. As children approach adolescence, organized sport opportunities in the school and community tend to be skewed to those who participate in competitive sport. Policies and programs should focus on ensuring more variety and promotion of recreational sport leagues, with strong youth-led components, and opportunities for programs to be designed and delivered by youth. There is also a need to link sport development objectives to healthy living messages targeting girls.¹⁰¹ There is a need to consider youth culture and subcultures (e.g., social networking and competing sedentary interests) in planning programs for adolescents. There may be opportunities to use screens to help promote active living, as well as opportunities for media literacy skills for youth whereby they can critically analyze the messages they receive from screens and also think critically about balancing screen time with active time for themselves.¹⁰¹
ACTIVE PLAY	F	<ul style="list-style-type: none"> Recommendations indicate that at least half of the physical activity accumulated by children should be in active play. 88% of Canadian children and youth are not meeting national physical activity guidelines (CFLRI CAN PLAY 2007-2009), which suggests they are also not engaging in sufficient amounts of active play. Yet 74% of a group of children in Ontario said that if they were allowed to decide, they would choose to do something physically active after school (CAPL Study, 2009). 	<ul style="list-style-type: none"> It is challenging to measure children's play, and more research is needed on how to best capture this information. Even in the absence of the desired objective data needed to influence nationwide changes in this area, everyone can contribute to making small changes that will promote free and active play for Canada's children and youth. It has been suggested that children require blocks of free time to plan, pretend, and enact play as individuals and a group. Families, child care centres, schools and community settings need to provide safe, supervised yet unstructured play spaces for active play where children and their peers can engage in physical activity of their own design. This will increase physical activity levels and promote imagination, social interaction and the ability to learn and practice skills independently. <p>What are YOU doing to provide opportunities for children to engage in free, unstructured, active play? Do YOU encourage, promote and participate in active outdoor play?</p>



INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
ACTIVE TRANSPORTATION	D	<ul style="list-style-type: none"> Evidence is sparse, but regional data indicate that less than 1/3 of children and youth regularly use active transportation to get to and from school.²⁴³ 	<ul style="list-style-type: none"> Parents and schools should be encouraged to promote active transportation as a safe and inexpensive way to increase physical activity levels. Creative solutions such as “walking school buses,” requiring that students be dropped off at least 400 metres from school, or discouraging parents who live in the immediate community from driving children to school altogether, are worthy of further exploration. It is also important that future national surveys assess active transportation rates among Canadian youth, in order to determine whether trends are improving.
SCREEN TIME	F	<ul style="list-style-type: none"> Canadian youth are accumulating 6 hours of screen time on weekdays and more than 7 hours on weekend days (HBSC 2005-2006). In Canada, 27% of 2- to 3-year-old toddlers and 22% of 4- to 5-year-old preschoolers are exposed to more than 2 hours of screen time per day (NLSCY 2004-2005). 	<ul style="list-style-type: none"> Parents should implement household rules on screen time. Active video gaming can replace sedentary time but not outdoor active play or physical education. Parents should be provided with recommended guidelines on screen time from their family physician or pediatrician, and encouraged to offer alternatives to screen time in the early years. TVs and computers should be removed from children’s bedrooms. Parents should be good role models and limit leisure-time screen time to a total of 2 hours per day.

Physical Activity Levels

Year	2005	2006	2007	2008	2009	2010
Grade	D	D	F	F	F	F

2010 Grade

The physical activity grade is an “F” for the fourth straight year to reflect the lack of change in physical activity levels evident from the directly measured data from the Canadian Fitness and Lifestyle Research Institute’s Canadian Physical Activity Levels Among Youth (CFLRI CAN PLAY) study. Last year we reported that the proportion of children and youth meeting the guidelines had increased from 9% in 2006 to 13% in 2008. The most recent data indicate that 12% of children and youth are meeting the current Canadian physical activity guidelines. According to these data, no substantive progress has been made in the physical activity levels of Canadian children and youth over the past 3 years.

Key Findings

This year, we decided to also look at the proportion of children achieving 60 minutes of moderate to vigorous physical activity per day, which is roughly equivalent to 13,500 steps per day. One reason for this approach is to harmonize with international guidelines for physical activity in children and youth. Another reason is simply to better understand our physical inactivity crisis in Canada. When so few (12%) are meeting the guideline, it is worthwhile knowing how many are getting close. The most recent data available (2007-2009) indicates that 31% of children and youth are accumulating 60 minutes of physical activity per day on top of incidental movement. This suggests that the majority of Canadian children and youth are falling far short of the present guidelines.

Provincial and territorial breakdowns indicate that, on average, no jurisdiction is achieving the Canadian physical activity guideline of 16,500 steps per day. British Columbia and Yukon were statistically higher than the national average in 2007-2009, while New Brunswick and Nova Scotia were statistically below the national average in 2007-2009 (Figure 2). Insufficient data were collected in Nunavut in 2005-2007 to include them in the graph for 2005-2007; however, a separate Nunavut study using slightly different methodology found that physical activity levels of children in Nunavut did not appear to differ significantly from the Canadian average.

The overall national prevalence of 12% is discouraging. When we delve deeper into the data, there is some good news and bad news in the age and gender breakdowns. It is important to note that 20% of boys aged 5 to 10, and 15% of boys aged 11 to 14 are meeting the guideline. By contrast, only 5% of adolescent girls are meeting the guideline (Figure 3).

The Canadian Physical Activity Guidelines are referred to several times throughout the Report Card. For clarification, the full guideline is as follows for children and youth (6 to 14 years): Work toward adding 60 minutes of moderate physical activity and 30 minutes of vigorous activity for a total of 90 minutes per day of moderate-to-vigorous physical activity. This activity should be in addition to daily incidental movement. This is roughly equivalent of 16,500 steps per day.



In August 2008, the Ministers responsible for Sport, Physical Activity and Recreation set 2 new physical activity targets for children and youth. The first was to increase the proportion of children and youth meeting the physical activity guideline by 7%, from 10% to 17%, by 2015 (i.e., a 1% increase per year). The second was to increase the average step counts per day from 11,500 to 14,500 by 2015, an increase roughly equivalent to increasing physical activity by 30 minutes a day.

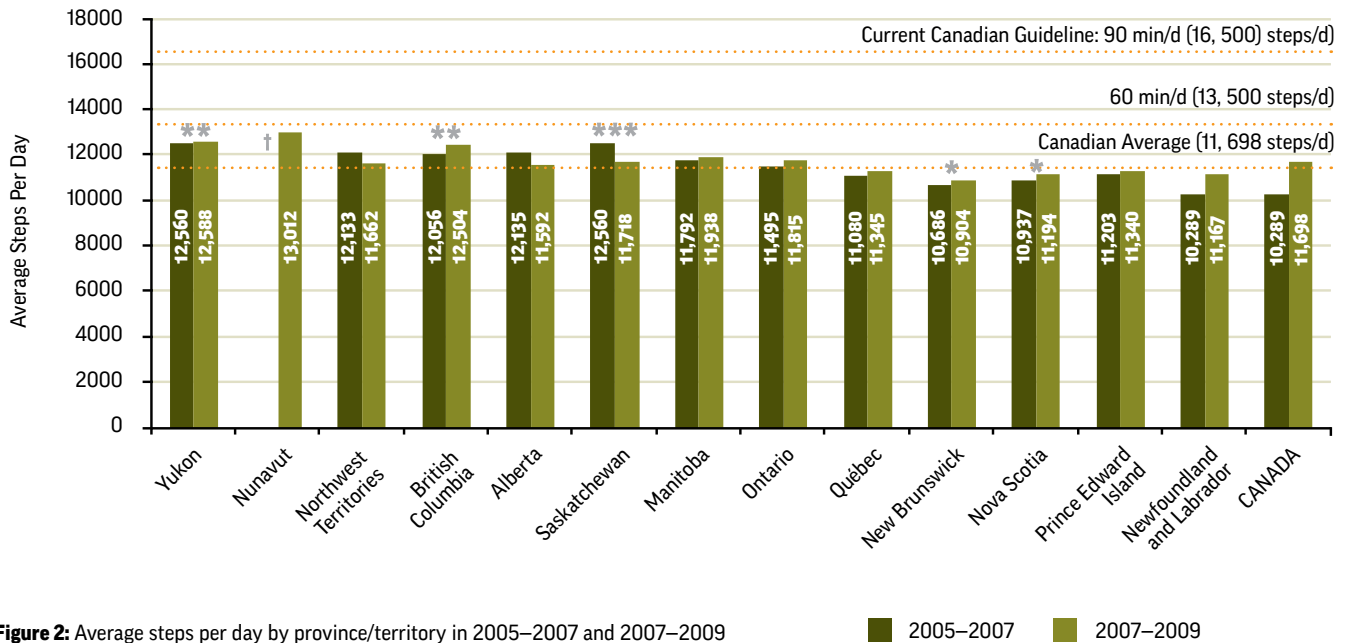


Figure 2: Average steps per day by province/territory in 2005-2007 and 2007-2009

- * Significantly lower than the national average in 2007-2009
- ** Significantly higher than the national average in 2007-2009
- *** Significantly different from 2005-2007 to 2007-2009
- † Insufficient data in Nunavut in 2005-2007

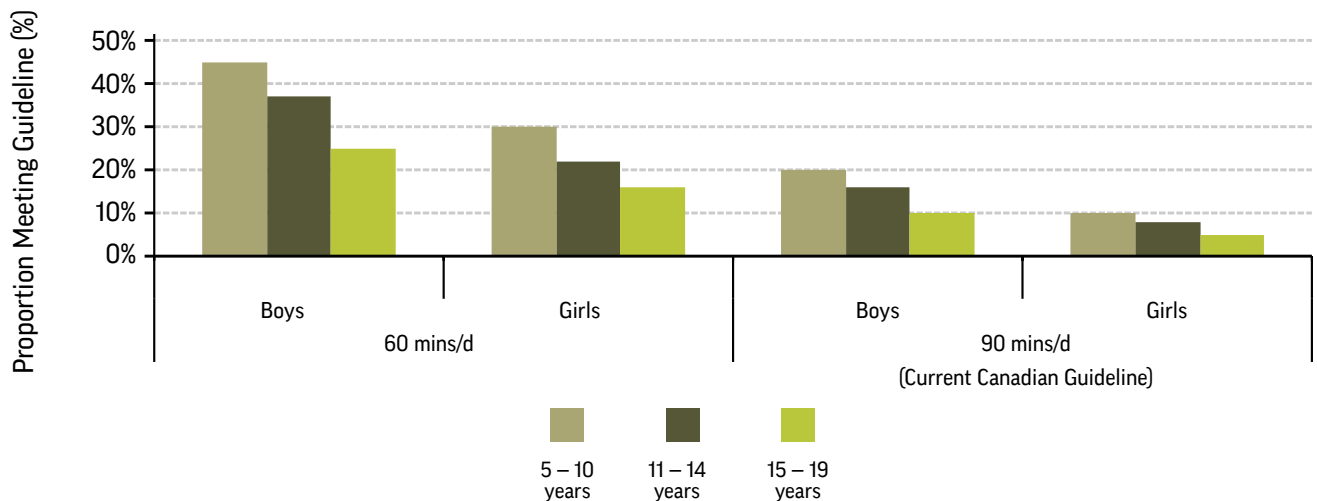


Figure 3: Proportion of children and youth achieving 60 and 90 minutes per day of moderate to vigorous physical activity, presented by gender and age group.

Where Do We Need to Focus Extra Effort to Increase Physical Activity Levels?

Overweight and Obese Children and Youth

Researchers at the University of New Brunswick are exploring parental experiences in facilitating physical activity in their children who are overweight or obese.¹⁰² The 10-week program includes education in health, nutrition, leisure and physical activity through group and individual sessions with a nurse, dietitian and leisure educator. Of the 25 families who have completed the program, many reported having an increased awareness of their child's use of time and of new strategies for shifting the time spent in sedentary activities to physically active time. In addition, many parents reported that they are more aware of and likely to use community resources. (Refer to the **Family** indicator for more information about the importance of parents as agents of facilitating healthy lifestyles in children and youth.)

Girls

Since the inception of the Report Card in 2005, Active Healthy Kids Canada has reported on the gender disparity in physical activity participation. This gender disparity in physical activity levels has been demonstrated to be consistent over time from many surveys (e.g., CAN PLAY, Web-Survey of Physical Activity and Nutrition [Web-SPAN], School Health Action, Planning and Evaluation System [SHAPES], Health Behaviour in School-Aged Children [HBSC]). The most recent CAN PLAY data from CFLRI (2007-2009) show that the average steps taken per day by boys are higher for all age groups compared to girls (Figure 3). Overall, twice as many boys meet the physical activity guidelines compared to girls (16% versus 8%). Of concern, only 5% of girls aged 15 to 19 years met the physical activity guideline. The Physical Activity Levels and Dietary Intake of Children and Youth in the Province of Nova Scotia (PACV) Study also showed that boys are more active than girls across all age groups in both the 2001-2002 and 2005-2006 study cycles.¹⁰² Moreover, the HBSC Survey found that boys were more active than girls in both 1989-1990 and 2005-2006.

In response to declining physical activity participation among girls, programs have been established to address this trend. The Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) conducted a project called In Her Voice that involved focus group conversations with 13- to 17-year-old adolescent girls regarding their perspective about physical activity and sport.¹⁰³ A total of 46 girls from 6 sites across Canada participated in the project. The overarching recommendation for creating programs for girls was to make it "fun." Other recommendations included: make it social, appeal to their interests, offer a variety of activities, create a low-pressure environment, provide opportunities for success (remembering that small changes make a big difference), have positive and experienced leaders and, finally, make it easy to get involved.

Older Adolescents

Younger children took more steps than older adolescents in the 2007-2009 CFLRI CAN PLAY study. Specifically, 15% of children aged 5 to 9 years, 12% of children aged 11 to 14 years, and 7% of youth aged 15 to 19 years are meeting the physical activity guideline. Figure 3 shows the importance of considering age and gender when looking at these data. We appear to be having greater success with boys aged 5 to 14 years; however, very few adolescent boys and girls of all ages are meeting the physical activity guideline. The most recent HBSC cycle showed that the duration and frequency of physical activity levels were highest in Grade 6 students and lowest in Grade 10 students, whether based on hours of participation or frequency of participation. This mirrors data from the Tell Them From Me (TTFM) Survey showing a decline in self-reported physical activity throughout high school.

Aboriginal Communities

In the last 40 years, chronic disease associated with low levels of physical activity has emerged as a leading cause of premature morbidity and mortality in indigenous populations throughout North America.¹⁰⁴⁻¹⁰⁶ Research indicates that increasing levels of physical activity in these high-risk populations protects against type 2 diabetes, cardiovascular disease and a range of secondary complications.^{104,107-109} The evidence that physical activity protects against chronic disease has led to increased federal, provincial and private funding over the past 20 years in order to support the design, implementation and evaluation of chronic disease prevention programs in native communities.^{110,111} It is important that funding is sustained and directed towards the development and evaluation of more physical activity, recreation and sport programs that are based on the terms of Aboriginal peoples.

In 2009, a systematic review of physical activity interventions was published that provides insight into what is working and where we need to go next.¹¹² Successful programs have empowered lay and professional community members to guide and develop the local and cultural relevance of the intervention, and involved community members outside of public health professionals in program design, implementation, evaluation, outcome interpretation and fiscal management.¹¹²



Implications for Health Promotion Practitioners and Researchers¹¹²

There is currently an absence of programs that both target the growing population of urban Aboriginals and are designed from an Aboriginal perspective. The programs should use culturally relevant styles of promotion and evaluation plans that are based on scientifically proven methods that are acceptable to the community and practical for local personnel to implement.

Individuals who work with Aboriginal people should incorporate a community-based participatory research approach to: 1) enhance the cultural and local relevance of the intervention, 2) integrate the interventions into tribal infrastructure to assure local leadership, ownership and support, and 3) develop sustainable evaluation plans to assess impact to justify continued financial support and guide program modifications.¹¹²

“The most effective programs demonstrated impact on multiple levels, specifically high risk behaviours, health and fitness measures, shifting local norms by gaining support of local leadership, and blending formal public health practices and cultural traditions”¹¹²

Children with Disabilities or Behavioural Challenges

The 2001-2002 HBSC Survey found that 11.6% of respondents reported having a disability, and these children reported slightly lower levels of physical activity than youth without disabilities. A recent Canadian study compared children with and without physical disabilities to shed light on how children with disabilities differed in their preferences for physical activity. The study used 2 new measurement tools developed at McMaster University in Hamilton, Ont., called the Children’s Assessment of Participation and Enjoyment (CAPE) and the Preferences for Activities of Children (PAC).¹¹³ The study found that children with disabilities preferred more informal activities and participated in less formal activities than children with typical development. Moreover, when children with disabilities participated in physical activities, they tended to participate at lower intensity levels than children with typical development. The top 5 most enjoyed activities for children with disabilities were: 1) going to the movies, 2) watching TV or a rented movie, 3) going on a full-day outing, 4) horseback riding, and 5) doing snow sports.¹¹⁴ Attention deficit hyperactivity disorder (ADHD) is increasingly common in Canadian children and youth. Research from McGill University in Montreal found that young boys with ADHD are less proficient in physical movement and more likely to report negative feelings about physical activity when compared to their peers without ADHD.¹¹⁵

Special Olympics Canada reported a 3% increase in enrolment in the past year, which they attribute to an increase in recruitment in school-based programs and community-based programs such as Active Start and FUNdamentals for Children. (www.specialolympics.ca).

Children from Lower-Income and/or Lower Parental Education Households

Data from the 2007-2009 CFLRI CAN PLAY study found that children from lower-income households accumulated fewer steps per day. Similarly, children from households where the parents’ highest level of education was high school or lower accumulated fewer steps than children whose parents had completed college or university.

A program run in Calgary shows promise as an intervention to help promote physical activity and recreation in economically vulnerable neighbourhoods. The strategy involved the use of “recreation facilitators” or “connectors” who worked with children and families over the course of a school year. These facilitators had a variety of backgrounds including social work, nursing, family support and child/youth recreation. Each connector served from 50 to 100 families. A greater proportion of children in the intervention group increased participation in physical activity when compared to a control group. The findings suggest that children living in vulnerable neighbourhoods can benefit from outreach workers who connect them with physical activity programs.¹¹⁶

A Truly “Canadian” Barrier to Physical Activity: The Weather

Not surprisingly, Canadians report that being active during the cold winter months is difficult. Researchers in Alberta reviewed 35 research studies and found that physical activity levels were affected by season in 83% of the studies. The influence of season appears to be more prominent in older children and adolescents; the impact upon preschool-age children is less clear, but appears to be similar.¹¹⁷ Overall, as the seasons become more extreme in temperature, particularly colder, children and youth are less likely to be active.¹¹⁸ These findings are important for practitioners designing programs for children and youth, as it highlights the need to make a concerted effort in the winter months. In addition, these findings should encourage researchers to not rely on a single measure of physical activity, as the result obtained may be significantly different in the same child at a different time of year.

The Heart and Stroke Foundation Report Card on Ontario’s Kids (www.heartandstroke.on.ca) reported that the proportion of children who are active in the summer has remained consistent from 1998 to 2009 (89% to 88%), whereas the proportion reporting they are active during the winter months has declined in the same time frame from 66% to 57%. This mirrors the CFLRI CAN PLAY data, which show that mean daily steps were lower between October and March compared to April and June.



Photo: Kent Patterson, Special Olympics Canada

The Role of Medical Doctors in Physical Activity Promotion

It is not unusual for primary care physicians to be asked for advice on physical activity. One study found that 70% of primary care physicians reported providing patients with verbal counselling for physical activity programs, but only 16% reported providing their patients with written prescriptions for physical activity programs.¹¹⁹ Bull and colleagues found that physicians are more confident in providing general advice (e.g., explain to a patient the importance of exercise) than specific advice (e.g., how much exercise, what type and how often) to increase their level of activity.¹²⁰ Pediatricians counsel fewer patients about aerobic physical activity for children and youth than family physicians and internists. Providing information on strength training is less common in all health practitioners, but lowest among pediatricians, of whom 50% do not provide any counselling on these exercises to any of their patients.¹²¹

Kennedy and Meeuwisse found that 42.4% of physicians felt “moderately knowledgeable” but only 9.7% felt “very” or “extremely knowledgeable” in providing exercise advice. About half of physicians rated themselves as “slightly” knowledgeable or lower. A total of 17% of primary caregivers believed they were not qualified to counsel patients on exercise habits.¹²² The 3 most common barriers to provide exercise counselling reported by primary care physicians include: inadequate time, insufficient knowledge and inadequate reimbursement.¹²³ It is encouraging to note that many physicians have requested formal education, exercise prescription aids and supportive literature to improve their knowledge on physical activity counselling.¹²³ This suggests that training programs should be implemented in order to help physicians provide preventive care for their patients.

Physical Activity in Nova Scotia

The Physical Activity Levels and Dietary Intake of Children and Youth in the Province of Nova Scotia (PACY) Study monitors physical activity and associated factors in students in grades 3, 7 and 11 using both objective (accelerometer) and self-report measures. PACY is run every 4 years through a partnership between the Department of Health Promotion and Protection and universities in the province. Data were collected on approximately 1,600 students in 2001-2001 and 2,300 in 2005-2006. Over this period, there was a significant decrease in physical activity in all 3 grades. The greatest decline was in Grade 3 students, suggesting that efforts need to be directed at all ages, including the early years.¹⁰²

Organized Sport and Physical Activity Participation

Year	2005	2006	2007	2008	2009	2010
Grade	C+	C-	C	C	C	C

2010 Grade

For the fourth year in a row, the 2010 grade for Organized Sport and Physical Activity is a “C.” Sport participation rates are high among children and youth in Canada, but the presence of disparities continues to hamper any grade increase. Participation in organized sport is associated with increased physical activity levels. To illustrate, the 2005-2006 HBSC study found youth who reported being involved in at least one organized sport were more active than youth who were not (24.8% vs. 12.5% were active for ≥60 minutes per day every day of the week). The same finding emerged in the CFLRI CAN PLAY data from 2007-2009: children who were involved in organized sport or physical activity accumulated about 1,500 to 1,700 more steps per day and were more likely to meet the physical activity guideline (13% versus 8%).

Key Findings

CFLRI data (CAN PLAY 2005-2009) show that participation in organized sport and physical activity has increased slightly between 2005 and 2009 (from 71% to 75%). Generally speaking, in each year, children of higher-educated parents are more likely to participate in organized physical activity and sport than are those of parents with lower education. Similarly, children in higher-income households are more likely to participate in organized physical activity and sport than lower-income households.

The 2004-2005 National Longitudinal Survey of Children and Youth (NLSCY) data show that 5% of 2- to 3-year-olds and 16% of 4- to 5-year-olds are participating in organized sports, and that an even larger proportion are participating in unorganized sports (36% of 2- to 3-year-olds and 44% of 4- to 5-year-olds). These numbers are encouraging given the recommendations summarized in the introduction (Table 1) indicating that organized sports should be introduced after the early years, which should focus on building competence and confidence in fundamental movement skills that can lay the basis for sport and broader physical activity participation.

Youth Engagement

Canadian researchers are examining participation and engagement in sport among a cohort of Canadian urban youth and the resulting impact on athlete development, sport organizations, businesses, sponsors and Canadian society. A literature review and preliminary analysis revealed that sport participation among urban youth was determined by 6 underlying drivers: household context, parental education, community context, social/gender expectations, self-perceptions and competing behaviours. Of interest, younger generations appear to be decreasing their participation at higher rates than other cohorts. The household context (e.g., number of parents at home, other family members' sports participation level, family income) emerged as a critical, if not the most important, element in adolescent sport participation.¹⁰¹

Policy Direction and Household Support

There is a need to develop policies that target the portion of the Canadian population requiring the most support. The middle-income family, with two parents living at home and a decent income, does not need as much help; their kids face fewer barriers to sport and physical activity participation. It is, in fact, living in cramped conditions and with limited income who really need the extra support; their kids are facing many barriers. Youth sport participation declines when household income falls below \$40,000 per year, indicating a need for government support for children of lower income earners.¹⁰¹

Aboriginal Sport

North American Indigenous Games (NAIG)

The NAIG is a multi-sport event involving indigenous North American athletes that has been running about every 3 years since 1990. The Games are governed by the North American Indigenous Games Council, a 26-member Council of representatives from the 13 provinces and territories in Canada and 13 regions in the United States. The 2008 Games were held in Duncan, British Columbia, and the 2011 games will be held in Milwaukee, Wisconsin.

Aboriginal Youth in British Columbia

In British Columbia the Aboriginal youth population is growing faster than the non-Aboriginal population, and Aboriginal children and youth under the age of 24 years make up 48% of the total Aboriginal population in the province. The First Nations Health Society published a document in 2009 titled "Promoting, Developing, and Sustaining Sports, Recreation, and Physical Activity in British Columbia for Aboriginal Youth."¹²⁴ The document argues that opportunities to participate in sports, recreation and physical activity can have a significant positive impact on the physical health and mental and emotional wellness of Aboriginal youth. The report highlights unique barriers Aboriginal children and youth face with respect to sport participation. For example, 42% of Aboriginal children under the age of 14 years do not live with both parents (for comparison, 18% of non-Aboriginal children in Canada live with a single parent). A lone-parent household faces additional financial and time barriers, which have a direct impact on a parent's ability to facilitate sport participation in their child.

The report also presents important data from the inaugural Aboriginal Youth Physical Activity Survey, which included data on 359 youth from 64 different First Nation and Métis communities. The top 3 sports reported were swimming, basketball and soccer. About half of the activities reported were considered traditional activities such as fishing, hunting and trapping. The primary barriers to participation related to health (e.g., unfit to play, health problems, injury, accidents), structure (e.g., missed too many practices to continue, not available nearby) and resources (e.g., financial, transportation).

Resources

- The Aboriginal Sport Circle (ASC) is Canada's national voice for Aboriginal sport. It brings together the interests of First Nations, Inuit and Métis peoples. Established in 1995, the ASC was created through a national consensus-building process in response to the need for more accessible and equitable sport and recreation opportunities for Aboriginal peoples (www.aboriginalsportcircle.ca). The ASC is committed to the development of Aboriginal athletes and coaches by supporting their efforts to achieve personal excellence through sport.
- A Recreation Director's Handbook for delivering recreation in Aboriginal communities was completed by Manitoba Aboriginal and Northern Affairs. The Handbook provides excellent guidance on various aspects important to recreation delivery, including program planning, fundraising, marketing and community involvement. It is available at the following website: www.northernlinks.org/pdf/RecreationHandbook_2008.pdf.
- Northern Links is a virtual recreational connection for rural, remote and Aboriginal communities. They have developed a toolkit containing information and resources to help create, plan, implement and evaluate recreational programs (www.northernlinks.org).
- The Kahnawake Sports & Recreation Unit (c/o Mohawk Council of Kahnawake; www.kahnawakesports.com) offers administrative and support services for minor sports in Kahnawake. Some of the services offered include administration of sports registrations, promotion of upcoming events and schedules, maintaining financial records and classifieds for buying/selling sports equipment.

Active Play

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	INC	INC	F

2010 Grade

The Active Play grade of “**F**” reflects the fact that the vast majority of children are not meeting physical activity guidelines, and since active play is a core component of physical activity, it must receive a failing grade. This indicator continues to require better and more representative data and harmonization of measurement. Emerging evidence is summarized below to justify the grade and why we need further research on this topic.

There was a time not so long ago when childhood involved being left alone to play freely with peers. Today’s parents appear to be shifting their focus away from providing physically active free play opportunities for their kids, and opting instead for organized sport and recreation programs or more protected indoor, screen-based leisure-time activities. Today’s children and youth are more familiar with being chauffeured to organized practices and classes than they are with hearing their parents tell them to go outside, keep themselves busy and not come inside until it gets dark outside. The evolution of enrichment programs and specialized training opportunities for children and youth has virtually eliminated the free time they have **to just go outside and...play!**

“When schools hire coaches to teach children how to play, it shows just how much we’ve destroyed childhood.”¹²⁵

Key Findings

Although many of us are able to conjure up a memory of playing freely as a child, we may have trouble pinpointing what constitutes play. Play is often characterized as an activity that a person desires to engage in – not what they are obligated to do, and is commonly defined by our attitude toward the activity we are engaged in, not by the nature of the activity itself.^{125,126} Play is an environment in which an individual can function and flourish, and is normally considered an enjoyable activity that is created, motivated and controlled by the individual. Play is incorporated into social structures because it promotes healthy brain development while contributing to the physical, social and emotional well-being of the young. In contrast to passive entertainment, active and free play helps to build active and healthy minds and bodies.¹²⁷ Throughout the stages of childhood, the type and function of active play changes.¹²⁸ Infants typically use play to establish voluntary motor control, while children in the preschool years use play as a form of exercise. This physical component of preschool play is beneficial for children’s cognitive development. As children move into middle childhood, play types shift from exercise into a more rough and tumble style, which functions to develop and maintain leadership and dominance in peer groups. It is around this time that strong gender differences in play type and participation emerge – with boys typically playing with more intensity and for longer amounts of time than their female counterparts.¹²⁸

We need to change public opinion about the role of play in order to value its importance in physical, emotional and cognitive development. When we understand the importance of play as a learning medium, we will be able to increase its value in the educational system.^{130,131} Perhaps we are not providing children and youth with adequate access to active play environments because the importance of play has been forgotten. Why is physically active, unstructured, free play so good for us? **When children engage in free, unstructured play, they not only develop their imagination, but also learn to work with others, tolerate small failures, send and receive subtle social cues, learn self-advocacy skills and develop leadership skills while practising acts of sharing, negotiation and conflict resolution.**^{126,127,130,132,133}

“The pedagogical value of play does not lie in its use as a way to teach children a specific set of skills through structured activities called ‘play.’ Rather, play is valuable for children primarily because it is a medium for development and learning.”¹³⁰

How much play do children need?

How much play do children need? It has been suggested that there are 3 phases to children’s free play: planning, pretending and enactment; and that children require a minimum of 45 minutes to carry out these 3 stages of play and should be free to engage in these play blocks at least 3 times daily.¹³³ Although Canada does not currently have specific guidelines for play, Health Canada states that our school-aged children and youth should be accumulating 90 minutes of physical activity on a daily basis. For children, it is desirable that half of this physical activity accumulation occur via unstructured, free-play settings.¹⁹ Guidelines for Australian children state that physical activity should occur primarily through active play up to the age of 5 years.³⁷

“Free play is not a glorious time-waster but possibly the key to the healthy development of a child’s mind, and the path to a productive adulthood.”¹³⁰

Play is such an important contributor to optimal growth and development that limited access to play opportunities has implications for public health. The importance of providing children and youth with sufficient access to play opportunities has been overlooked in recent years. However, active play is an excellent means for children to accumulate daily physical activity while simultaneously benefiting from the social, emotional and cognitive development that is acquired through free play experiences (Figure 4).

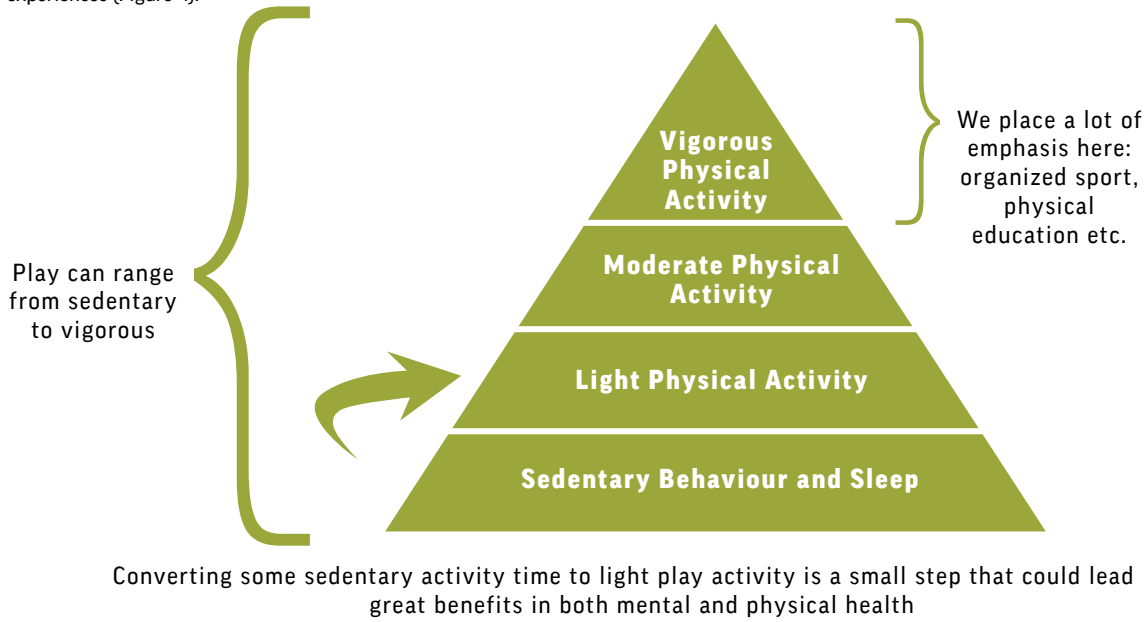


Figure 4: Depiction of the daily breakdown of physical activity patterns.

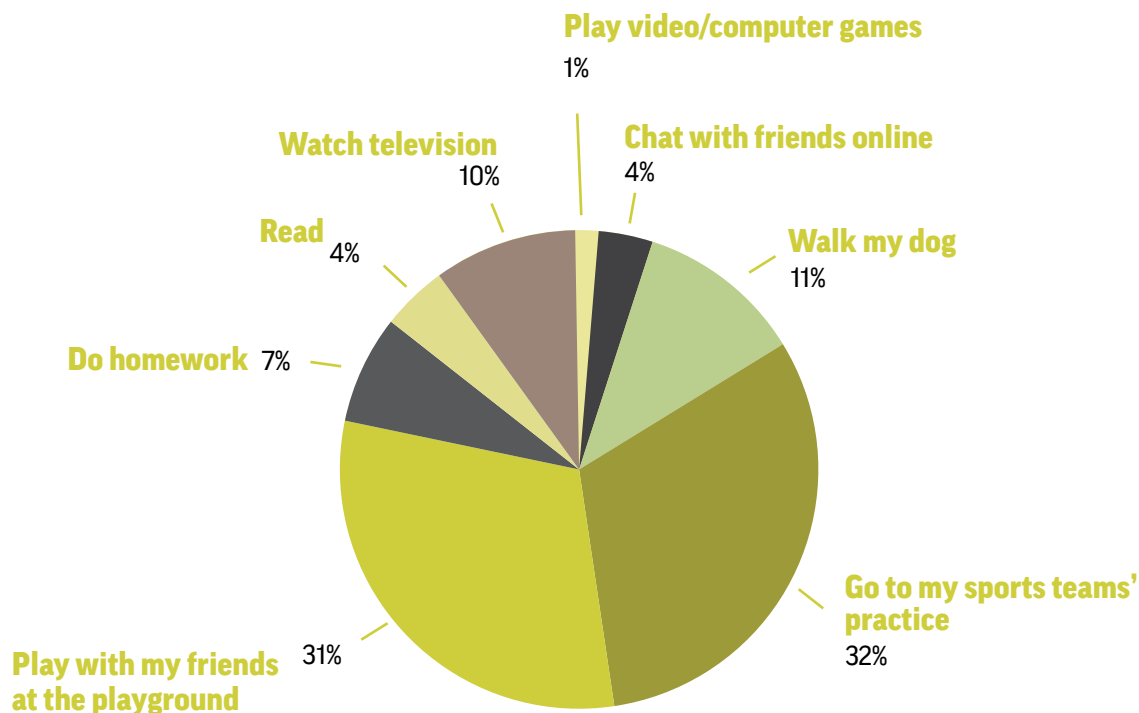


How Much Active Play are Children Getting?

The Best Start Resource Centre Survey (Ontario, December 2009, n = 304) found that 55% of parents disagreed with the statement that “children between the ages of 2 and 5 are naturally active and do not need to be encouraged to actively play.” Similarly, 83% of parents disagreed that children from this age group are too young for them to worry about the amount of physical activity they are getting. These findings suggest that many parents understand that we cannot simply assume that young children do not need help becoming more active. It is encouraging to note that 94% of parents reported they are going to strive to provide more opportunities for active play, and 45% are going to encourage their child care facility to do the same.

It has been suggested that children and youth do not have the access to the free, unstructured, physically active play that they require for optimal growth and development. Since 2008 the Report Card has asked researchers to find novel ways to measure and characterize play. Given its very nature, it can be difficult to study play. Questionnaires exist that either ask parents about the amount of time their child spends engaged in play¹³² or directly ask children about their own participation in free play.¹³⁴ As part of The Canadian Assessment of Physical Literacy (CAPL) research program, more than 600 Canadian children in grades 4 to 6 were asked: If you were allowed to pick which activity you do after school, what would you pick? It is encouraging that 74% of respondents would choose to engage in a form of physical activity by either playing with friends at the playground (31%), walking their dog (11%) or going to their sports teams' practice (32%)! (Figure 5). With low national levels of physical activity, there appears to be a disconnect between what kids are actually doing and what they would like to be doing.

It is challenging to measure children's play, but even in the absence of the objective data needed to influence nationwide changes in this area, everyone can contribute to making small changes that promote free and active play for Canada's children and youth. **What are YOU doing to provide opportunities for children to engage in free, unstructured active play? If you are a policy-maker, are you funding opportunities that support active play? If you are a community leader, are you creating opportunities for the children in your community to engage in safe active play? If you are a teacher, are you utilizing opportunities that allow your students to engage in active play? If you are a parent, are you ensuring that your children have both structured activities and free play?**



If you were allowed to pick what you do after school, which activity would you pick?

Figure 5: Canadian Assessment of Physical Literacy data showing what kids would like to be doing after school if they had the choice.

Active Transportation

Year	2005	2006	2007	2008	2009	2010
Grade	—	D	—	D	D	D

2010 Grade

Consistent with previous Report Cards, the grade for Active Transportation remains a “D.” Currently, there are not enough new data to assess whether active transportation rates among Canadian youth are improving.

Active transportation is any kind of human-powered transportation to school, such as walking, bicycling and in-line skating, as well as additional methods appropriate to our Canadian climate, such as skating, snowshoeing and cross-country skiing.

Key Findings

A recent survey of Prince Edward Island students in grades 5 to 12 found that just 11% commuted to school using predominantly active means (cycling, walking or skateboarding) (SHAPES PEI). Similarly, a survey of 258 Ontario schoolchildren in grades 4 to 6 found that just 23% commute via active means in the fall and winter, while 32% report commuting actively in the spring and summer (Figure 6; CAPL 2010). A provincial and territorial breakdown of active transportation is provided in Figure 7.

Anecdotal reports suggest that some school boards have begun to promote active transportation, and educational campaigns such as Active and Safe Routes to School are in place in several provinces (www.saferoutestoschool.ca). On the Move to School!, a program that aims to improve walking and cycling conditions for elementary school students in Québec, has reached 12,000 students at 85 schools since its inception in 2005.¹³⁵ One school in Ontario has even forbidden parents from driving their children to school, and estimates that 98% of their 700 students now commute to school using active means!¹³⁶ In opposition to these positive developments, there are reports that several schools have banned skateboards, inline skates and scooters due to safety concerns.¹³⁷ These reports suggest that although steps are being made in the right direction, there is still much work to be done.

A Key Player in Increasing Physical Activity

Other recent research has suggested that increased rates of active transportation could play a key role in improving public health. A recent study published in *The Lancet* estimates that increased active transportation could prevent 530 deaths per million people every year due to improved physical and mental health, and reduced pollution.¹⁴⁶ Similarly, a new report from the Quebec Longitudinal Study reports that children who commute using active transportation in kindergarten have healthier body weights in grades 1 and 2.¹⁴⁷ These findings underscore the important role that active transportation can play in the health of Canadian youth.

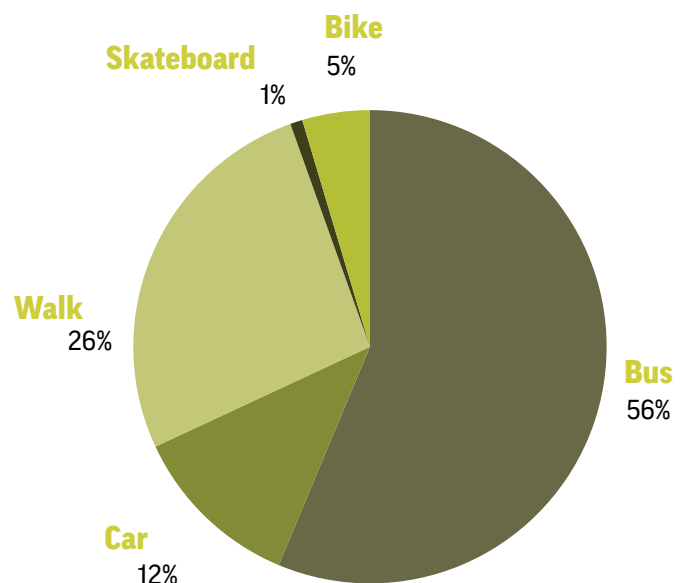


Figure 6: Mode of transportation to and from school in a group of 238 eastern Ontario school-aged children in the spring/summer.

Where Do We Need to Focus Extra Effort to Increase Active Transportation?

Neighbourhood Environment

Several recent reports underscore the important role played by the neighbourhood environment in the adoption of active transportation. Kids and parents who perceive their route to school to be safe, have strong social ties with neighbours and high emotional satisfaction with their neighbourhood are more likely to use active transportation on a regular basis.¹³⁹⁻¹⁴² Aspects of the built environment such as street connectivity and pedestrian infrastructure also have strong relationships with active transportation.^{139-141,143} Key challenges in this field of research include the urban/suburban classification and the spatial and temporal variability that exists at regional levels.¹⁴⁴ (For more on this topic, refer to the Community and Built Environment indicator.) Together, these findings suggest a need for improvements to the built environment and management of safety concerns.

Children's Mobility, Health and Happiness: A Canadian School Travel Planning Model

A new Canadian School Travel Planning Model is getting underway in several Canadian jurisdictions. The project is funded through the Canadian Partnership Against Cancer's Coalitions Linking Action and Science for Prevention (CLASP; \$15.5 million in funding). Co-funded by the Public Health Agency of Canada and the Heart and Stroke Foundation, CLASP is designed to improve the health of Canadians by preventing chronic disease.

The project focuses on increasing the number of children doing daily physical activity and on promoting healthy lifestyles. The program does this by changing the way elementary school children travel to school. School Travel Planning (STP) is an established, community-based model that contributes to chronic disease prevention through activities that promote the use of active transportation. This project encourages the creation of policies and practices that go beyond using school buses as transportation by engaging local practice and policy partners (public health, police, municipal planners, traffic engineers, school boards, parents and school administrators) to develop and implement travel plans that will create conditions that make it safe for families to use active transportation to and from school. The results have multiple benefits for children, their families and the school community, including increased physical activity for children, parents and caregivers, and fewer cars on the road, which may reduce harmful emissions and contribute to improved air quality in school zones. The long-term goal of STP is to motivate changes to municipal and school board policies and practices so that active transportation to and from schools is commonplace. STP projects are already underway in 7 jurisdictions (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Nova Scotia and the Yukon). The CLASP funding will support the implementation of STP in all provinces and territories in Canada, and lay the foundation for future local sustainability. Participating organization include: Green Communities Canada; Yukon Parks and Recreation; Hub for Action on School Transportation Emissions (HASTE); Safe, Happy, Active People Everywhere; Saskatchewan in Motion; Resource Conservation Manitoba; University of Toronto; Green Communities Canada – Active and Safe Routes to School; Cape Breton University; and Ecology Action Centre. Participating organizations from other provinces and territories will be recruited during the start-up phase of national dissemination of the STP model.

"We treat our children's lives like we're cruise ship directors who must get them to their destination "adulthood" smoothly, without their feeling even the slightest bump or wave."¹⁴⁵

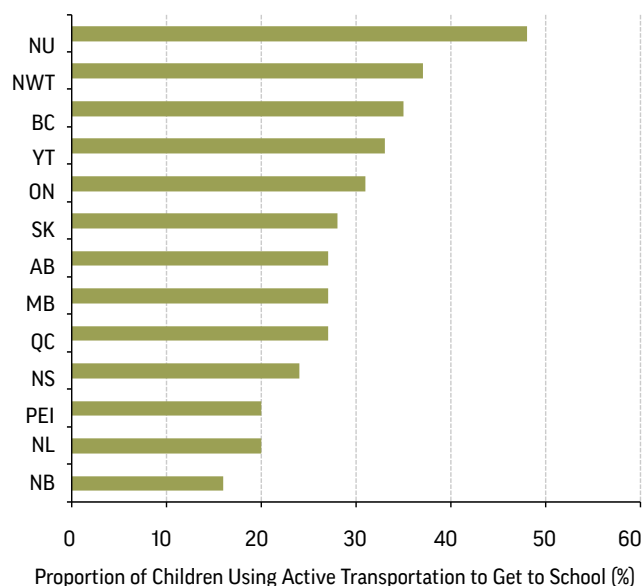


Figure 7: Proportion of Canadian children engaging in active transportation to get to and from school, by province and territory (Adapted from Trudeau and Shepherd, Sports Medicine, 2005¹³⁸).

Active and Safe Routes to School National Partnership

This is a network of organizations, government agencies and professional groups in the United States that work together to implement Safe Routes to School programs. The goal of these programs is to get more children and youth walking and biking to school daily. To help reach this goal, children are taught safe behaviours when interacting with traffic, and some states have invested millions of dollars in new bike lanes, pathways and sidewalks to alleviate parents' safety concerns. Look for data from pilot communities in next year's Report Card. For more information, visit www.saferoutespartnership.org. To learn more about how this initiative is progressing in Canada, go to www.saferoutestoschool.ca.

Screen Time

Year	2005	2006	2007	2008	2009	2010
Grade	C-	D-	D-	D	F	F

2010 Grade

The grade for screen time is “F” again, reflecting the most recent and best available data on Canadian children and youth, which clearly demonstrate that screen time is pervasive and dominates the leisure time of our young people.

Today, the typical 8- to 18-year-olds’s home contains an average of 3.8 TVs, 2.8 DVD or VCR players, one digital video recorder, 2.2 CD players, 2.5 radios, 2 computers and 2.3 console video game players.¹⁴⁸ Exposure to the media has become one of the most dominant forces in young people’s lives, and this exposure is increasingly occurring at very young ages.¹¹ A report published in early 2010 in the United States paints a troubling picture of how dramatically the pervasiveness of electronic media has changed even in the last few years. Children are engaged with media more than any other activity in their lives, with recent estimates suggesting the number to be 7.5 hours per day, 7 days a week. This is roughly equivalent to the average adult’s working week! Clearly the displacement of physical activities has been profound. **Furthermore, the exposure to media messages about family, peers, relationships, sex, violence, food, values, clothes and many other topics has changed the environment in which today’s youth grow up.**

Key Findings

The HBSC Survey is our best mechanism to understand the amount of screen time Canadian youth are engaged in. The most recent cycle available (2005-2006) indicates that youth are accumulating more than 6 hours of screen time on weekdays and more than 7 hours per day on weekends.^{14,52} These results are similar to the recent findings in the U.S.¹⁴⁸ A regional study conducted in Prince Edward Island reported mean screen time values close to 4 hours per day, with just 20% of the children and youth surveyed achieving the guideline of less than 2 hours per day (SHAPES PEI). In other words, 80% of children in Prince Edward Island are not meeting the screen time guidelines. The majority of parents (71%) say their children participate in some form of sedentary behaviour during the after-school period and before the evening meal (CFLRI CAN PLAY).

Intuitively, children who are more sedentary tend to accumulate fewer steps per day and, in turn, are less likely to meet the physical activity guideline (CFLRI CAN PLAY). The TTFM Survey shows that for every hour of screen time children and youth accumulate, they spend 1/3 of an hour less being physically active. Children most at risk of spending a lot of time in front of screens appear to be adolescents, those with parents with lower education, those from larger communities, those not participating in organized activities, those with inactive parents and children with disabilities.

TV watching is only part of the story. The Kaiser Foundation Report suggests that TV as a medium is decreasing in usage as other media (e.g., iPods, hand-held devices, laptops) alter the way children and youth watch TV shows and movies.¹⁴⁸ This is consistent with a study on Alberta youth (Web-SPAN) showing that over the past 3 years, adolescents are spending more time playing video games and less time watching TV. The TTFM data also show an increase in computer use between 2006 and 2009.

Screen Time in the Early Years

In 1971, the average age at which children began to watch TV was 4 years old; today, it is 5 months.¹¹ More than 90% of children begin watching TV before the age of 2 despite recommendations to the contrary.¹¹ Canadian data from the NLSCY (2004-2005) indicate that 27% of children aged 2 to 3 and 22% of children aged 4 to 5 are watching more than 2 hours of TV per day!

The Kaiser Foundation – Generation M²: Media in the Lives of 8 to 18 Year Olds¹⁴⁸

Exposure to media was identified as a problem several years ago and, therefore, a key question now is: Has the situation changed over time? The answer is, unequivocally, “yes.” Five years ago, the Kaiser Foundation reported that young people spent approximately 6.5 hours per day with media and managed to pack 8.5 hours of media exposure into that time frame via multi-tasking. Today, young people have increased the amount of time they spend consuming media by 1 hour and 17 minutes **daily**, from 6 hours, 21 minutes to 7 hours, 38 minutes (Figure 8). With multi-tasking, the actual amount of media content is over 10 hours per day; an increase of almost 2 ¼ hours per day compared to 1999. It is important to note that these numbers refer to recreational media use only and not school-related media and screen-based time.¹⁴⁸



Why is Media Exposure Increasing?

1. The explosion in mobile and online media: "Try waking a teenager in the morning, and the odds are good that you'll find a cellphone tucked under their pillow - the last thing they touch before falling asleep at night and the first thing they reach for upon waking. Television content they once consumed only by sitting in front of a TV set at an appointed hour is now available whenever and wherever they want, not only on TV sets in their bedrooms, but also on their laptops, cellphones and iPods".¹⁴⁸ Today, 20% of media consumption (about 2 hours, 7 minutes) occurs on mobile devices - cellphones, iPods or hand-held video game players.
2. Increases in mobile media ownership: Over the past 5 years, the proportion of 8- to 18-year-olds who own their own cellphone has grown from 39% to 66%. The proportion with iPods or other MP3 players has increased even more dramatically, jumping from 18% to 76%.
3. Increases in home Internet access: In the past 5 years, home Internet access has expanded from 74% to 84%, the proportion of 8- to 18-year-olds with a laptop has grown from 12% to 29%, and Internet access in the bedroom has gone from 20% to 33%.

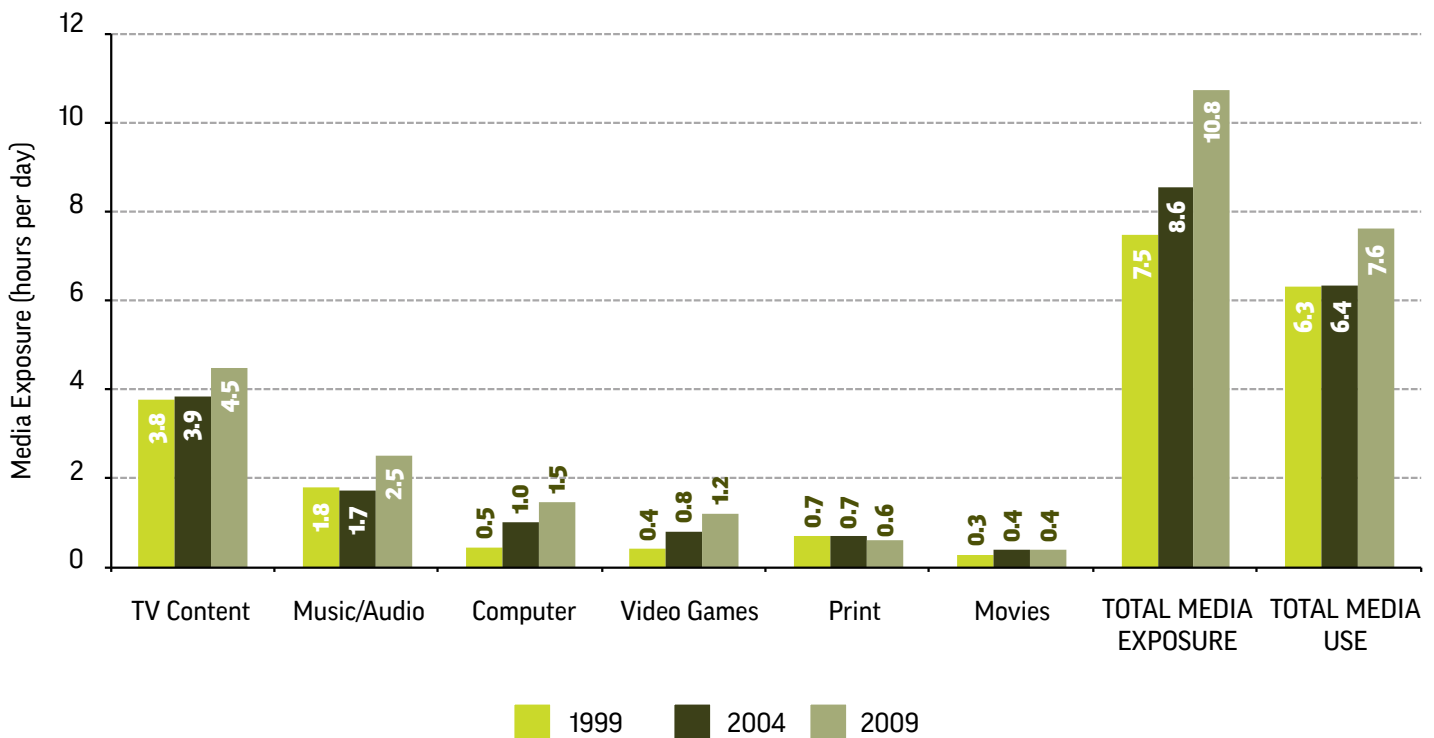


Figure 8: Breakdown of type of media use with total media exposure (includes multi-tasking) and usage over the past decade in children and youth 8 to 18 years old in the United States (Adapted from Generation M² - Media in the Lives of 8- to 18-Year-Olds, Kaiser Family Foundation Study¹⁴⁸).

Intervention Recommendations

A comprehensive review was recently conducted to inform and guide an initiative within the Physical Activity Strategy for the Halifax Region, which targets a reduction of screen time among children and youth. The design of the initiative will be based on the evidence presented in this report including target age, gender and setting, along with consideration of the Nova Scotia context and the availability of resources. The key finding of this report is that multi-component (i.e., physical activity and diet), multi-leveled (i.e., individual factors, parental relationship, school and community, built environment, policy) interventions targeting a range of behaviours - not just screen time - are the most promising way to improve child and youth health in the Halifax region and beyond. The authors stress the importance of not relying on the 'displacement effect' by targeting only sedentary behaviour, without also incorporating support for an increase in physical activity.¹⁴⁹

Active Video Gaming

The current generation of children and youth has been labeled the 'gamer generation.' Until quite recently, video games were a completely sedentary activity; however, active video gaming has altered the landscape by providing games and fitness programs that require users to get up off the couch. Researchers from the University of Calgary are exploring whether active video gaming is a way to work with students' interests to increase physical activity during physical education classes. Other Canadian researchers have expressed concern that the results of this study will potentially lead to the adoption of active video gaming into mainstream physical education programs. The worry is that physical education is designed to teach children how to be active by providing directed teaching in fundamental motor skills, cooperation in active group games and sports, and an overall understanding of the importance of active living to overall well-being and development,¹⁵⁰ and active gaming clearly falls short of these objectives.

Not surprising, research has shown that active video gaming leads to increased energy expenditure compared to resting quietly;¹⁵¹⁻¹⁵³ however, anecdotal reports from many parents confirm that children are savvy and learn quickly that they can lie on the couch and continue to play games with small flicks of the wrist. Therefore, the fitness and weight loss benefits touted by the manufacturers and demonstrated in controlled research studies cannot be guaranteed if users are finding shortcuts to avoid activity. One setting where active video gaming appears to be extremely beneficial and appropriate is in the rehabilitation and therapy of children with physical disabilities (e.g., cerebral palsy, disabling accidents). For example, the Bloorview Kids Rehab Centre in Toronto regularly uses active video gaming to engage children in therapy sessions.¹⁵⁰

Active Healthy Kids Canada strongly recommends the following in relation to active video gaming:

1. Active video gaming is a suitable replacement for sedentary activities as long as the participant is actually moving.
2. Truly 'active' gaming usage should be encouraged (i.e., full body movement, rather than flicking a wrist).
3. Active video gaming may be useful in some rehabilitation and therapeutic settings to help individuals overcome injury, disability, disease or aging-related issues.
4. Active video gaming **should not replace** outdoor active play.
5. Active video gaming **should not replace** organized sport and physical activity participation.
6. Active video gaming **should not replace** or even complement physical education in schools.



SCHOOL

INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
PHYSICAL EDUCATION	C-	<ul style="list-style-type: none"> Mandated physical education time is highly variable across Canada. Few data exist on how much physical education is actually delivered in each province and territory. As of September 2008, daily physical education was mandated in Manitoba. New Brunswick has committed to hiring more physical education specialists in their Anglophone school system. 	<ul style="list-style-type: none"> Specialist physical education teachers are recommended at the elementary school level. Daily physical activity that supplements physical education is recommended for all elementary schools. Increased evaluation and research on the developmental and health outcomes of physical education is needed.
SPORT AND PHYSICAL ACTIVITY OPPORTUNITIES AT SCHOOL	C	<ul style="list-style-type: none"> About half of Canadian children and youth report being involved in at least one school sport (TTFM 2008-2009). School sport participation decreases in high school (TTFM 2008-2009). More boys than girls participate in school sports, and this gap widens at the higher grades (TTFM 2008-2009). Physical activity is low and sedentary time is high in preschool-aged children attending child care facilities.²⁵ 	<ul style="list-style-type: none"> Provide ongoing support to The Joint Consortium for School Health as it continues to produce resources for teachers and school administrators to improve physical activity opportunities in a way that is individualized to each school's needs. For more information and to access their tool kits, visit www.jcsh-cces.ca. Schools should provide a variety of physical activity and sporting opportunities that appeal to students with different interests and ability levels, as these have been shown to be successful in motivating student participation and fostering student leadership. Create opportunities for student-led physical activity opportunities, particularly at secondary school.
INFRASTRUCTURE AND EQUIPMENT	B	<ul style="list-style-type: none"> Evidence is sparse but some regional surveys suggest that the majority of children and youth feel the physical activity facilities available at their schools are adequate (SHAPES PEI). 	<ul style="list-style-type: none"> Early childhood education centres and preschools should allocate financial resources for simple, age-appropriate toys and equipment to promote outdoor active play in preschool-age children.^{20,163}
SCHOOL POLICY	C	<ul style="list-style-type: none"> Many schools in Canada have school-based physical activity policies designed to improve levels of physical activity for the student population; however, the support for these policies and evidence of actual implementation is sparse.^{158,164,166} 	<ul style="list-style-type: none"> School-based physical activity policies need to be thoroughly evaluated for effectiveness, uptake and outcomes in order to inform program changes and to justify sustained funding.



Physical Education

Year	2005	2006	2007	2008	2009	2010
Grade	F	—	—	—	C-	C-

2010 Grade

In 2009, Physical Education (PE) was graded a “C-” in the Report Card. This year the grade is a “C-” again to reflect the limited new data available to justify moving the grade in either direction. PE is provincially mandated and therefore highly variable across the country. It also varies considerably within provinces at the preschool, elementary and secondary levels. This makes it particularly challenging to have a discussion at the national level. There is often a discrepancy (for any number of reasons) between time mandated for PE and what is actually being implemented in individual schools and classrooms. This is a persistent challenge for PE that is also complicated by mandated Daily Physical Activity (DPA) time in some provinces. DPA is not PE, and has never been intended to replace PE. PE provides students with an opportunity to learn how to play, move with competence, increase their physical fitness, engage in physical activity and learn the provincially mandated physical and health curriculum – in essence, become physically literate. PE teaches children the skills they need to be active outside of the classroom. DPA facilitates physical activity in children; it is not a substitute for PE. More attention to the importance of PE needs to be provided by each provincial and territorial Department or Ministry of Education, especially at the elementary school level. One setting that requires stronger support is preschool and child care as research indicates that children attending child care facilities spend a considerable amount of time being sedentary.

Key Findings

More Time in PE = Better Health Outcomes

PE has always been present in schools; however, its perceived importance through various lenses has varied over time. Improving the health of children through the development and promotion of active and healthy lifestyles is one of the major aims of today’s PE systems. It is undisputed that PE is an integral part of the education of the whole child. However, there is limited evidence about the long-term effects of quality PE on the health of a child. Increasing PE time in both elementary school¹⁵⁵ and high school settings¹⁵⁶ has led to decreases in body mass index (BMI). In a national sample of 9,751 American kindergarteners, researchers found that a 1 hour increase in PE instruction per week between kindergarten and Grade 1 led to a significant reduction in

BMI (-0.31 kg/m²) among girls who were overweight or at risk for overweight.¹⁵⁵ The relationship was not as strong for boys, but still led to a slight decrease in BMI. There was no reduction in BMI for children who were already at a healthy body weight. Another American study of 3,345 adolescents in grades 8 to 12 (from the Longitudinal Study of Adult Health) found that time in PE was associated with decreases in BMI over a span of several years.¹⁵⁶ They found that each weekday that adolescents participated in PE decreased the odds of being an overweight adult by 5%, with PE participation on all 5 weekdays decreasing the odds of being overweight as an adult by 28%.¹⁵⁶

What this means is that 2 separate surveys on 2 very different age groups found that increased time spent learning and engaging in the physical and health education curricula has a positive impact on the health of children and youth. What is not clear is whether the benefits are associated with the increased time being active or the educational content they learn which they can then implement or use outside of the classroom. The likely answer is a little bit of both – but the take home message is that **children need to spend more time in PE classes and policy makers need to take notice and provide the resources necessary for increased PE time and quality.**

Time Mandated for PE Across the Country

Education in Canada is provincially mandated and implemented. Therefore, the mandatory PE times were compiled by contacting the Ministry of Education for each of the provinces and territories, and verifying with Physical and Health Education Canada’s (PHE Canada) the best available information provided by their own provincial associations. It is a difficult task to determine the actual implementation rates within each province and territory.

Recent data from the School Health Action, Planning and Evaluation System for PEI (SHAPES PEI) indicate that only 10% of the students polled reported having 5 PE classes in the past week, and 36.5% reported having no PE classes in the past week. This reflects a disconnect in the time that is mandated by the province and what was reported by the students. Figure 9 shows the PE time as mandated in each province and territory.

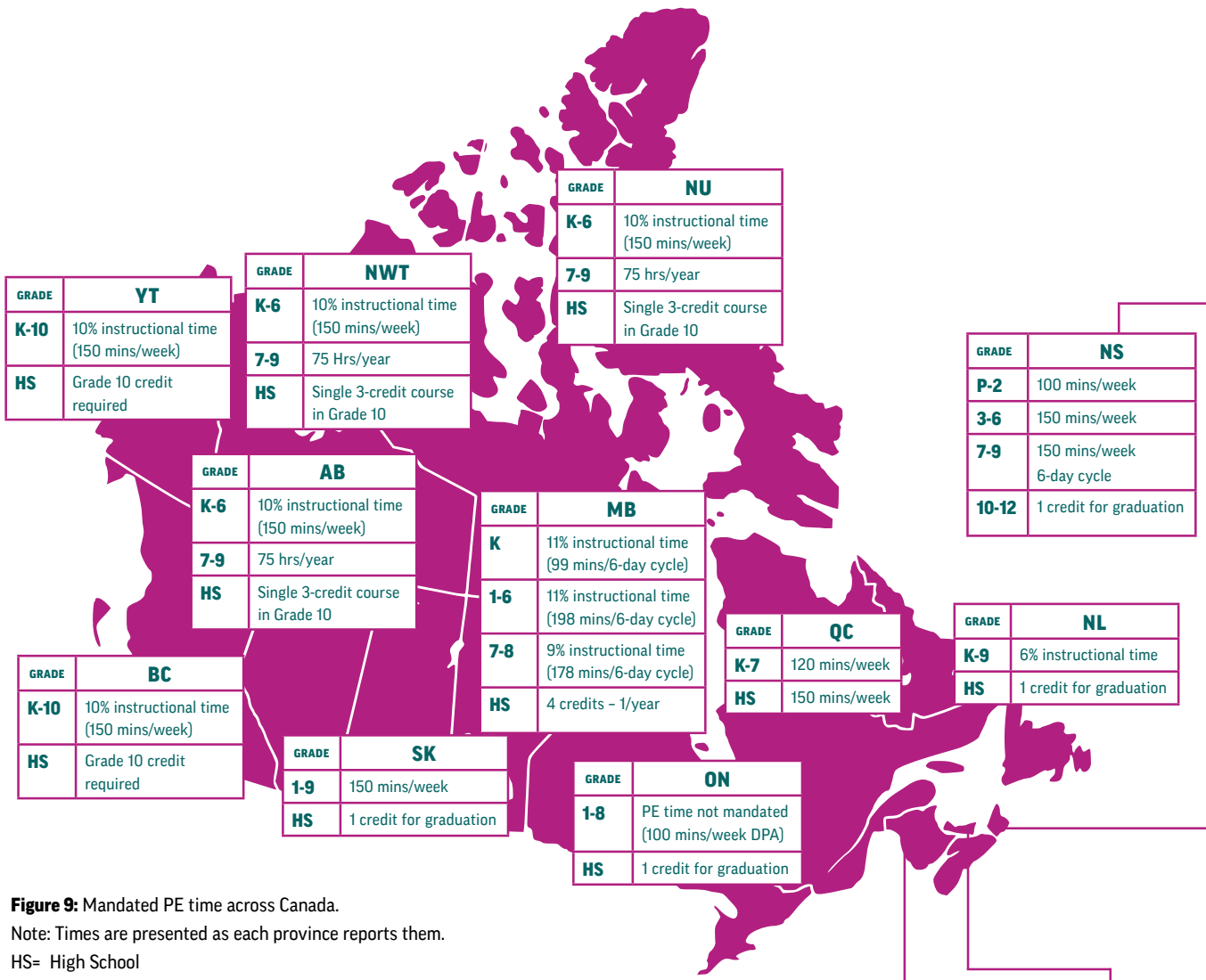


Figure 9: Mandated PE time across Canada.
 Note: Times are presented as each province reports them.
 HS= High School

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
1-6	5% instructional time (90 mins/6-day cycle)
7-9	4-6% instructional time (72-108 mins/6-day cycle)
HS	Not compulsory

Who is Teaching PE?

In the 2008 Active Healthy Kids Canada Report Card we reported on school level perceptions regarding training and support for teaching PE in Canadian schools. Of the schools surveyed, 77% indicated that they have access to a PE specialist, yet only 65% indicated that all students regularly received physical education instruction from those specialists. Only 23% indicated that only specialists deliver health and physical education curriculum. Further, only 46% of schools have fully implemented policies to hire specialists, and 37% say they have no policy to hire specialists (CFLRI Capacity Survey 2004, 2006).

PE specialists are not mandated in all provinces across Canada at the elementary level. This leads us to question what kinds of training generalist teachers receive in PE, and is it 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 physical education curricula.¹⁵⁷ 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...”.¹⁵⁷ Teachers were also quick to acknowledge their “inadequate specialist training and the resulting lack of knowledge” with regard to teaching PE.¹⁵⁷ The presence of PE specialists tends to increase as the size of the school increases.¹⁵⁸

Sport and Physical Activity Opportunities at School

Year	2005	2006	2007	2008	2009	2010
Grade	INC	INC	C	C-	B-	C

2010 Grade

The 2010 grade is a "C" and is lower than in 2009 to reflect the finding that physical activity levels in preschool-age children in child care facilities are very low. This is the first year that this age group has been included in the assessment of this indicator; however, we feel that organized child care is an important setting to consider when examining when and where physical activity habits are formed. When it comes to providing physical activity opportunities in school-aged children, the data suggest we are succeeding with at least half of students. Furthermore, between grades 6 and 12, approximately 50% of students participated in at least one school sport. Finally, about half of children report that they are active in free time at school for about 2 hours per week. There is certainly room for improvement in this indicator, as noted by the fact that only 29% of children reported having opportunities to be active outside of PE classes.

Key Findings

Participation in school sports appears to drop off as children transition from middle (more than half participate) to high school (fewer than half participate) (TTFM, 2008-2009). Another key issue is that boys are more likely to participate in school sports than girls in grades 6 to 12. The gender divide appears to widen in the later grades (TTFM 2008-2009). Another concerning reality is that levels of objectively measured physical activity of young children attending child care programs are low, and time spent being sedentary is high.²⁵

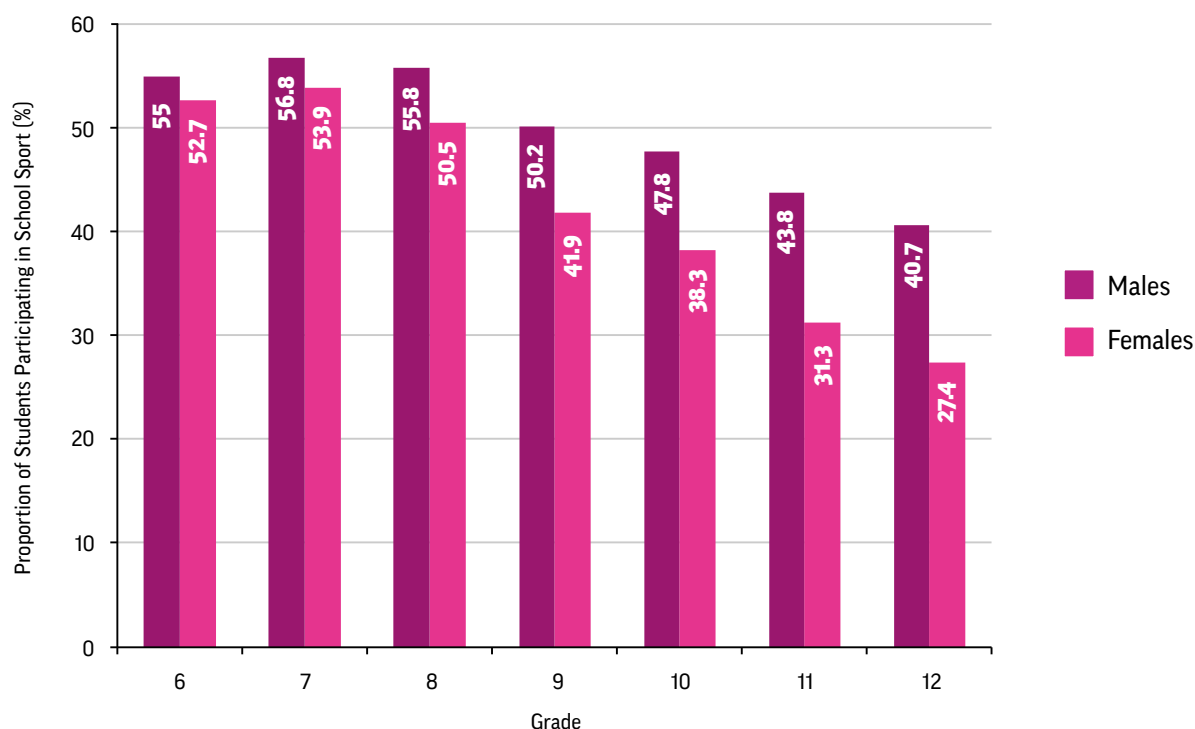


Figure 10: The proportion of students in grades 6 to 12 who report participating in at least one school sport (TTFM 2008-2009).

Physical Activity During School

The Tell Them From Me (TTFM) Survey is a powerful study for Active Healthy Kids Canada to revisit each year given the rapidly expanding number of students reflected in the results. This year the study sample is comprised of 115,291 students. As stated above, more boys than girls are participating in school sports. Figure 10 indicates that the gender divide widens even further at the higher grades. For example, 55% of Grade 6 boys and 53% of Grade 6 girls participate in school sports, but by Grade 12 the prevalences are 41% and 27%, respectively (TTFM 2008-2009). Even when children are at school, there should be opportunities for physical activity outside of PE class (e.g., intramural sports programs, recess and DPA). In the SHAPES study, 71% of children polled said they did not have an opportunity to be physically active in classes outside of PE. The 2005-2006 Health Behaviour in School-Aged Children (HBSC) Survey (n = 7,638) found that 55.1% of children in grades 6 to 10 reported being active for 2 hours per week during class time, and 49.3% reported being active for 2 hours per week during free time at school.¹⁵⁹ This information indicates room for improvement when considering sport and physical activity opportunities provided to children at school.

Helping Teachers Achieve DPA Targets – “Fun, Fast and Fit”

Several years ago, 2 teachers at Driftwood Public School in Kitchener, Ont., began to notice that many students seemed to lack energy and stamina during exercise. This, combined with the implementation of DPA targets in their school, led them to create the “Fun, Fast and Fit Program,” which matches popular music with routines involving toe-tapping, hip-swinging, marching, squatting, skipping and more. Thus far, more than 600 CDs have been sold and teacher feedback indicates the program is helping them meet DPA goals in their classroom. Teacher comments have included: “I have come away with tons of new DPA [ideas] for my Grade 2 class. Thanks for an energetic, fun time!”, “QDPA [Quality Daily Physical Activity] does not have to be complicated!”, and “I learned how to make DPA fun.” School administrators are in agreement as well: “...the program is a key component of our school climate and culture. It mentally and physically energizes both the staff and our more than 400 students – and it’s just plain fun” (former principal, Driftwood Public School, Kitchener). Parents have also chimed in with positive stories: “Fun, Fast and Fit demonstrates the enjoyment which physical activity provides for a healthy lifestyle for a child’s growing body. A healthy, active body promotes a healthy, active mind. When my girls hear a song [from the program], they get up and start doing the moves – and we all know the moves.” For more information, contact: Cathy.Stone@sympatico.ca.

How Active are Children in Child Care Settings?

Canadian children under the age of 5 are increasingly spending a large proportion of their time in child care. A recent systematic review of the literature²⁵ on the amount of time preschool-age children spend engaging in objectively measured moderate to vigorous physical activity (MVPA) found that the best available evidence typically shows very low physical activity levels and high levels of sedentary behaviour within child care facilities.

Aboriginal Communities

The Kahnawake Schools Diabetes Prevention Program (KSDPP) program^{160,161} was developed by a tribe-university partnership within the Kahnawake (Mohawk) community, located 15 kilometres outside of Montreal, Quebec. This school-based project was originally designed to reduce the prevalence of obesity, high-calorie/high-fat diets and low physical activity in children aged 6 to 12 years; it has evolved into a multi-target, multi-layered intervention engaging school personnel, families and the entire community. The 12-year project has since been institutionalized into schools, marking its success through a change in school policy to allow for more time for physical activity in the school schedule, a general sense of acceptance by the community, high attendance at community events that promoted physical activity, and the construction of walking/cycling paths in the community. In 1996, an evaluation indicated that physical activity levels in children and youth had increased while sedentary time had decreased. However, a follow-up study in 2002 showed these effects were not sustained. Nonetheless, the program demonstrated the ability to change local behavioural norms governing physical activity while creating and sustaining a culture of wellness.¹¹²

Children with Disabilities

A recent study investigated the physical activity of 15 students (average age of 8.8 years) with mild intellectual disabilities during their adapted PE classes, in the regular classroom and during recess.¹⁶² They found that students were most active during their adapted PE classes, with an average of 20 minutes of MVPA during class and during recess. The Take Home Message: Appropriately adapted PE programming delivered by skilled professionals with the appropriate supports can lead to increases in MVPA in children with disabilities.

School Infrastructure and Equipment

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	INC	B	B

2010 Grade

The grade for School Infrastructure and Equipment is derived from the proportion of schools reporting adequate space and facilities, and the proportion of schools that allow off-hours access to their facilities. The grade has not changed due to the limited new evidence since the 2009 Report Card and therefore the grade for the 2010 Report Card remains a “B.”

Key Findings

Both the quality and quantity of physical activity equipment at school are important for promoting physical activity levels in children and youth, and most report them to be adequate. The provision of simple and age-appropriate equipment and toys can lead to increases in physical activity and decreases in sedentary time in preschool-age children attending child care programs.

School Facilities and Equipment

As one would expect, increasing the number of physical activity supports at school is associated with greater participation both during structured classes as well as during free time.¹⁵⁹ Unfortunately, we are unable to report national level data on the proportion of children and youth who feel that the indoor and outdoor facilities at their schools are meeting their needs when it comes to physical activity. However, we can report on some regional data from Prince Edward Island (SHAPES PEI). 84% of students in this survey reported that the indoor facilities at their school met their physical activity needs, while 75% reported that the outdoor facilities at their school met their physical activity needs. Interestingly, a gender difference in opinion as to what aspects of available facilities impacted upon physical activity was noted in the HBSC Survey (2005-2006). The existence of a playing field was associated with boys', but not girls', physical activity levels during free time at school.¹⁵⁹ In contrast, the playing field condition was an important predictor of physical activity in girls but not boys.¹⁵⁹

Preschool Equipment and Playground Design can Influence Physical Activity

Active play is critical to the healthy development of children under 5 years. (Refer to the Active Play indicator.) With more and more children in Canada spending the majority of their time in child care facilities, there comes an increased interest in whether these settings are conducive to active play and physical activity. A very recent paper aimed at determining predictors of physical activity in preschool-age children found that fewer children per square metre on the playground, greater availability of outdoor green space and open play areas all had a positive influence on preschoolers' physical activity levels.²⁰ The provision of age-appropriate equipment is another relatively simple change that child care facilities and preschools can make to encourage preschoolers to engage in creative active play. In support of this argument, research has shown increased physical activity levels and decreased sedentary time in preschoolers when activity-friendly equipment (e.g., balls, beanbags, crawl tunnels) was added to the outdoor preschool playground.¹⁶³



School Policy

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	—	C	C

2010 Grade

The 2010 grade for School Policy is a “C” and reflects a balance of positive (i.e., development of promising initiatives and policies) and less desirable realities (i.e., lack of implementation and evaluation of effectiveness) in the school setting. In order for school policy to lead to action and change, it is not enough for policies to be developed. Beyond this, resources need to be allocated appropriately; teachers need to be provided with adequate training; and evaluation programs need to be in place to determine the effectiveness, uptake and response to a given policy change.



Key Findings

Rights of the Child

The World Health Organization (WHO) suggests that the investment in children and youth through schools is one of the most cost-effective investments a nation can make to improve the education and health of children simultaneously.²⁴⁵ The World Health Organization’s Global Strategy on Diet, Physical Activity and Health states that schools should be encouraged to provide students with daily physical education and should be equipped with appropriate facilities and equipment.²⁴⁵ In 1978, the UNESCO International Charter of Physical Education and Sport¹⁵⁴ stated that the practice of PE and sport is a fundamental right for all; that teaching, coaching and administration of PE and sport should be performed by qualified personnel; and that adequate facilities and equipment are essential to PE and sport. These international guidelines supporting the provision of PE for all children and youth are in place; when and why did PE lose priority within many Canadian school systems?

The Ontario Ministry of Education has released the new elementary physical education curriculum. The revised health and physical education curriculum is based on the vision that the knowledge and skills acquired in the program will benefit students throughout their lives by enabling them to acquire physical and health literacy, and to develop the comprehension, capacity and commitment needed to lead healthy, active lives and to promote healthy, active living. The new curriculum has shifted to a student-centred approach to skill building for learning, and includes a revised healthy living framework, updated information to align with student needs today and in the future, and integration of and emphasis on living skills. The curriculum policy document is available at: www.edu.gov.on.ca/eng/curriculum/elementary/health18curr2010.pdf

UNESCO International Charter of Physical Education and Sport (1978)¹⁵⁴

Article 1	The practice of physical education and sport is a fundamental right for all.
Article 2	Physical education and sport form an essential element of lifelong education in the overall education system.
Article 3	Physical education and sports programmes must meet the individual and social needs.
Article 4	Teaching, coaching and administration of physical education and sport should be performed by qualified personnel.
Article 5	Adequate facilities and equipment are essential to physical education and sport.

Daily Physical Activity Policy

There is no question that Quality Daily Physical Education (QDPE) and DPA are important initiatives, yet there appears to be a discrepancy between what is mandated or recommended and what is actually happening. Are the policies being enforced? Are enough resources being provided to actually make the policies feasible? Do teachers have enough support to make the policies a reality? For example, DPA was mandated in Ontario before professional development was available to help teachers implement it.¹⁶⁴ Furthermore, there has been no systematic, rigorous evaluation of the effectiveness or implementation rates of DPA in Ontario.

Saskatchewan is making strides to include physical activity as a key element of school improvement plans. The Active Healthy Kids Canada Report Card – Saskatchewan Supplement¹⁶⁵ was published in 2009 and is being used to educate school community councils regarding the importance of prioritizing physical literacy in the accountability framework for Saskatchewan schools. In other words, the Supplement draws attention to an evidence-based and direct link between important school-related outcomes and physical activity.

There are policies in place all across Canada to promote physical activity and PE within schools. The pertinent question is whether these policies are being enforced, supported or implemented to their fullest potential. When polled, 64.8% of parents in Alberta with children in Grade 5 strongly agreed that schools should adhere to the DPA mandate of 30 minutes of physical activity per day.¹⁶⁶ In Ontario, nearly 75% of elementary schools report additional supports are needed to provide provincially mandated DPA.¹⁶⁸

How Much More Evidence is Needed? Do We Need More Policy?

In the current climate of the physical inactivity crisis in children and youth, it is important for policy-makers to have firm evidence that justifies increasing time and resources for quality PE programs. Some might say we don't need more policy because the policies we have are not implemented properly, and this may be true. Many policies are not implemented the way they were designed. How do we get around this issue? One study found that in areas where PE specialists were employed, there was greater adherence to local PE policies and recommended teaching practices.¹⁶⁷ This study provides some evidence of the importance of qualified personnel to ensure the implementation of high-quality PE policies and practices.



FAMILY AND PEERS

INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
FAMILY PHYSICAL ACTIVITY	D	<ul style="list-style-type: none"> Children whose parents have rules about their media use are exposed to an average of nearly 3 hours less screen time per day than those who say they don't have any rules.¹⁴⁸ Strength and flexibility in Canadian adults (many of whom are parents) have dropped and obesity rates have risen significantly from 1981 to 2007-2009.¹⁷³ 	<ul style="list-style-type: none"> Promote 3 household routines that have been identified to help prevent childhood obesity.¹⁷² <ul style="list-style-type: none"> limiting TV time eating family meals together getting adequate sleep
PEER INFLUENCE	INC	<ul style="list-style-type: none"> Peers can be both positive and negative in their influence on physical activity.¹⁰³ 	<ul style="list-style-type: none"> Positive youth development and youth-led models have been shown to be helpful in fostering positive peer engagement in schools and communities. Peer engagement models such as these, where the influence is known to be positive, should be maximized when the influence is known to be positive. Campaigns promoting physical activity in peer groups should be established to position spontaneous, recreational play as a means of expression and self-determination led by youth.

Family Physical Activity

Year	*2005	*2006	*2007	*2008	2009	2010
Grade	C to D	D to D-	D	B to D	C+	D

* From 2005-2008, the Family indicator was split into Family Physical Activity and Ensuring Kids are Active. In 2009 and 2010, the sub-indicators were consolidated into one.

2010 Grade

The 2010 Family grade is a "D" to reflect low levels of fitness in Canadian adults and the disconnect between what parents report they are doing as a family and what is actually happening. American research indicates that many households do not have any rules relating to quantity or quality of screen exposure, and it is reasonable to assume we are not drastically different in Canada.

Parents are the gatekeepers of what children are exposed to in the home environment. The decisions they make regarding their children's use of media formats (e.g., TVs, computers, iPods, cellphones) can create a home environment that is conducive to inactivity and sedentary pursuits, or one that supports a balance of active and sedentary time. However, in trying to make the correct decisions, parents often struggle with a variety of competing

forces. For example, many parents report that their children prefer sedentary pursuits over active ones (CFLRI CAN PLAY) and are hesitant to restrict TV time because their children use it as a way to improve their social engagement (i.e., by being 'up' on the current shows).¹⁶⁸ Helping parents understand their role as the regulators of family physical activity levels may be the most effective way of increasing the physical activity levels of entire families. Canadian research has shown that a 4 week family lifestyle intervention can lead to increases in self-reported family physical activity, largely explained by increases in unstructured family activities.¹⁶⁹ With regards to preschool-age children, interventions that engage the parents as key moderators of change have proven to be promising.^{170,171} Parents are often the targeted "agents of change" when it comes to increasing physical activity in children. **The message is out there but dramatic changes are not evident. Perhaps telling parents is not enough. Perhaps we need to divert our attention toward educating parents on how to implement changes in their family.**



Key Findings

Three household routines for preschool-age children have been proposed to help prevent obesity:

1. Limit TV time (less than 2 hours per day)
2. Eat family dinners together (more than 5 nights per week)
3. Get adequate sleep (10.5 hours or more per night)

These recommendations were included in a paper recently published in *Pediatrics*.¹⁷² Preschool aged children (n = 8,550; age = 4 years) exposed to 3 household routines of regularly eating the evening meal as a family, obtaining adequate sleep, and having limited screen time had an approximately 40% lower prevalence of obesity than those exposed to none of these routines. While the recommendations in this study were derived from preschool-age children, they are applicable to older children as well.

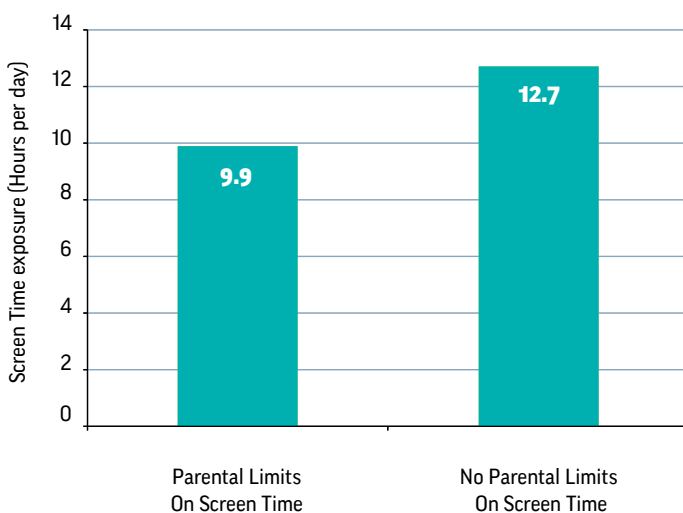


Figure 11: Amount of total screen time exposure in a typical day among children with and without parental limits on screen time (Adapted from Generation M² – Media in the Lives of 8-to 18-Year-Olds, Kaiser Family Foundation Study¹⁴⁸).

Household Rules on Screen Time

Children living in households where TVs are left on “most of the time” end up watching more TV per day (3 hours, 17 minutes) compared to households where the TV is on “some of the time” (2 hours, 20 minutes) or little/none of the time (1 hour, 42 minutes). Parents seem more likely to put limits on the type of media rather than the amount of time children and youth spend consuming it. 46% of kids reported having rules about what they can watch on TV, while only 28% reported having rules about how long they can watch. Of interest, many kids reported that the media rules are not always enforced. When parents set limits, children spend less time in front of screens. Those young people who say their parents have some rules about their media use are exposed to an average of nearly 3 hours less media content per day than those who say they don’t have rules (Figure 11).¹⁴⁸ The Best Start Resource Centre Survey (n = 304) surveyed more than 300 parents of children aged 2 to 5 years from Ontario in 2009. 72% of parents reported that screen time should be limited to less than 2 hours per day for children aged 2 to 5 years. More than half (55%) reported that they intended to reduce the amount of screen time their child was currently accumulating.

Active Parents = Active Kids

The Best Start Resource Centre Survey found that most parents understand that their children mimic their own physical activity habits (90%) and that these habits can last a lifetime (86%). More than half of parents (63%) reported that they were good role models when it came to physical activity. About a quarter (27%) reported spending an hour every day being physically active with their child, and about the same proportion (33%) reported that time was their main barrier to spending more active time with their child. Interestingly, most parents felt they knew how to help their child be active (85%) but were open to learning new ideas on how to encourage physical activity in their child (76%).

In January 2010, Statistics Canada released fitness data on adults from the Canadian Health Measures Survey (CHMS).¹⁷³ A comparison between the 1981 Canada Fitness Survey and the CHMS shows that over the past 2 decades, adults in Canada have become less flexible and weaker while accumulating excess body weight and fat. These changes were evident in all ages and in both genders. Notably, the percentage of individuals who had a waist circumference indicative of high health risk, who were obese or who had body composition scores in the “fair/needs improvement” category more than doubled in almost all groups except females aged 40 to 59 years, among whom obesity almost doubled.¹⁷³ What are the implications of these findings to a report card focused on physical activity in children and youth? One can assume that a large proportion of the adults included in the CHMS are parents. If fitness is poor in many of these parents, then it is not too far of a leap to suggest they are not acting as ideal role models for their children when it comes to modelling healthy active living. The implication for policy-makers and practitioners is simple: to increase physical activity levels in Canadian children and youth, we need to ensure their parents are leading active lifestyles too!

Wishing is Not Enough

The Best Start Resource Centre Survey found that 67% of parents reported that their child gets enough physical activity at home. The same survey shows that only 27% of parents say they were active with their children at least an hour each day. An Ipsos Reid Survey conducted in 2007 found that when parents and children of the same family were asked whether they engaged in family physical activity at least once per week, the answers obtained were very different. About 60% of parents reported this was true for their family, while only a quarter (25%) of children corroborated this. The disconnect between what parents think their kids are doing and what they are actually doing when it comes to physical activity is a complex issue to resolve. Are parents impacted by social pressure to have a healthy active family? Or do they simply not have a solid grasp of what type of activities children are engaged in at home, at school and in the community? Overall, parents understand that physical activity is good for healthy development. The 2008 Capacity Survey from the Canadian Fitness and Lifestyle Research Institute (CFLRI) found that 90% of parents feel that walking or cycling to school is a good or very good way for their child to maintain a healthy body weight. However, when asked specifically if they are familiar with Canada’s physical activity guidelines for children and youth, only 27% of parents answer affirmatively, which represented a 10% drop compared to 2003.

The Impact of Maternal Obesity on Obesity in Offspring

A recent Canadian study found that maternal pre-pregnancy weight was associated with childhood overweight, low physical activity and high screen time in offspring.¹⁷⁴

A healthy lifestyle during pregnancy can benefit the mom, baby and even future generations. It is important for Canadians to be aware that the total amount of weight gained during pregnancy¹⁷⁵ and the rate at which mothers put it on, can dramatically influence the fetal environment.¹⁷⁶ Novel research suggests that healthy weight gain during pregnancy is important for childhood growth and development.^{177,178} In essence, how mom eats, moves and feels may have lasting effects on child health.

Past beliefs emphasized pregnancy as a state of confinement and bed rest to ensure optimal growth of the baby. However, today things have changed. Now, women are encouraged to maintain their physical activity during pregnancy or, if previously inactive, encouraged to initiate a new routine,^{179,180} since this may improve the health of their baby in utero and in the future. There are of course some restrictions, and women should be encouraged to speak with their doctor or health practitioner about individual goals and limitations. But the message needs to be spread: be active during pregnancy.

Maternal energy imbalances during critical developmental stages have persistent effects on offspring health and can even be transmitted to the next generation (transgenerational effects).¹⁸¹⁻¹⁸³ Several compelling lines of evidence indicate that factors in the life of the mother (e.g., maternal diet and behaviour, environmental toxins) can alter developmental programming in utero and throughout life. The programming of the fetus in utero and during critical early developmental stages is under the influence of not only the altered metabolic milieu of the pregnancy (gestational diabetes, obesity, hypercholesterolemia, etc.), but the amount and types of nutrients available through the maternal diet,¹⁸⁴ and arguably the expenditure side (amount and type of physical activity) of the energy balance equation also has a role to play.¹⁸⁵ In simple terms, by “programming” both your child’s drive to be more physically active and the way it utilizes the energy in food,¹⁸⁶ the benefits of healthy active moms are potentially both intergenerational and limitless.

It is important to recognize that excessive weight gain is harmful to both mom and her baby. We know that pregnancy is a time in most women’s lives where significant weight is gained, and we know that excess weight gained during pregnancy and failure to lose it after pregnancy is a predictor of overweight and obesity years after pregnancy for the woman.¹⁸⁷ Furthermore, what we’re starting to understand is that excessive weight gain in the mother can also affect the child. New research indicates that children born to mothers who gained excessive weight while pregnant face a greater chance of being overweight themselves – as children and potentially as adults.¹⁷⁶ Researchers at the Children’s Hospital of Eastern Ontario have embarked on a research trial, The Maternal Obesity Management (MOM) Trial, to further explore these issues. In essence, lifestyle habits of mothers impact upon the health of their children. Healthy active moms have improved chances of having healthy active kids!

Peer Influence

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	—	INC	INC

INC = incomplete

2010 Grade

The 2010 grade for the Peer Influence indicator remains incomplete. This indicator was introduced in 2009 to reflect emerging evidence that peers have a powerful influence on the lifestyle behaviours (e.g., physical activity and eating) of their friends. We know that children associate more with peers as they age. We also know that as children get older, they see friendship differently. Quality of friends (i.e., having a friend who cares, talks to them and helps with problems) becomes more important with increasing age.¹⁸⁸ In a recent report by the Canadian Association for the Advancement of Women in Sport (CAAWS),¹⁰³ friends were mentioned frequently as a significant influence on participants' physical activity levels, and the authors noted that "throughout the focus groups, friends emerged as perhaps the most important factor in the young women's participation in sport and physical activity" (p.16).¹⁰³ It is important to note that peer influence was both a positive (e.g., "I love gym class, it's so fun, you're with your friends") and negative (e.g., "My friends don't want to go swimming, so I just don't go") influence on physical activity participation in girls.

Key Findings

As part of the Canadian Assessment of Physical Literacy (CAPL) research program, children in grades 4 to 6 in eastern Ontario completed a questionnaire that included free-response questions about influences on physical activity and sport participation. One of the questions asked the children to identify what they like about playing sports or being physically active. Approximately 35% of participants to date have indicated that peers influence their enjoyment of sports and physical activity. Common answers include "making friends," "meet new kids," "you get to be on a team" and "it is cool." Participants were also asked what sports and activities they regularly participate in and to identify why they like doing these activities on a regular basis. More than 25% of participants' answers reflected peer influences, for example: "playing with my friends," "they're team sports," "you can meet new people on your soccer team" and "they're cool." This indicates that peers have a significant influence on the choice to regularly engage in physical activity and sport. Furthermore, participants were asked to speculate about the reasons their friends like to participate in sports and physical activity. About 20% of responses again related to peer-influence: "we enjoy playing together while being fit," "same as me" and "because everyone can all play together." When participants were asked about what activities they would choose to engage in after school, 63% of children indicated that they would choose to participate in team and group activities with their peers (i.e., playing at the playground with friends and going to their sports teams' practice). The preliminary results from this study demonstrate that children in grades 4 to 6 are aware of the influence their peers exert on active and healthy lifestyle choices. Although this information provides insight, there is much more research needed to tease out the influence of peers on physical activity choices. For example, adolescents have high dropout rates in both physical education and sport; what are the negative and positive influences of peers at different age groups and by gender?

Implications

A recent American study suggests that decreasing sedentary behaviour and increasing active leisure activities may require meaningful relationships with friends, as friendship may help to promote or "socialize" active lifestyle.¹⁸⁹ Conversely, peers have been known to promote a clustering of bad behaviours ranging from experimentation with drugs, sex and/or alcohol, and rebellion against organized school activities and sports. When put in a position to facilitate or diminish peer contact, the parent, teacher or guardian needs to determine whether the peer or peer group is helping or hindering the healthy development of the child in question. While this category has an "incomplete" grade, one thing is certain: peer influence can be very powerful and should be at the very least considered in the design of programs aimed at promoting physical activity in children and youth.



COMMUNITY AND THE BUILT ENVIRONMENT

INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
PROXIMITY AND ACCESSIBILITY	B	<ul style="list-style-type: none"> Many characteristics of the community and built environment that help facilitate physical activity (e.g., parks, recreation facilities) are nearby and accessible to well over half of Canadians (CFLRI PAM 2007). 	<ul style="list-style-type: none"> Community recreation leaders should increase resources allocated to advertising in order to attract families to use the programs and facilities in their neighbourhood. Partnerships between community recreation centres and schools that allow children to access the recreation centre for programming during the school day can help to facilitate the introduction of families to the centres for use at other times. Municipalities should upgrade and renovate old park spaces to be more inviting for families by including child-friendly features.
USAGE OF FACILITIES, PROGRAMS, PARKS AND PLAYGROUNDS	D	<ul style="list-style-type: none"> Less than half of Canadian children and youth use community amenities that are available to them to be physically active (CLFRI PAM 2008). 	<ul style="list-style-type: none"> Research Gap – There is a need to explore why families are not accessing local spaces and programs despite identifying the spaces are available.
COMMUNITY PRO-GRAMMING	B+	<ul style="list-style-type: none"> Well over half of Canadians agree there are a variety of appropriate programs available in their neighbourhood (CFLRI PAM 2007). 	
PERCEPTIONS OF SAFETY AND MAINTENANCE	B	<ul style="list-style-type: none"> A quarter of Canadian parents report that traffic concerns make walking in their neighbourhood difficult or unpleasant (CFLRI PAM 2007). 	<ul style="list-style-type: none"> There is a need to develop resources for communities to alleviate parental safety concerns, which may keep them from letting their children play in local parks and playgrounds. Community and neighbourhood programs to facilitate outdoor supervision or “watch” need to be encouraged and coached. <p>Research Gap – Research, using behavioural and crime-specific measures, should examine the relationship between real and perceived crime-related risks and physical activity.¹⁹⁰</p>
MUNICIPAL POLICIES AND REGULATIONS	D	<ul style="list-style-type: none"> 96% of 24 major municipalities surveyed in Canada have a community-level policy that hinders physical activity participation in children and youth.²⁴⁴ 	<ul style="list-style-type: none"> Municipalities should make a concerted effort to ensure policies aimed at increasing safety are not acting as a major barrier to participation in physical activity.



Proximity and Accessibility

Year	2005	2006	2007	2008	2009	2010
Grade	C	C	C	B+	B	B

* The 2007 grade reflects both access and use while in all other years, accessibility was assessed on its own.

2010 Grade

The Proximity and Accessibility indicator received a grade of “**B**” this year because many characteristics of the community and built environment that help facilitate physical activity are nearby and accessible to well over half of Canadians. This indicator has received a similar grade in the last couple of years. The maintenance of success on this indicator is encouraging, but there is still room for improvement.

Key Findings

- » 66% of Canadians agree that sidewalks exist on most streets in their neighbourhood (CFLRI Physical Activity Monitor [PAM] 2007).
- » 64% of Canadians agree that they live within a 10- to 15-minute walk of a transit stop (e.g., bus, train, trolley, tram) (CFLRI PAM 2007).
- » 61% of Canadians agree that there are facilities for bicycling (e.g., special lanes, special paths or trails, shared-use paths for bicyclists and pedestrians) in or near their neighbourhood (CFLRI PAM 2007).
- » 34% of Canadian parents agree or strongly agree that there is a lack of convenient facilities for physical activity nearby, which represents a decrease (i.e., an improvement) from 2003 (CFLRI PAM 2008).

An established link exists between the health and physical activity of young people and the built environment. Preschool girls living in walkable neighbourhoods are less likely to be overweight or obese.¹⁹¹ School-age children in neighbourhoods with good access to playgrounds, parks and recreational facilities are less likely to be overweight or obese and more likely to be physically active.^{192,193} A follow-up survey of ants from the 1981 Canada Fitness Survey reveals that well-connected walking routes tripled the odds of boys being physically active. In the same study, having plenty of nearby accessible destinations also increased the odds of girls being physically active (CFLRI PALS 2002).

Making Connections – The Built Environment and Health

The physical activity of children and youth remains an important public health priority as current levels continue to fall short of recommended guidelines.

A growing number of strategies and interventions are being developed in Canadian communities to help increase physical activity. Although steps are being taken, it is important for strategies to consider the various factors that influence individual behaviour, including environmental determinants. New emerging research reveals associations between community infrastructure, built environments, and children's and youths' physical activity. Characteristics of communities, community programs, parks and facilities, and urban design are all linked to physical activity.

Interventions targeted at community infrastructure and the built environment can affect entire populations – not just individuals – and are, therefore, being examined for their ability to bring about change in a cost-effective and inclusive manner. To be successful, the environments in which interventions are initiated must be supportive. For example, a lack of recreation facilities and resources may hinder an individual's ability to be physically active in a way that is appealing to them even if they have received an exercise plan. Therefore, the goal of interventions should be to create healthy community environments that provide health-promoting opportunities and the environmental support needed to enable Canadian children and youth to achieve healthy lifestyles.

Usage of Facilities, Programs, Parks and Playgrounds

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	C	D+	D	D

* The 2007 grade reflects both access and use while in all other years, usage was assessed on its own.

2010 Grade

Usage of facilities, programs, parks and playgrounds received a grade of “D” this year because fewer than half of Canadian children and youth use these amenities to be physically active. This grade has been the same now for 3 years. The grade does represent, however, a downward trend from 2007, when the grade was “C.”

Key Findings

According to parental reports, 3% of Canadian children do the majority of their physical activity on local trails, 10% at private facilities, 12% in parks or playgrounds, and 14% at public facilities (CFLRI PAM 2008). At first glance, the poor grade for this indicator seems out of step with the grade for the previous indicator. Well over half of Canadians have facilities that are nearby and accessible, yet well under half of children and youth use them. The research literature reflects this disconnect. Many studies report a positive relationship between park/recreation settings and physical activity;¹⁹⁴ other data, however, suggest that personal determinants of physical activity among children and youth may be less explanatory than other considerations. In one Canadian community, for example, fewer than half of parents with children travelled to the nearest park. The majority travelled to parks more than 4 kilometres away due to water attractions, swing shades and cleanliness.¹⁹⁵ In another study, the number of visitors and their physical activity levels were observed at 3 parks on 2 separate occasions. Between these 2 occasions, 2 of the 3 parks underwent renovations. The renovated parks saw a four-fold increase in the number of visitors, suggesting that park renovations alone increase usage and overall physical activity (Figure 12).¹⁹⁶ Another significant influence on physical activity among children and youth, which receives attention in the **Perceptions of Safety and Maintenance** indicator, is parental perceptions of safety.

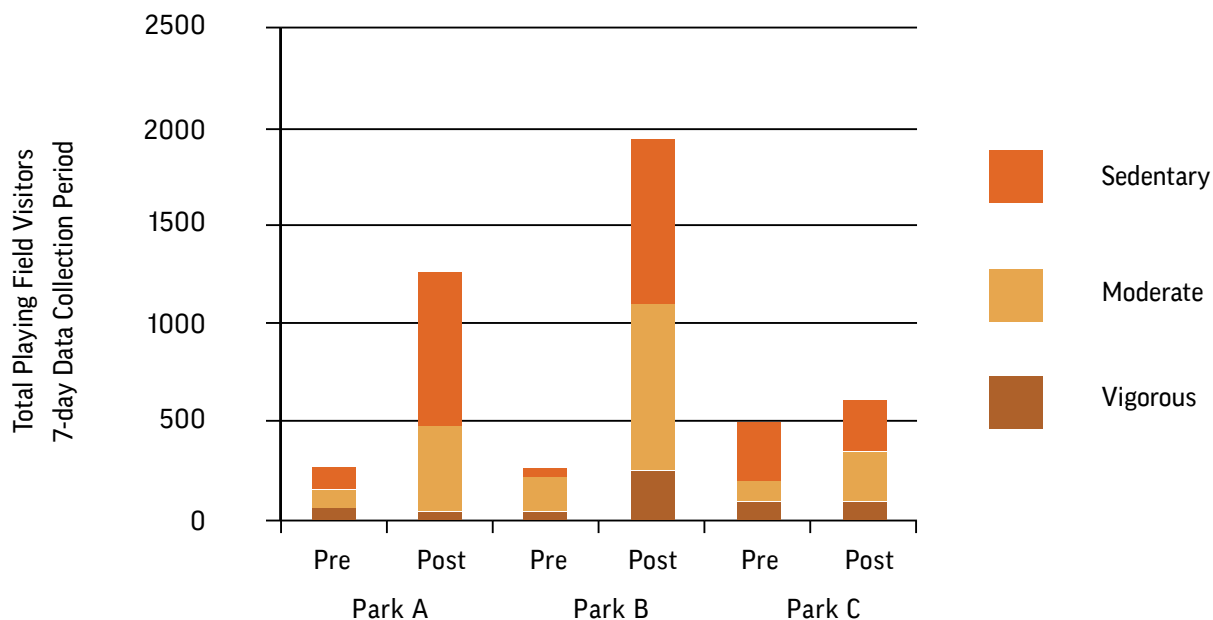


Figure 12: Sedentary and physically active (moderate and vigorous intensity) visitors to parks during baseline and follow-up collection periods. Parks A and B underwent renovations while Park C did not.¹⁹⁶

Community Programming

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	—	B+	B+

2010 Grade

The grade for Community Programming this year is a “B+” because well over half of Canadians agree there are a variety of appropriate programs available in their neighbourhood. Accessing new and comprehensive data remains a challenge with this indicator.

Key Findings

- 74% of Canadians agree that their neighbourhood has several free low-cost recreation facilities such as parks, walking trails, bike paths, recreation centres, playgrounds and public swimming pools (CFLRI PAM 2007).
- 28% of Canadian parents agree or strongly agree that there is a lack of programming or opportunities for children (CFLRI Capacity Survey 2008).
- 49% of Canadian parents agree or strongly agree that cost is a barrier to accessing community programs (CFLRI Capacity Survey 2008).

A significant number of parents find cost a barrier to community programs. Initiatives are beginning to address this barrier such as Canada Gets Active. This project, which is modelled after Kingston Gets Active, is being conducted in conjunction with the Everybody Gets to Play™ initiative. It provides Grade 5 students across Canada with Community Physical Activity Passes for free access to designated recreation activities and facilities, thus eliminating the potential financial barrier to recreation and physical activity participation. The rationale for targeting Grade 5 students is related to the established decline in physical activity among children as they near adolescence. The main objective of the Community Physical Activity Pass is to increase Canadian children’s physical activity levels by increasing their access to and participation in community recreation facilities.

An important part of programming for children and youth is after-school activities. Education systems across the country have not typically shown any interest in offering after-school programs and so organizations such as the Boys and Girls Clubs of Canada offer a number of out-of-school programs (e.g., team sports, ballet, karate, outdoor adventures) to fill this gap. Despite the good work these organizations have been doing, transportation to out-of-school programs is challenging for children and youth whose parents are at work. A possible solution to this problem is to initiate school/community programs where recreation leaders come into schools and lead after-school programs.

An Opportunity to Promote Physical Activity in the Early Years: Full Day Learning in Ontario

The new Ontario-based initiative recommends that school boards offer full-day learning for 4- and 5-year-olds starting in September 2010 and that it be available province-wide within 3 years.¹⁹⁷ The plan also recommends that fee-based programming be offered (when requested by 15+ families) and that the programs be staffed by trained teachers and early childhood educators. The report recommends that the first phase of implementation include lower-income neighbourhoods as part of the government’s Poverty Reduction Strategy. To meet the needs of older students (9 to 12 years old), school boards may establish contracts with municipal recreation programs operating before and/or after school and in the summer; these would be funded by parent fees, and subsidies for low-income families would be available. Integrating early learning into a single program would result in significant savings for parents compared with the cost of the traditional child care options that parents have had to rely on with half-day instruction for 4- and 5-year-olds. For more information, go to www.ontario.ca/earlylearning.

This initiative marks an opportunity to increase physical activity in the early years and establish active living habits early. In addition, new school/community partnerships can be created and existing ones can be strengthened. Finally, there is an opportunity to reduce income disparity in physical activity opportunities by focusing the program initially on lower-income families. However, these positive outcomes can be achieved only if the initiative is implemented according to the framework set forth. We will be following the progress of this initiative in future Report Cards.



Perceptions of Safety and Maintenance

Year	2005	2006	2007	2008	2009	2010
Grade	—	B	—	—	B	B

2010 Grade

Similar to the previous indicator, the lack of new and comprehensive data remains a challenge for Perceptions of Safety and Maintenance. The grade this year is a “B” because well over half of Canadians perceive their neighbourhood to be safe enough to walk in and engage in other physical activities with their children. In the other 2 years when this indicator has been graded – last year and 2006 – the grade was also a “B.” While grade stability is positive, there is still room for improvement.

Key Findings

- 18% of parents agree or strongly agree that safety concerns are an issue in their neighbourhood (CFLRI Capacity Survey 2008).
- 79% of Canadians disagree that the crime rate in their neighbourhood makes it unsafe to go on walks at night (CFLRI PAM 2007).
- 22% of parents agree or strongly agree that there is too much traffic in their neighbourhood (CFLRI Capacity Survey 2008).
- 77% of Canadians disagree that traffic on streets makes it difficult or unpleasant to walk in their neighbourhood (CFLRI PAM 2007).
- 57% of Canadians report that access to safe streets and other public places would be important in encouraging them to be active (CFLRI PAM 2007).

When parents are asked about the perception of neighbourhood safety, the factors most likely to be cited are harm from strangers, road safety, personal injury and bullying.¹⁹⁸ Parental concerns about neighbourhood safety are shown to negatively correlate with physical activity and positively correlate with obesity in children and youth.^{142,198-200} The strength of these relationships is dependent on the age and gender of the young people under consideration. These associations suggest that parental perceptions of safety generally have an influence on children's and youths' physical activity. Most research, however, focuses on perceptions of safety. To fully understand the current state of affairs, and more effectively address concerns, studies using objective measures of safety are needed.¹⁹⁸



Municipal Policies and Regulations

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	—	D	D	D

2010 Grade

Since no new data have emerged, the grade for Municipal Policies and Regulations remains a “D” for the third year in a row. Without new information, it is difficult to assess whether additional success has been achieved in policy work at the municipal level to remove existing barriers and promote physical activity among children and youth.

Key Findings

Despite the aforementioned paucity of data, evidence of encouraging developments is emerging. In a report released by the Pan-Canadian Public Health Network, 13 case studies from communities in each of Canada’s provinces and territories highlight collaborative approaches being taken to urban planning. These approaches recognize that planning processes related to the built environment can either promote or hamper physical activity.²⁰¹

Also of note is a built environment toolkit being developed by the Heart and Stroke Foundation of Canada. This toolkit will be a free, web-based resource with several objectives, which include providing tools to educate and mobilize built environment champions across Canada and helping to promote the planning and design of active, healthy communities.²⁰²

LEED Canada

LEED (Leadership in Energy and Environmental Design) is a third-party certification program that is accepted internationally as the standard for the design, construction and operation of green projects. The Canadian Green Building Council hopes to introduce a rating system for neighbourhood development this year to guide and assess the development of sustainable and healthy communities. Currently, 24 pilot projects in communities across Canada have been registered with LEED Canada (8 in British Columbia, 6 in Ontario, 5 in Alberta and 5 in Quebec). For more information, visit www.cagbc.org/leed/what.

Child and Nature Alliance

This alliance, which was launched in 2009, seeks to reconnect children and families to the natural settings where they live and play in order to enhance their health and well-being. The alliance works with many different groups including policy-makers, urban planners, educators, health care professionals, parents and young people. The alliance is involved in collaborative partnerships, awareness building and research to ensure that outdoor play is a mainstream part of Canadian life. For more information about this movement, visit www.childnature.ca.

A Kid’s Guide to Building Great Communities

In recognition of the right of young people to take an active role in decisions that affect the health and well-being of their communities, the Canadian Institute of Planners has released a manual that provides planners and educators with material and exercises to use with children and youth in a variety of settings including school curricula. To download a copy of the manual, visit www.ec.gc.ca/cppic/en/refView.cfm?refId=1972.



POLICY: GOVERNMENT AND SECTOR STRATEGIES AND INVESTMENT

INDICATORS	GRADES	QUICK STATS	RECOMMENDATIONS FOR ACTION
FEDERAL GOVERNMENT STRATEGIES	C+	There is no "stand-alone" strategy focused on physical activity, and this is indicative of low priority given to the issue.	A comprehensive national physical activity strategy and federal-provincial-territorial commitments for supportive policies are required at multiple levels to remove or reduce the social, organizational and environmental barriers to physical activity.
PROVINCIAL GOVERNMENT STRATEGIES	B+	Nine of 10 provinces have developed specific physical activity strategies; the other province included a specified physical activity strategic area in its "Wellness Strategy."	
FEDERAL GOVERNMENT INVESTMENT	F	Spending at the federal level in real dollars per capita is half the amount that it was in 1986.	Dramatic increases in federal spending are required.
PROVINCIAL GOVERNMENT INVESTMENT	C-	Spending in provinces and territories has been steadily increasing over time and is double what it was in the 1980s, in at least the 5 provinces where data could be obtained.	Despite some increases over time, further resources are still required at the provincial/territorial level. The trend of increasing investment needs to continue to ensure progress is not stalled.
INDUSTRY, PHILANTHROPIC AND RESEARCH INVESTMENTS	C	Funding has dropped in many sectors; a reality likely explained in part by the economic downturn.	Industry and philanthropy groups should maintain healthy active living as a priority area for funding as a fundamental contribution to healthy individuals, families, communities and overall society.



Introduction – The Evolving Policy Landscape in Canada

Physical inactivity and low levels of physical fitness have been key issues on governments' policy agendas since our earliest days as a nation. These have included military preparedness in the 1900s,²⁰³ unemployment and social welfare in the 1940s,²⁰⁴ and health²⁰⁵ and quality of life in the 1970s and 1980s.^{204,206} More recently, the economic burden of chronic disease and concern with population health have been key policy drivers, fuelled by the concern of the escalating health care costs attributable to physical inactivity.²⁰⁷

As demonstrated by the scope of the indicators assessed in this Report Card, broad-based policy is required at multiple levels to remove or reduce the social, organizational and environmental barriers to physical activity (Figure 13). The current policy landscape has evolved to a multi-level, multi-sectoral community development approach to promote physical activity and remove systemic barriers. A joint federal/provincial/territorial policy framework²⁰⁸ was adopted to guide the development of strategies and implementation plans. All subsequent strategies have contained strategic elements to encourage individuals to become more active and to create social and physical environments that are more supportive of physical activity, but these elements vary in the mix of actions.

Background – The Current Policy Landscape in Canada

To date, a general policy statement has been developed at the federal level through the Healthy Living Strategy,²²⁰ with physical activity considered as one of two areas of emphasis. Nine of the 10 provinces have developed specific physical activity strategies, and the 10th included a specified physical activity strategic area in its "Wellness Strategy."²²¹ Consultations are underway to create a physical activity policy in one of the 3 territories. The strategies generally outline a wide range of actions through multiple partnerships; however, despite recommendations in government reports and precedents elsewhere, legislative action is lacking. Ries and von Tigerstrom suggest that "concern about legislative authority, ideological opposition to government regulation and questions about the impact of legislation" may explain this reticence.²²² Table 2 presents elements of current strategies against criteria that have been identified as essential to the successful implementation of policies.²²³

National

- Focus on common approaches
- Physical activity guidelines
- Monitoring to support physical activity strategies
- Best practices portal
- Social marketing, common messaging, etc

Provincial
Territorial

- Individual approaches (promotion, mass events, counselling by health care professionals)
- Improving access (e.g., shared use of facilities, trails, etc.)
- Improve social/policy environment (supportive culture in schools, physical education/activity, etc.)
- Capacity-building at the municipal level (leadership development, grants/contributions, etc.)

Local

- Promotion to individuals
- Municipal programs and facilities
- School-board initiatives
- Discounted fee structures and subsidies
- Local policies and bylaws

Figure 13: Policy actions by level of jurisdiction (Figure created from a review of strategic planning and policy documents from across Canada²⁰⁹⁻²¹⁹).

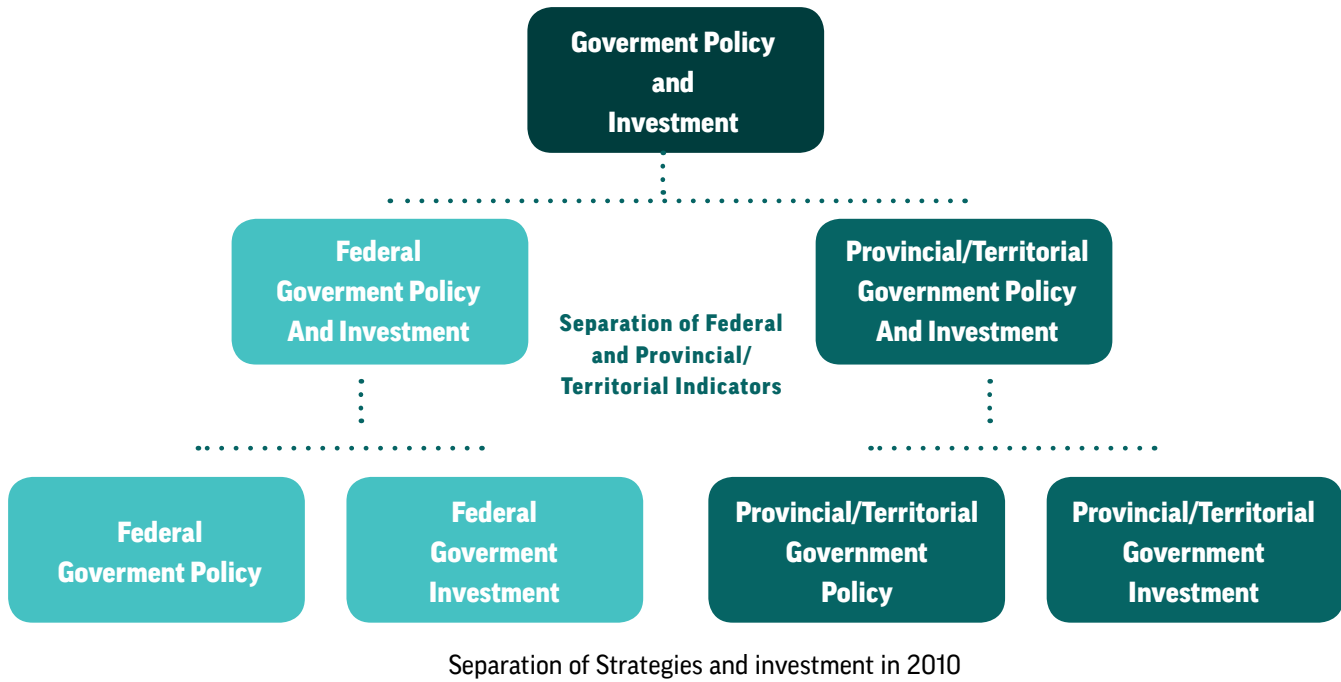
Table 2: Summary of criteria required for effective policy development and implementation.

CRITERIA	FEDERAL	PROVINCIAL*
Highly consultative in development	The Healthy Living Strategy has generally been developed with broad-based stakeholder input.	Provincial physical activity strategies have generally been developed with broad-based stakeholder input.
Active through multi-strategic and multi-level partnerships	Although lacking the details of the provincial strategies, the Healthy Living Strategy is also concerned with children within a whole population approach, and includes general statements related to multi-strategic and multi-level actions. Detailed implementation plans are rare.	Provincial strategies have implementation plans that involve provincial coalitions, departments of health, sport, education, etc. Two provinces focus on children and youth; the remaining provinces take a whole-population approach that includes children as one of the key target groups. All have identified multiple actions to encourage individuals to become more active, to increase organizational and social support encouraging an active lifestyle, and to create more supportive physical environments for physical activity.
Developed as stand-alone strategies with synergy to other policy agendas	Lack of a stand-alone strategy at the federal level does not preclude action on the issue, but it is indicative of a lower overall priority attached to the issue.	Eight of 10 provincial strategies were developed as stand-alone strategies. They contain partnership elements with other sectors and in some cases are guided by high-level steering committees, so they can complement and be responsive in other policy areas.
Widely communicated messaging	Nationwide awareness campaigns have re-emerged through federal funding of ParticipACTION, and a common messaging framework is being developed across jurisdictions. Most strategies include informational materials to support delivery of the program through a variety of professional groups. ²²⁴	Branding and mass communications support many provincial strategies.
Independently evaluated	Since 1997, the Canadian Fitness and Lifestyle Research Institute (CFLRI) has been independently and systematically monitoring progress toward meeting physical activity targets as well as the conditions supporting and detracting from participation at the individual, social, organizational and societal levels. ⁵⁴ This comprehensive system is unique in the world. Sample size for provinces and territories is small but assessments at the federal and provincial/territorial level are produced.	
Adequate investment to support strategies	Evidence has informed the development of the joint Framework for action in 1997. The Healthy Living Strategy has developed a research agenda to help fill identified gaps. Detailed action plans are lacking.	All provincial strategies explicitly included consideration of the evidence base, and almost half incorporate some aspect of knowledge generation.
Defined guidelines	National physical activity guidelines for adults, children, youth and older adults were released between 1998 and 2002. Canada was the first country to create guidelines for children and suggest limits on sedentary time. A series of systematic reviews of the evidence occurred in 2008 through the Canadian Society for Exercise Physiology in partnership with the Public Health Agency of Canada. The completion of revisions and updates to the guidelines has slowed because of lack of funding.	Not applicable – provinces and territories follow national guidelines on physical activity.
Adequate investment to support strategies	Background: High blood pressure, high blood glucose, smoking and physical inactivity are the top risk factors (in terms of attributable risk) for premature death around the world. ²²⁵ \$5.3 billion in health care costs could be avoided annually in Canada if everyone was sufficiently active. ²⁰⁷ Despite increased widespread recognition of the issue of inactive lifestyles, only a fraction of the above amount is being invested in promoting active living.	
	Spending at the federal level in real dollars per capita is half the amount that it was in 1986. ²²¹	Provincial spending has increased since the 1980s, in at least the 5 provinces where data could be obtained.

* In one of the three territories, consultations are underway to create a physical activity policy.

Government Strategies and Investment: Historical Overview

It is important to note that strategies and investments have always been assessed collectively in past Report Cards. Also, federal and provincial/territorial levels of government have been assessed both separately (2005, 2009) and collectively (2007-2008). To provide a more in-depth look at **Government Policy and Investment**, we have subdivided the indicators again: **1) Federal Government Strategies, 2) Provincial/Territorial Government Strategies, 3) Federal Government Investment, and 4) Provincial/Territorial Government Investment** (Figure 14).



YEAR	2005	2006	2007	2008	2009	2010
Federal Government Strategies	C-	—	C	C+	C	C+
Provincial/Territorial Government Strategies	INC	—	C	C+	C+	B+
Federal Government Investment	C-	—	C	C+	C	F
Provincial/Territorial Investment	INC	—	C	C+	C+	C-

Figure 14: The transitions over time in how government strategies and investments have been assessed in the Report Card.

Federal Government Strategies

2010 Grade

The 2010 grade is a “C+” and reflects a favourable comparison against the criteria outlined in Table 2. The current strategies in place represent a valuable set of policy assets to guide the implementation of action plans. However, the extent to which these represent a solid foundation for action is unclear.

Past Federal Government Strategies

Physical activity strategies in the 1980s were influenced by the health orientation of the 1974 *New Perspectives on the Health of Canadians*,²⁰⁵ and the recreation movement originating in British Columbia in 1934.²⁰⁴ Together, they grounded physical activity promotion in concerns for the health and quality of life of the individual while taking a community development approach. Although all responsibility for recreation was ceded to the provinces in the 1970s, the responsibility for physical activity and fitness remained a shared responsibility of the Federal/Provincial/Territorial (FPT) governments, and the policy National Recreation Statement created the foundation and mechanisms for joint action to increase physical activity.²²⁶

In the 1980s, federal commitment in terms of development and funding for implementation of physical activity strategies was almost twice that of current commitments on a per capita basis.²²¹ In 1986, a national strategy was developed through broad-based consultation involving FPT governments, national associations, and individual delegates chosen by provincial and territorial governments. The document contained a new vision for the field and areas of emphasis (e.g., the school system) with a specific goal, objectives and actions.²⁰⁶ *Blueprints for Action* were developed and secretariats established to implement the action plans in partnership with governments, national and provincial professional organizations, and voluntary organizations.²²⁷

Due to a focus on federal government deficits and pressure to privatize public functions, the role of federal leadership on physical activity policy began to decrease, primarily in reaction to reductions in funding. Despite an independent evaluation by an external government branch that recommended that funding for physical activity be increased, the opposite occurred. The status of physical activity promotion at the federal level diminished from a directorate to a unit to a program to its current status as an area within the Healthy Living Program.²²¹

Current Federal Government Strategies

Considering the national and provincial/territorial levels together, the current policy landscape in Canada appears to be no better and no worse than the majority of those outlined in a recent review of policy document from 14 countries,²²⁸ with 2 notable exceptions. First, Canada has adopted a system for monitoring progress of short-, medium- and long-term impacts of strategies. Second, Canada was the first country to call for a reduction of times spent in sedentary activities within its physical activity guidelines directed at children and youth.² However, many of these policies generally lack detailed implementation plans containing objectives for each action, as well as measurable outcomes and roles, and also lack the commitment of adequate resources for implementation. Although we have a strong foundation of strategic plans, there does not appear to be sufficient resources attached to create and implement action plans on a large scale to make a difference in the coming years. As the trends show us, historic levels of funding are inadequate. Investment and concerted effort are needed. According to a recent study, 92% of Canadians think government should support physical activity and sport promotion (54% strongly agree with this statement) and 57% feel that current government contribution to promoting physical activity is inadequate.²²⁹ In essence, Canadians and stakeholder/partner groups are looking to the federal government for leadership – in action and investment.

National Physical Activity Policy

An implementation plan with clearly defined roles is required to support the broadly stated strategic elements of the physical activity component of the Healthy Living Strategy, and a national physical activity policy may well be required to elevate attention to it. The need for multi-level and multi-sectoral partnerships is recognized, but engagement of partners is required. A national policy could delineate how various sectors could work together. For example, the 2008 recession permitted the refurbishment of recreation facilities to be eligible for federal cost-sharing through the Canada Strategic Infrastructure Fund.²³⁰ South Carolina's 2007 Priority Investment Act created priority investment zones to make communities more walkable and bikeable.²³¹ Similar infrastructure initiatives to support the creation of walking trails and bicycle paths could be permitted or even established as a priority under future infrastructure funding. A policy commitment of sustained funding for the overarching elements of the current policy landscape is required. For example, a common messaging platform for social marketing campaigns is insufficient. Although the recent campaign to build awareness among parents that children were not active enough achieved – and exceeded – that expected goal,²³² the collective reach of campaigns is insufficient for the majority of Canadians to be aware of them.²²⁴ A sustained set of mutually reinforcing campaigns is required. Similarly, adequate levels of investment are needed for periodic development and promotion of national physical activity guidelines,²³³ ongoing monitoring, planning and assessment of the overall impact of elements within strategies, promoting equitable approaches to promoting physical activity across the country, and knowledge transfer activities.

Canada's Fitness Tax Credit

The Government of Canada implemented the children's fitness tax credit in 2007, which allows a non-refundable tax credit of up to \$500 for registering a child in an eligible physical activity program. Almost half of Canadian parents with children in organized physical activities or sport programs have claimed this tax credit. The tax credit appears to have benefited higher-income families in Canada. Parents in the highest income category (>\$60,000) were significantly more aware and more likely to claim the fitness tax credit than the other income groups. Few parents (11%) believed that the fitness tax credit had led to increased physical activity in their children. While the intent was good, the implementation and reality of the program does not appear to have achieved its goal of facilitating participation in lower-income families.²³⁴ Some provinces are further supporting physical activity for children and youth by matching the federal program. Nova Scotia, Manitoba and Yukon all have fitness tax credit schemes available in addition to the federal credit. Nova Scotia is working toward making the credit available to all ages in the future,²³⁵ and Manitoba and Yukon both make special provisions for children with disabilities (\$1,000 credit instead of \$500).^{236,237}

Provincial/Territorial Government Strategies

2010 Grade

The 2010 grade is a satisfactory "B+" and reflects a favourable comparison against the criteria outlined in Table 2. There are obvious challenges in assessing provincial/territorial governments because of the variation across the country.

Role of Provincial/Territorial Governments in Physical Activity Policy

Responsibility for recreation, education and municipal affairs lies at the provincial/territorial level. Most jurisdictions take a community development approach, and fund programs to promote and support physical activity at the local level. Some provide assistance for leadership development and the development of strategic plans for physical activity at the community level. They also mandate physical education or activity in schools. Interestingly, in addition to prescribing physical education in elementary school, a 2007 Texas law requires annual fitness testing of children in grades 3 to 12 to assess the overall impact of policy.²³¹ Provinces could also consider the approach taken by South Carolina to provide a variety of incentives for developers to encourage the creation of more walkable and bikeable communities (e.g., density bonuses, fee waivers, reduced waiting time for permits). In addition, California, Illinois and Vermont have adopted legislation for transit-oriented development of the transportation system, called "complete streets" to meet the needs of all users (bicyclists, pedestrians, transit users, children, seniors, the disabled and motorists).²³¹

Government Investment in Physical Activity for Children and Youth

2010 Grades

The low Federal Government Investment grade of "F" is a reflection of the constant and dramatic decline in federal investment since 1980 (Figure 15). One might question why the grade did not drop before this year. Two key changes have occurred: 1) the low investment is now coupled with promises for higher levels of investment; and 2) there is now a more convincing body of literature relating to the severity of the physical inactivity crisis in Canada and the expected outcomes of this situation. There is some evidence of increased investment as a result of the Healthy Living Strategy, and this will be followed closely in the year to come.²²¹

The moderate Provincial/Territorial Government Investment grade of "C" is a reflection of a general substantial increase in investment in most jurisdictions since the 1980s.²³⁸



Investment Beyond Vancouver 2010

As noted in the introductory section of the Report Card, we recognize the achievements of our Winter Olympic athletes, the support of the Own the Podium program and the impact the Games can have on Canadians. However, data noted earlier also indicated that sport participation is decreasing, and without ongoing support to foster sport and physical activity participation, the inspiration provided by the Olympics for young people to engage in physical activity and sport may be short-lived. This assessment of policy investment is focused on overall support to increase physical activity participation among all children and youth.

Physical activity levels are low among children and declining among adults. This indicates that the current level of investment and action to address the issue may be inadequate. Federal investment to physical activity from 1981 to 2009 is presented in Figure 15. The spending level required to solve the issue of physical inactivity is not known. The Coalition for Active Living is a national action group of more than 100 organizations advocating for health promotion and disease prevention through physical activity. The Pan-Canadian Physical Activity Strategy,²⁰⁹ developed by the Coalition for Active Living, outlines a focused plan to implement sustainable and long-term change in physical activity habits of Canadians. Estimates suggest an annual \$100 million investment (less than 0.5% of the annual health care budget) is required to address what has become a \$2.1 billion health problem.²⁴⁶ Achieving the target to reduce physical inactivity by 10% by 2003 was associated with annual health care cost containment of \$150 million (\$6.15 per capita); only a fraction of these savings are being directed to implementing federal and provincial strategies to encourage physical activity. For example, in Ontario, the combined federal and provincial expenditure on physical activity is \$1.42 per capita.²²¹

The federal budget released in March of this year demonstrates a new level of support by our federal government, yet it still falls short of the \$100 million annual investment recommended. In total, \$31 million has been allocated annually and on an ongoing basis to a range of priorities, with a particular focus on sport participation and some support for physical activity. Budget commitments include: \$17 million for programs that support the training and competition of winter and summer elite athletes (i.e., the \$11 million to Own the Podium and to Team Sport initiatives); \$5 million to the Canadian Paralympic Committee to build from the Vancouver Games in the years ahead; \$5 million to renew the La Relève initiative at Sport Canada that was slated to end on March 31st of this year; \$1 million to Special Olympics Canada in support of sport for people with an intellectual disability; and \$3 million dedicated to ParticipACTION to promote healthy lifestyles through physical activity and fitness. The ongoing support of our Canadian athletes is commendable – investment to support physical activity for the health of all Canadians is needed as well.

Municipal Government Strategies and Investment

The sheer number of municipalities in Canada prevents us from being able to take a detailed look at municipal government strategies and investments. Multi-faceted community-based campaigns are recommended to increase levels of physical activity.²³⁹ Policies at the local level shape our community infrastructure. An audit of existing and any proposed zoning or bylaws needs to be made through a “physical activity impact assessment lens” to determine if they support or detract from opportunities to be active. Policies and incentives to develop walkable, bikeable and play-friendly streets can also be adopted locally.

Similar to provincial/territorial government investment trends, municipal spending on recreation, which includes access to programs and opportunities for physical activity, is up (Figure 16).²⁴⁰ Local governments across the country are also developing and implementing physical activity strategies. Examples include the Saskatoon In Motion (www.in-motion.ca) community initiative, Toronto's Get Your Move On (www.toronto.ca/getyourmoveon) and the ACTIVE Halifax Communities (www.halifax.ca/activehalifax), among others. Local strategies have the following attributes: they have been built through partnerships across multiple sectors; are branded; take a population-wide approach with target audiences; consider access to local programs and facilities; promote active transportation; have a focus on the built environment; and have some evaluation strategies. In 2004, 39% of large municipalities (100,000 residents or more) had identified physical activity as a high priority and had developed a formal written plan.²⁴¹



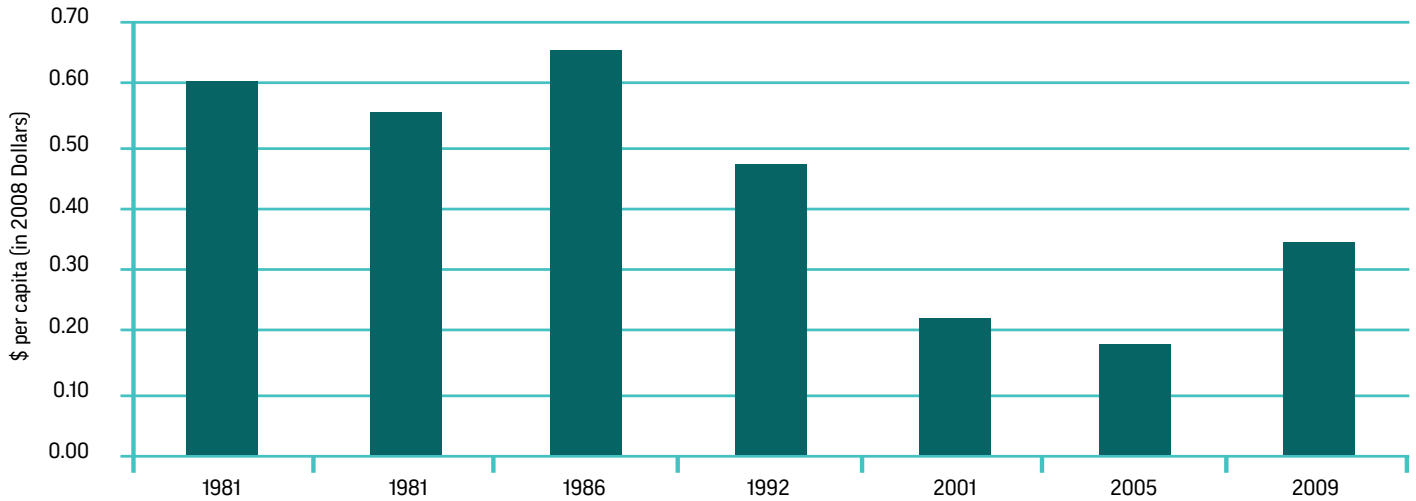


Figure 15: Federal government spending on physical activity promotion from 1981 to 2009, in 2008 dollars (adjusted for inflation using the 2008 Consumer Price Index).

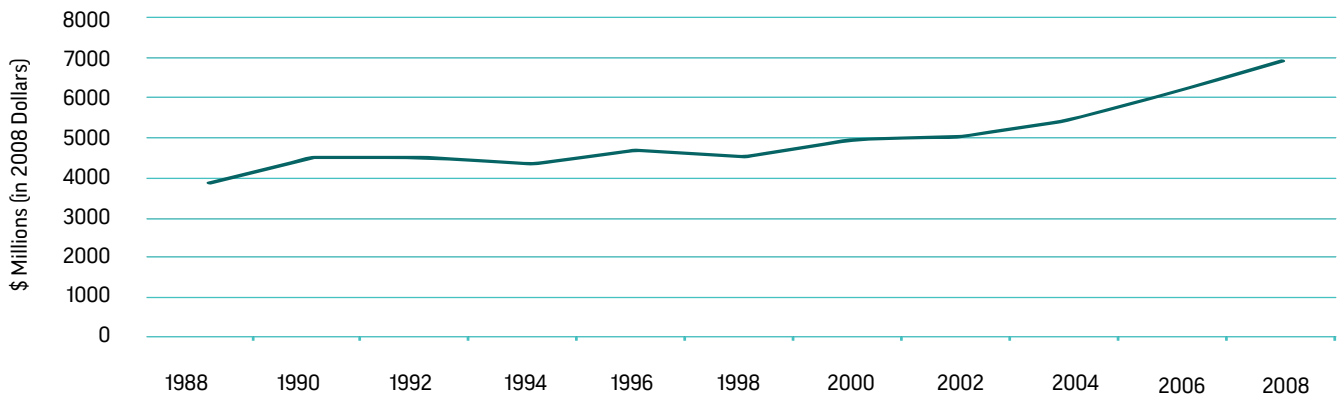


Figure 16: Municipal government spending on recreation from 1988 to 2008 (adjusted for inflation using the 2008 Consumer Price Index).

Industry, Philanthropic and Research Investments

Year	2005	2006	2007	2008	2009	2010
Grade	—	—	INC	C+	B-	C

2010 Grade

Similar to previous years, the 2010 grade for this indicator is a “C.” Public-private partnerships, philanthropic foundation support and strategic priorities of research granting agencies have been identified as important partners in the quest to increase and understand the physical activity levels of children and youth. There is some encouraging evidence that these groups are stepping forward, but given the size of resources they control and the scope of the inactivity crisis, much more could be done. An increase in investment and leadership by the federal government may also attract increased investment by these other groups. Despite increased funding for obesity research, this increase has occurred for basic science and clinical research only, indicating that efforts are currently focused more heavily on treating obesity and less on preventing it.

Funding Directed Toward Physical Activity in Children and Youth

The Canadian Institutes of Health Research (CIHR) has been a leader in funding research relating to physical activity for children and youth. Between 2000 and 2009, CIHR invested nearly \$16 million in 97 projects. The funding supported operating funds for research, postgraduate students, new investigators, fellowships, knowledge translation initiatives and strategic meetings.

A review of philanthropic funding in 2008-2009 indicated that over \$41 million was given to more than a thousand “Sport and Recreation” initiatives. Unfortunately, we do not know how much of this was allocated to children and youth, nor do we know the nature of the programs or initiatives funded. The average proportion of funding directed toward sport and recreation was 3.4%, which is considerably less than that given to other sectors (e.g., health, community, education, medical). Some top contributors include: the Ontario Trillium Foundation (\$31.9 million), the Royal Bank of Canada Foundation (\$3.1 million) and the J.W. McConnell Family Foundation (\$2.1 million).

Bridging Gaps in Chronic Disease Prevention

Coalitions Linking Action and Science for Prevention, or CLASP, is an initiative of the Canadian Partnership Against Cancer. With the ultimate goal of improving the health of individuals and populations, CLASP reaches beyond the cancer community by supporting coalitions of organizations that cross provincial and territorial boundaries to integrate cancer prevention with other chronic disease prevention strategies. The development of CLASP has been a collaborative effort involving consultation with researchers, practitioners and policy specialists working in cancer and chronic disease prevention across Canada. This approach ensures that the Partnership’s investment in cancer and chronic disease prevention is guided by the needs from the field and links the lessons learned from science (knowledge to action) with the lessons learned from practice and policy (action to knowledge) – building upon what is already being planned and put in place for primary and secondary prevention. Following an open call for proposals, a total of \$15.5 million, including funding support from the Public Health Agency of Canada and the Heart and Stroke Foundation, was awarded to 7 coalitions. To provide continued momentum, the Partnership is hosting regular knowledge exchange meetings that bring funded coalitions to work together on cross-CLASP issues including evaluation, knowledge exchange, and sustainability. (Refer to the Active Transportation Indicator for information about a CLASP initiative underway to increase physical activity in children and youth using a School Travel Planning framework.) Go to www.partnershipagainstcancer.ca/coalitions for more information.

Funding Directed Towards Obesity

During the 1990s, the Medical Research Council (MRC) of Canada was spending less than \$1 million per year on obesity research. By 2000-2001, when the MRC became the CIHR, funding had increased to \$3.4 million. With the Institute of Nutrition, Metabolism and Diabetes (INMD)’s strategic focus on obesity, total CIHR funding grew to nearly \$20 million per year in 2005-2006, a six-fold increase. Between 2000 and 2006, \$63 million across 442 grants and awards was directed toward obesity. Of this, approximately \$10 million was directed toward childhood obesity, some of which focused on physical activity. INMD has helped increase the number of researchers in Canada who are tackling obesity-related questions. The number of individuals supported through one or more CIHR-funded grants and awards grew from 60 in 2000-2001 to more than 400 in 2005-2006; a seven-fold increase in the number of researchers, collaborators and salary awarded trainees.

Research Funding for Physical Activity

Social Sciences and Humanities Research Council

- Awarded \$67,325 (4 projects) between 2005-2008 toward research relating to children and physical activity
- Focus is shifting toward sport only and away from health-related research

Heart and Stroke Foundation

- Awarded \$11,914,658 to health-related projects between 2001-2003

Canadian Diabetes Association

- Awarded \$4,990,000 in 2007 and \$5,024,000 in 2008 for research grants and personnel awards
- Government health programs payable: \$7,215,000 in 2007; \$7,114,000 in 2008

Canadian Cancer Society

- Awarded \$1,260,312 toward physical activity projects between 2004-2009

Upstream versus Downstream

A focus on basic science and clinical research implies that we are currently focused more heavily on treating obesity (and inactivity) and less on preventing it. While the treatment and management of obesity are important, there is a need to think proactively and strategically about reducing the number of obese Canadians by keeping healthy Canadians healthy. In other words, population health research focused on the prevention of chronic disease is an area we need to pursue more aggressively. Precious few resources get allocated for this purpose. Even if strategies to manage obesity are developed, it is well understood that maintaining a healthy weight is far easier than maintaining a reduced weight after being overweight or obese.²⁴² If we can keep healthy kids healthy, we will be in a far better situation down the road, with a reduced burden on the health care system resulting from obesity-related co-morbidities. Increased efforts need to be made to prevent the development of obesity in the first place. Focused messaging to the entire population on active living and healthy eating are part of the answer, but more effort is needed. Policies and programs that support families in achieving these ends are needed.

Some organizations have shown dedication to the promotion of physical activity for children and youth during difficult economic times. For the past 3 years, The Lawson Foundation has funded the Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth, and has now entered into a partnership with the CHEO Foundation. This partnership will create and fund 2 Junior Research Chairs who will be dedicated to research on keeping kids healthy. The Chagnon Foundation partnered with the Government of Quebec to fund grassroots projects that promote physical activity throughout the province, and the McConnell Foundation continues to work with Sport Matters on initiatives in relation to sport participation and citizen engagement. Canadian Tire's Jump Start initiative has maintained its investment to provide support for children from low-income families to participate in recreation. George Weston Ltd. has supported the Active and Safe Routes to School Partnership, and has an initiative that supports healthy active living initiatives in the after-school period. Kellogg Canada has continued to support the Report Card and General Mills Canada has maintained its Champions for Healthy Kids grants in support of healthy active living programs.

These are examples of industry support of physical activity, but in other areas, economic challenges have affected funding initiatives. For example, The National Board of Directors of the BMO Employee Charitable Foundation has decided to dissolve the Kids 'n Motion Endowment Fund, which was introduced in 2004 to address the health risks associated with physical inactivity and obesity among children and youth, including those who are physically or mentally challenged, or financially disadvantaged. BMO indicates that the income received since the fund's inception has not been sufficient enough to carry out the original purpose of the fund. Several foundations and corporations have had similar experiences, which has affected their support of physical activity for children and youth.



CROSS-CANADA TOUR:

KEY CHALLENGES AND PROMISING STRATEGIES RELATING TO 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 2010 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

11,592

Average steps taken per day
(CAN PLAY 2007-2009)

11%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

30%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

21.8%^Δ

Prevalence of overweight and obesity, Canadian Community Health Survey 2004

^Δsignificantly lower than the national average for overweight/obesity (26%)

Challenges

1. **Infrastructure deficit:** Approximately \$327 million is needed to upgrade existing infrastructure (\$2.8 billion would be required to replace these assets). This does not include parks, trails, community halls or infrastructure such as gyms, and does not include new facilities to meet population growth and changing trends.
2. **Need for collaboration and integrated approaches:** Coordinated work within government departments, and with other levels of government and with non-government organizations, is required for enhancing cross-sectoral collaboration and integrated approaches. There is a need to increase human resource capacity to meet the time investment required to collaborate, and to manage relationships and projects.
3. **Inequitable access to adequate facilities and physical activity opportunities:** Due to income and other socio-demographic factors, lack of consistent approaches to reciprocal agreements between communities and schools/access to after-school programs, there is a severe lack of safe, accessible, affordable and available facilities and opportunities.

Ever Active Schools Program: The program's vision is that Alberta students live, learn and play in healthy, active school communities. The program provides resources, networking opportunities, professional development, assessment tools and tracking mechanisms to help interested school communities review current practices and implement action plans supporting physical activity, healthy eating and mental well-being.

Alberta Healthy Living Fund: Coordinated by Alberta Health and Wellness, this fund supports initiatives focused on active living, healthy eating and positive social environments. Projects funded through this Funding Framework (a partnership with the Public Health Agency of Canada, Alberta Health and Wellness, and Alberta Tourism, Parks and Recreation), have supported an analysis of after school recreation initiatives examining "critical hours" programming, and participation opportunities for children and youth in rural areas, Boys and Girls Clubs and reserve school communities.

Healthy Kids Alberta: A 10-year (2007-2017) government strategy involving 16 ministries, identifying ways to work together and promote the wellness of all Alberta children and youth (aged 0 to 18) focused on 4 areas of wellness.

Continued Project Funding to Support Provincial Active Living Initiatives and Healthy School Community Initiatives: This will continue in 2010/11 for projects that address the conditions/factors that support physical activity, healthy eating and positive social environments in school communities, as well as contribute to achieving targets aimed at increasing the proportion of Alberta children and youth who are physically active.

For more information about challenges and promising strategies within Alberta, please contact Bernie Mac Donald of Alberta Tourism, Parks and Recreation (Bernie.MacDonald@gov.ab.ca) or Judith Down of Alberta Centre for Active Living (Judith.down@ualberta.ca).

Promising Strategies

Active Alberta – A Recreation, Active Living and Sport Policy: This is still in development and will identify outcomes and actions to help individuals, communities, active outdoor environments and "systems" embrace participation in physical activity, recreation and sport. This policy is being developed in collaboration with 11 provincial government departments.

Alberta Tourism, Parks and Recreation, and the Alberta Sport, Recreation, Parks and Wildlife Foundation: ASRPWF provides project funding to assist sport and recreation stakeholders in communities to develop physical literacy programming, increase participation in sport by under-represented groups, and promote healthy active living.

Daily Physical Activity (DPA) and Framework for Kindergarten to Grade 12 Wellness Education: Implemented in 2005, the DPA initiative requires 30 minutes of daily physical activity for students in grades 1 to 9. Annual implementation resources provide school authorities and teachers with scheduling or activity suggestions. In 2009, the Framework for Kindergarten to Grade 12 Wellness Education was released by Alberta Education. It was developed from research and stakeholder feedback to guide future revisions to the Health and Physical Education Programs of Study, and to integrate wellness dimensions across all subject areas.

BRITISH COLUMBIA

12,504

Average steps taken per day
(CAN PLAY 2007-2009)

15%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

37%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

26.4%

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

Challenges

1. **Financial resources:** The after-school time period (3 p.m. to 5 p.m.) has been identified as a critical period to decrease “screen time” and subsequently increase physical activity. After-school care, however, is costly, both in terms of families who can’t afford it and governments/schools/communities that don’t have the resources to provide affordable or free access province-wide. There is a lack of school/staff/program funding.
2. **Human resources:** Provision of out-of-school-hour physical activity opportunities requires supervision, training and/or certification. These resources (teachers, coaches, recreation providers) are not always available because of workloads, geography, conflicting schedules and/or skill/certification requirements.
3. **Social environments:** Safety issues (real or perceived) and social influences (e.g., dependence on the car for transportation, demands on single-parent families) often keep kids “in” (i.e., in cars, in front of TVs, inside the home), thereby limiting opportunities for physical activity. There is a lack of family encouragement, mentoring, leadership/role models and self-esteem.
4. **Program options:** Although a number of programs are available, there is a lack of variety in these programs to attract and engage many children and youth. Also, there is too much competition and distraction for kids with the availability of TV and computers.

Promising Strategies

ActNow BC: ActNow BC supports all ministries in the shared goal of maintaining and improving BC’s leadership position as the healthiest province in Canada. Currently in its fifth year, ActNow BC is recognized by the World Health Organization as one of the leading programs of its kind world-wide. Action Schools! BC, School Fruit and Vegetable Nutritional Program, ActNow BC Athlete Ambassador Team (inspired by the 2010 Olympic and Paralympic Winter Games), the multiple programs from the BC Healthy Living Alliance, and hundreds of others, directly contribute to the goals of ActNow BC.

Daily Physical Activity (DPA) and Healthy Eating and Physical Activity Learning Resources: DPA in schools was implemented by the Ministry of Education in 2008. Schools will offer 15 minutes for kindergarten and 30 minutes of DPA for grades 1 to 9 students as part of their educational programs. In grades 10 to 12, students must document and report a minimum of 150 minutes per week of physical activity, at a moderate to vigorous intensity, as part of their Graduation Transitions Program.

Action Schools! BC (AS!BC): Funded by the Ministry of Healthy Living and Sport, this is a best practice model designed to assist schools in creating individualized action plans to promote healthy living. Action plans include activities in 6 zones – Scheduled Physical Education, School Environment, Classroom Action, Family and Community, Extracurricular and School Spirit.

National Initiatives: the BC Recreation and Parks Association has been building on successful national programs such as Sogo Active and HIGH FIVE® through BC implementation. BC saw over 160 community organizations help over 2,700 BC youth get active and 225 Sogo Active youth were selected by Coca-Cola to participate in the Vancouver 2010 Olympic Torch Relay. B.C. HIGH FIVE® created four specific supplements to augment the program’s national delivery and will be one of the first provinces to move into HIGH FIVE® Sport.

BC Sport Participation Program: This program supports community and school programs that increase participation in sport. It is funded through a \$2 million (over 3 years) bilateral agreement between Sport Canada and the Sport and Recreation Branch (Ministry of Healthy Living and Sport), and is administered by 2010 LegaciesNow. The programs (such as Girls Only Incentive Program, Run, Jump, Throw, Kids Can Move) are delivered by provincial and multi-sport organizations. Between 2007-2010, an estimated 160,000 new participants, 10,000 new coaches/leaders and more than 100 communities have benefited.

Everybody gets to play™: This is a Canada-wide initiative led by the Canadian Parks and Recreation Association (CPRA) and delivered in British Columbia by the B.C. Recreation and Parks Association (BCRPA), to make recreation more accessible for low-income children and their families. B.C. was the first province to create a provincial program supplement and is currently the leader in organizing and running workshops. The B.C. component of the initiative has also aligned itself with other similar initiatives, such as Everybody Active, in order to broaden the scope of education and provide further support to communities.

Walking School Bus and Bicycle Train Program: This program provides support to B.C. schools in setting up their own walking school buses and bicycle trains through online tools and an incentive program. This is a partnership between the Ministry of Education, the Ministry of Healthy Living and Sport, the Directorate of Agencies for School Health (DASH BC) and the Hub for Action on School Transportation Emissions (HASTE).

For more information about challenges and promising strategies within British Columbia, please contact Scott Beddall of the Healthy Schools Initiative (scott.biddall@gov.bc.ca) or Holly-Anne Burrows of the B.C. Recreation and Parks Association (HBurrows@bcrpa.bc.ca).



MANITOBA

Challenges

1. **Disparities:** Unique situations are faced by First Nations, Inuit and Métis people, low-income families and new immigrants that make healthy choices more difficult. This is especially prevalent in Manitoba.
2. **Built environment:** The way communities are designed are preventing children from using more active modes of transportation
3. **Cost:** The high cost of some physical activity and sport programs are a major barrier for low-income families
4. **Leadership:** There is a need for ongoing training and support of volunteers, coaches and fitness leaders in rural and remote areas of the province.

Promising Strategies

Manitoba in motion: This is a provincial strategy to help all Manitobans make physical activity part of their daily lives for health benefits and enjoyment. **In motion** activities focus on families, children, youth, adults and older adults in the home, community, school and workplace settings. Initiatives targeted to children and youth include Healthy Schools **in motion**, Communities **in motion**, and Manitoba **in motion** Community Physical Activity grants. Communities and schools receive resources, training and consultation. An awareness campaign in partnership with CTV focuses on physical activity, family role modelling, active play and addressing barriers.

Healthy Schools: Manitoba's Healthy Schools initiative promotes physical, emotional and social health of students, their families, school staff and school communities, recognizing that schools are uniquely positioned to positively influence several of the determinants that affect healthy child, adolescent and family development. Healthy Schools has 6 focus areas, one of which is physical activity. Each year, school divisions receive funding to support local Healthy Schools plans. Targeted provincial campaigns are offered annually to help schools conduct projects that support health and wellness issues.

Mandatory Physical Education: Manitoba is the first province in Canada to mandate a Physical and Health Education Curriculum from kindergarten to Grade 12. Physical Education/Health Education is compulsory for these students in Manitoba as of September 2008. A minimum instructional time is mandated for both physical education and health education, varying with the grade level. A new, different approach is taken for grades 11 and 12; the curriculum promotes home, school and community involvement, and may include competitive sports and recreational pursuits. The intent is to encourage students to take ownership of their physical activity.

11,938

Average steps taken per day (CAN PLAY 2007-2009)

13%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

34%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

30.8%*

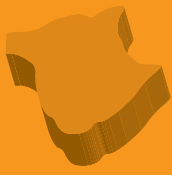
Prevalence of overweight and obesity, Canadian Community Health Survey 2004

* significantly higher than the national average for overweight/obesity (26%)

Bilateral Agreements: Agreements between Manitoba and the Public Health Agency of Canada on Physical Activity and Healthy Eating funds 3 children/youth projects:

- » The Immigrant/Refugee Physical Activity Initiative supports immigrant and recreation service providers to plan and implement programs that address the barriers to physical activity and support active lifestyles for immigrant children, youth and their families.
- » The Aboriginal Youth Healthy Living Mentor Program for elementary school children is led by university mentors who train high school youth to be leaders.
- » Winnipeg Aboriginal Sport Achievement Centre Youth Achievement Programs in Winnipeg and Shamattawa (a remote, northern Manitoba community that has limited employment, education and recreational opportunities) provides leadership development for Aboriginal youth to increase access to physical activity, sports and cultural programming for Aboriginal children and youth.

For more information about challenges and promising strategies within Manitoba, please contact Jaymi Derrett of Manitoba **in motion** (Jaymi.Derrett@gov.mb.ca).



NEW BRUNSWICK

Challenges

1. **Comprehensive approach:** We need to engage partners across all sectors and levels of decision making in implementing a comprehensive approach to address areas that require attention such as screen time, built environment, optimal usage of NB Student Wellness Survey data, after-school opportunities and access to facilities.
2. **Erosion of the recreation profession and reduced funding:** Address the economic climate and change in prioritization of recreation at the municipal level, leading to the erosion of the recreation profession, reduced funds toward upkeep and refurbishment of facilities. It's necessary to attract the participation of vulnerable populations, and to obtain stable and accessible funding.
3. **Aligning stakeholders:** In order to optimize resources, avoid duplication and cross-promote opportunities in their efforts to increase physical activity levels of New Brunswick children and youth, all stakeholders must be aligned.

Promising Strategies

Surveillance and Knowledge Mobilization: Wellness Strategy Surveillance engages stakeholders in schools and communities by promoting use of local and relevant data to support awareness, participation and sustained engagement in initiatives to promote physical activity. Activities associated with this effort include the distribution of products such as provincial fact sheets, community profiles, district and school-specific feedback reports, as well as consultation and related workshops.

Comprehensive Support to Schools: Schools require support in all aspects of a comprehensive school approach; policy, resources, tools and leadership all make a difference. School Communities in ACTION is a program designed to recognize and reward successful ongoing physical activity programs, and encourage schools to adopt additional physical activity programs. The School Pedometer Challenge encourages students to be more active through the integration of pedometer use in school to foster a culture of physical activity. Promotion of Sport Participation and its Benefits Program is a sport ambassador/outreach program targeted to rural public schools whereby current/former high-profile athletes speak to students about the benefits of sport participation at any level. The messages include, but are not limited to, the importance of teamwork and fair play, and how to set goals and achieve them.

10,904

Average steps taken per day (CAN PLAY 2007-2009)

7%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

23%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

34.2%*

Prevalence of overweight and obesity, Canadian Community Health Survey 2004

* significantly higher than the national average for overweight/obesity (26%)

Implementation of Wellness Networks: As part of mobilizing communities and regions toward improved wellness and health outcomes, the "in motion" model is currently being piloted in 7 communities/regions in New Brunswick under the management of the Healthy Eating Physical Activity Coalition of New Brunswick (HEPAC). It is anticipated that full provincial adoption of this model will begin in the fall of 2010.

Active Communities Grant Program: This program provides support to municipal and non-profit organizations that initiate physical activity opportunities in their community or region. Focusing on partnership, goal setting and evaluation, this program has made a significant difference in increasing participation and leadership around healthy active living.

Go NB! Taking Action Through Sport: This program is the result of a bilateral agreement between the province of New Brunswick and Sport Canada. Its main objective is to deliver sport initiation programs for children and youth and to reduce barriers for under-represented populations. Funding is also available to provide leadership development and programming opportunities to further support participation.

Active Kids Toolkit: This program provides caregivers and program providers with support in developing physical literacy in children (from 0 to 5 years old), optimizing active play and encouraging healthy eating and other aspects of wellness. Active Kids has expanded to include programs for school-aged children, municipality playground programs and a lending library for families.

For more information about challenges and promising strategies within New Brunswick, please contact Cindy Dickie of the New Brunswick Department of Wellness, Culture and Sport (cindy.dickie@gnb.ca) or Jessica Arbuckle of the Healthy Eating and Physical Activity Coalition of New Brunswick (hepac@nbnet.nb.ca).

NEWFOUNDLAND AND LABRADOR



Challenges

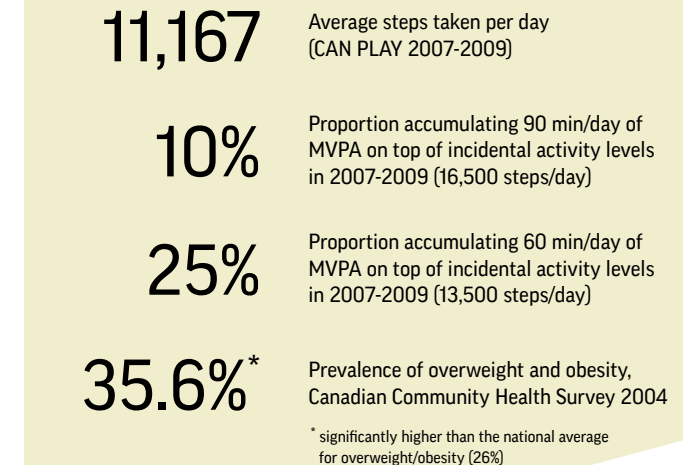
1. **Lack of research data:** There is a strong need for research data on physical activity levels and participation rates in recreation, sport and physical activity programs. More specific provincial research data on physical activity levels will assist in targeting resources and interventions toward those identified as in greatest need.
2. **Community and School infrastructure:** This is needed in order to support recreation, sport and physical activity programming. This includes quality free, unstructured play environments.
3. **Access for all:** There is a need to eliminate barriers that block participation in recreation, sport and physical activity. The needs of all people must be met regardless of age, ability, ethnic diversity or circumstance.

Promising Strategies

Active, Healthy Newfoundland and Labrador: This is a Recreation and Sport Strategy for Newfoundland and Labrador. Released in May 2007, it offers a framework to encourage citizens to pursue physical activity, recreation and sport at all levels for improved quality of life, improved health, enhanced social interaction, personal fulfillment and the achievement of excellence.

Canadian Tire Jumpstart Program: This is a community-driven program offering funding support to children and youth to participate in organized sports and recreational activities. It is generously supported by the provincial government (funding) as well as by recreation, community leaders and Canadian Tire.

Achieving Health and Wellness: A Provincial Wellness Plan for Newfoundland and Labrador reflects on increased focus on a shared responsibility for health, and provides direction for promoting health, preventing illness and injury and increasing the capacity of individuals, groups and communities to take action for wellness. Examples of outcomes include After Schools Programs, Healthy Schools, the Healthy Students Initiative and Provincial/Regional Wellness Grants program.



Recreation Newfoundland and Labrador Physical Activity Campaign: This is a focused campaign comprised of physical activity and healthy living programs and initiatives that supports collaboration and partnering at the local, regional, provincial and national level. Examples of outcomes include Regional Recreation Directors Program, and the Small Steps... Big Results Physical Activity website.

Canadian Sport for Life; Long Term Athlete Development Program: This is a coordinated and collaborative approach to the new National Sport Model. An Advisory Board comprised of partners and agencies in the fields of physical activity, recreation and sport is in place to implement Canadian Sport for Life (CS4L) in Newfoundland and Labrador. The Board is supported by a full-time project leader.

For more information about challenges and promising strategies within Newfoundland and Labrador, please contact Gary Milley of Recreation NL (garymilley@recreationnl.com) or David Doyle of NL DDepartment Tourism Culture and Recreation Government Newfoundland Labrador (DavidDoyle@gov.nl.ca).

11,194

Average steps taken per day
(CAN PLAY 2007-2009)

10%

Proportion accumulating 90 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (16,500 steps/day)

27%

Proportion accumulating 60 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (13,500 steps/day)

32.0%*

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

* significantly higher than the national average for
overweight/obesity (26%)

Challenges

1. **Unaffordable Insurance:** Getting and keeping liability insurance has become a major issue for many recreation organizations. This affects programming in communities when activities are curtailed or abandoned to fit within available insurance coverage.
2. **Aging infrastructure and lack of equipment:** About 2/3 of existing sport and recreation facilities in Nova Scotia are approaching 30 years of age and are in need of major renovations if their useful life is to be extended. The cost to repair these aging facilities is estimated to be \$92.5 million.
3. **Decline in spontaneous play, contact with nature, and the percentage of kids using active transportation in their communities:** Affecting change in these behaviours will require a combination of parental engagement in supporting their kids to be active, supports through program and policy initiatives, and changes to the built environment.
4. **Existing policies and practices do not enable or support access to organized recreational activities:** Elements of this issue include disengaged adolescents; a focus on interventions targeted at children, despite the fact that participation levels appear to plummet in the adolescent years; and strong competition from sedentary activities (e.g., screen time).

Promising Strategies

Active Kids Healthy Kids (AKHK): AKHK is a comprehensive strategy shared by government, non-government organizations and residents of Nova Scotia that provides a multi-year plan for improving physical activity opportunities and participation rates for the 0-18 age range.

Municipal Physical Activity Leadership Program (MPAL): The Department of Health Promotion and Protection partners with municipalities (27 to date) through this cost-sharing program to develop and implement comprehensive local plans intended to increase participation in health-enhancing physical activity. In some cases, adjacent municipalities develop a common plan and share resources.

Active Transportation: A movement in support of active transportation (AT) is growing in numerous settings and myriad ways across the province. The Pathways for People document provides an overarching framework; the Union of Nova Scotia Municipalities has established an AT Committee; municipalities are developing AT plans; and provincial approaches such as Bicycle Nova Scotia's Bikeway Vision, Ecology Action Center's Active and Safe Routes to School, Heart and Stroke Walkabout and Recreation Nova Scotia's Pathway for People web site are in various stages of development and implementation.

Social Marketing: Nova Scotia is contributing to several national, federal/provincial/territorial (F/P/T) and interprovincial social marketing initiatives that represent promising practices, including national campaigns under development by ParticipACTION and the F/P/T Physical Activity Social Marketing Working Group. Ongoing, collaborative, province-wide campaigns include Heart and Stroke Walkabout and Recreation Nova Scotia's two seasonal campaigns June is Recreation Month and Take the Roof off Winter. The Department of Health Promotion and Protection is working with stakeholders to develop capacity, while planning for a collective direction for marketing physical activity in Nova Scotia.

Physical Activity Practitioners: Since 2003, there has been a significant increase in the number of professional positions whose primary role is to promote physical activity. For example, municipalities participating in the MPAL program and regional coordinating organizations have full-time coordinators, and Sport Animators are employed by each school board to build bridges between schools and communities to facilitate non-curricular physical activity opportunities.

Improvements to Health and Physical Education Curriculum: The Department of Education, with input from the Departments of Health and Health Promotion and Protection, is developing a new curriculum for grades primary to 8. A mandatory high school physical education graduation requirement has been initiated and several new course options are now offered or under development.

Health Promoting Schools: Health Promoting Schools provides an overall provincial framework and policy platform for key school health initiatives at the Board level, including healthy eating, physical activity, youth sexual health, tobacco reduction, addiction, and injury prevention in the school setting.

After School Time Period: Planning is taking place on how government can support after-school programs across Nova Scotia. Also, a literature review on screen time reduction programs has been completed, and planning and evaluation for a provincial initiative will take place in 2010/11 by the IWK Health Centre, Dalhousie University and the health, education and recreation sectors.

Healthy Living Tax Incentive: A provincial tax credit of \$500 helps families with registration costs for children and youth who are participating in eligible physical activity, sport and recreation programs.

For more information about challenges and promising strategies within Nova Scotia, please contact Bev Mahon of Recreation Nova Scotia (bmahon@recreationns.ns.ca) or Rick Gilbert of the N.S. Department of Health Promotion and Protection (Rick.Gilbert@gov.ns.ca).

NORTHWEST TERRITORIES



Challenges

1. **Prioritization within government policy and decision making:** Physical activity is seen as a low priority, with less than 0.5% of the government's budget being directed toward sport and recreation.
2. **Unhealthy lifestyle choices:** There are many choices for kids these days other than being active, such as substance abuse, smoking and family social issues, which are more prevalent than choosing physical activity as a healthy alternative.
3. **Lack of trained instructors:** There are very few quality coaches, volunteers and role models to depend on.
4. **Lack of proper facilities/cost of operating facilities in the NWT:** Much of the current infrastructure is aging and outdated. There is need for large investment to improve these facilities.
5. **Screen time:** Television, computer and video game usage is far above the recommended guidelines.

Promising Strategies

School Involvement: NWT schools are placing increased importance on physical activity as an academic, leadership development and cultural knowledge tool - through 'On the land' activities and camps, sport academies, fitness/treadmill programs and after-school programs.

Right to Dream: With the Olympics being hosted in Canada, the Aboriginal Sport Circle of the NWT has been holding camps, clinics and other physical activity events in small communities across the NWT with the purpose of inspiring youth to follow their dreams, and understand the value of physical activity and choosing a healthy lifestyle. Each event is leaving a legacy for kids and community members to continue being physically active long after the Olympics are over.

11,662

Average steps taken per day
(CAN PLAY 2007-2009)

15%

Proportion accumulating 90 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (16,500 steps/day)

32%

Proportion accumulating 60 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (13,500 steps/day)

NA

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

NA = data not available

NCCP Pilot Program: The Sport North Federation is offering online training courses that will give instructors/coaches the qualifications they require in order to become certified to teach their sport of choice. As a lack of trained instructors in the NWT is an issue, this project is aimed at increasing leadership capacity, having a greater impact on a positive, quality sport experience of our children and youth.

For more information about challenges and promising strategies within the Northwest Territories, please contact the NWT Sport and Recreation Council (1-800-661-0797, info@nwtsrc.com).



NUNAVUT

13,012

Average steps taken per day
(CAN PLAY 2007-2009)

NA

Proportion accumulating 90 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (16,500 steps/day)

NA

Proportion accumulating 60 min/day of
MVPA on top of incidental activity levels
in 2007-2009 (13,500 steps/day)

NA

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

NA = data not available

Challenges

1. **Infrastructure/environment:** There are limited spaces to perform and enjoy modern physical activity in the long winters that we endure in facilities such as a multi-use community centre.
2. **Education/capacity building:** There is a lack of accessible and ongoing training and education opportunities to generate a strong recreation team within communities, and a high turnover rate of employees.
3. **Limited funding:** Limitations on the amount of funds available for physical activity makes it challenging to address the barriers to promote and deliver physical activity programs and services.

Promising Strategies

Granting Programs: The Sport and Recreation Division (Government of Nunavut) has an extensive list of grants and contribution opportunities available to communities and groups to support them in physical activity, recreation and sport programming, including the Physical Activity Initiative Grant and the Traditional Activities Grant, and Sport and Recreation Skills Program Grant.

Afterschool Physical Activity Program: In 2009/10, the Sport and Recreation Division has recognized the importance of Physical Activity Programming during the afterschool (3-6pm) time period as an opportunity to target those young people and is working to create appropriate programs.

Education Act: The new Education Act now guarantees at least 20 minutes of physical exercise every day for kindergarten and grades 1 to 9 in schools across the territory and efforts are underway to provide professional development to ensure that quality opportunities exist to implement this.

SportFit: This program is being implemented in partnership with 2010 Legacies Now within Nunavut grade schools. It is a free, easy-to-use interactive program delivered by teachers and students that encourages children and youth to discover sports that match their physical abilities and individual interests.

Social Marketing – PA Mascot Initiative: This initiative is aimed at inspiring the territory to lead a culturally relevant active life through promotion of current and emerging programs. This project is in the development phase with implementation planned for 2011.

For more information about challenges and promising strategies within Nunavut, please contact Christine Lamothe of the Nunavut Department of Culture, Language, Elders and Youth, Sport and Recreation (1-888-765-5506, clamothe@gov.nu.ca).

ONTARIO



Challenges

1. **A comprehensive system of affordable after-school physical activity and healthy living programs:** Surveillance data indicate that approximately 12% of Ontario children/youth attain the recommended daily level of physical activity and that many children use the after-school time period to engage in sedentary recreational activities.
2. **Affordable access to community sport and recreation programs and services:** Children from low-income families are less likely to be engaged in organized sport/recreation activities due to registration and equipment costs. Equitable access for all children is a priority.
3. **\$5.6 billion community sport and recreation infrastructure deficit:** Aging and ill-equipped recreation infrastructure and a lack of parks and trails make it difficult for families to participate in sport and physical activity programs within their neighbourhood/community.
4. **Need for implementation support and cross-sectoral partnerships:** Governments at all levels, social service organizations, the private sector and public health organizations all have a shared responsibility to ensure the planning and delivery of services that support healthy active living for all members of the community.
5. **Lack of integration and alignment between policies and other "demands" on community leaders:** The implementation of a quality physical activity programs cannot be accomplished in isolation from other social services. Collective planning within the broad social service sector is critical for long-term success. (i.e., educators, public health, community sport and recreation providers).

Promising Strategies

Ontario's Revised Health and Physical Education Curriculum: In January 2010, the Ontario Ministry of Education released a revised elementary Curriculum for Health and Physical Education (H and PE). The revised secondary curriculum will be released in Fall 2010. The revised H and PE curriculum is based on the vision that the knowledge and skills acquired in the program will benefit students throughout their lives and help them to thrive in an ever-changing world by enabling them to acquire physical and health literacy, and to develop the comprehension, capacity and commitment needed to lead healthy, active lives and to promote healthy, active living.

After-School Program: In the 2008-09 budget, the Ontario government announced \$10 million annually toward a childhood obesity strategy to

11,815

Average steps taken per day (CAN PLAY 2007-2009)

14%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

32%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

27.5%

Prevalence of overweight and obesity, Canadian Community Health Survey 2004

encourage children to eat healthy and be physically active. Ontario's After-School Initiative is a key commitment under Ontario's Poverty Reduction Strategy to help break the cycle of poverty. There are plans to make further developments in this area.

Healthy Communities Fund (HCF): This is a \$16 million grant program to support community partnerships to plan and deliver integrated services that improve the health of Ontarians. The HCF builds on current ministry funding programs and provides more opportunities for provincial and local organizations to apply for funding. The fund requires increased partnerships among stakeholder organizations, resulting in more comprehensive health promotion programs that provide Ontarians with better access to priority health promotion programs and services. Upon an analysis of the evaluation of the HCF, a new call for community physical activity and healthy living grant submissions will be announced in 2010/11.

Sport/Recreation Infrastructure: Since 2006/07, the Government of Ontario has invested \$584 million in 1,082 community recreation infrastructure projects valued in excess of \$1.85 billion.

Daily Physical Activity (DPA): DPA is being implemented in elementary schools as a part of the government's Healthy Schools Program. Ophea has created a number of useful DPA training and support services for schools/teachers to help them effectively implement DPA. Evaluation shows that the Ophea DPA Training and Support Services increased educators' overall ability to implement DPA in the classroom and helped them to increase their level of DPA implementation.

For more information about challenges and promising strategies within Ontario, please contact Art Salmon of the Ontario Ministry of Health Promotion (art.salmon@Ontario.ca) or Jennifer Cowie-Bonne of Ophea (info@ophea.org).

PRINCE EDWARD ISLAND

Challenges

1. **Screen time:** Similar to other jurisdictions, P.E.I. children and youth are caught up in the technology craze. Children and youth on P.E.I. spend considerable time in front of screens (TV, computer, cellphone, text messaging, etc.). This poses a challenge in terms of trying to get their attention to the need for more physical activity time in their day.
2. **Access to programs:** Like many areas of the country that have a large rural population, P.E.I. has challenges in ensuring that there are appropriate recreation, sport and physical activity opportunities available for children and youth living in rural areas of the province. Access to trained leaders and, in some instances, the proper facilities present barriers to participation.
3. **Poor food choices:** Encouraging our children and youth to make healthy food choices is often a challenge with the lure of fast food options. It is also a challenge for parents to understand the importance of choosing healthy food options for their family as they face busy hectic schedules that often result in less family time for proper meal planning and preparation.
4. **Daily physical activity in schools:** The school setting is a perfect place to educate and encourage our children and youth to be more physically active and develop healthy eating habits. However, our schools are increasingly challenged to find sufficient time during the school day to expose children and youth to physical activity and healthy eating options outside of instructional time. Schools are faced with increasing needs/demands from both inside and outside the school.

Promising Strategies

Atlantic Wellness Campaign: “Let’s Right The Future” is an Atlantic Wellness Campaign that is designed to engage families and communities to achieve a healthier future by committing to small, simple changes to eat nutritious foods and be more active. The goal of the campaign is to promote children’s physical activity and healthy eating by making it everyone’s business.

Provincial Physical Activity/Healthy Eating Program: Building on the momentum gained through the Let’s Right the Future Campaign, the Department of Health and Wellness and Recreation P.E.I. will be launching its own provincial campaign that will encourage Islanders to become more active and make healthier food choices as part of “Righting the Future” for themselves and their families. The provincial campaign will inform Islanders of the opportunities that are available across the province and the relative ease with which one can incorporate activity and healthy food options into their daily lives.

11,340

Average steps taken per day
(CAN PLAY 2007-2009)

9%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

26%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

30.2%

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

Healthy Foods for Island Children and Youth: We are witnessing a positive growth in the number of school breakfast programs and healthy snack programs that are being offered at the school level. We must continue to encourage and support the development and promotion of these programs.

SHAPES PEI: The School Health Action Planning and Evaluation System - SHAPES PEI survey is a provincial survey of Prince Edward Island students in grades 5 through 12 conducted by the PEI Department of Education and Early Childhood Development in partnership with the Comprehensive School Health Research Group. The survey provided data on students’ mental fitness, physical activity and eating behaviours. The data from this study will be used by both schools and community partners to develop action plans that will address the findings in the survey.

Alternative Program Options: There are program opportunities such as Sogo Active, Sporty Kids and outdoor adventure-based programs that could provide options for children and youth who are not engaged or motivated by our traditional structured sport and recreation programs. HIGH FIVE® is a quality assurance program for leaders of recreation and sport programs for children from ages 6 to 12 years. We need to ensure these programs are promoted to specific groups that would be interested in exploring these options. We should also be directing more users who are challenged with finding the resources required to enrol their children in physical activity, recreation and sport programs to seek assistance through programs such as Kid Sport, Jump Start and Active Kids Fund.

For more information about challenges and promising strategies within Prince Edward Island, please contact Beth Grant of Recreation PEI (info@recreationpei.ca) or John Morrison of PEI Department of Health and Wellness (jwmorris@gov.pe.ca).



QUÉBEC

Challenges

1. **Synergy:** Quebec has a long history of leisure and active transportation, recreational physical activity promotion, and policies and programs. The number of organizations (government, non-government organizations, coalitions, etc.) currently involved in these activities is proof of this long history. However, synergy is not optimal despite several mechanisms being in place.
2. **Coordination:** Better coordination is required so that provincewide initiatives meet the needs of the local stakeholders.
3. **Transition to action:** There is a strong need to make decision makers in all walks of life concerned about children and youth leisure and active transportation so they can act upon it with sustainable measures, ensure physical and financial access for all, and see that program delivery and infrastructure are top quality.

Promising Strategies

A public (Government of Quebec) and philanthropic (Fondation Lucie et André Chagnon) alliance, the *Société de gestion du Fonds pour la promotion des saines habitudes de vie*, is financing community projects and comprehensive (regional/provincial scale) promotion projects. For example, some provincial-wide initiatives are aimed at promoting and creating supportive environments for active routes to school, conducting major communications campaigns and partnering with the private sector. **Quebec en Forme** (a Non-Profit Organization) is dedicated entirely to the mobilization of local communities on healthy eating and active living. Quebec en Forme has the mandate to ensure the development and coordination of the first component of the fund.

Because of Quebec en Forme's close ties with local communities, it can assess interventions that are most likely to meet the needs of communities and, where appropriate, it can influence them. For example:

- » **Psycho-motor Training Seminars:** Seminars designed for child care and elementary school personal. Their development was in response to the fact that underprivileged children did not master basic motor skills as they should have when entering the school system. Today, the seminars are disseminated through the universities of Sherbrooke and Trois-Rivières.
- » **Safe Routes to School (Mon école à pied, à vélo!):** This is an initiative for the elementary schools, launched by the Vélo Québec Association, and which Quebec en Forme helps disseminate throughout its network of more than 2,000 local partnering organizations. The initiative is a

11,345

Average steps taken per day (CAN PLAY 2007-2009)

10%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

27%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

22.6%^Δ

Prevalence of overweight and obesity, Canadian Community Health Survey 2004

^Δsignificantly lower than the national average for overweight/obesity (26%)

response to the fact that children are chauffeured to school when they could probably walk. The initiative includes a security audit, a school travel plan, promotion material and support.

- » **Mini Tennis:** This is a program adapted for children in an elementary school setting. It is offered by the provincial tennis federation, which was confronted with the fact that the elementary schools often lack space and resources to properly teach traditional tennis activities. The versatility of the program and the instructions make it applicable to many settings and minimizes the sitting time for the participating children.
- » **Leadership Programs:** These are initiatives providing leadership training to students who wish to be involved in the delivery of physical activity programming in their school during the lunch hour. Organizations such as the Fédération québécoise du sport étudiant, Égale Action and Kino-Québec offer training, printed materials, activities repertoire, etc., intentionally designed for the second cycle of the primary school. In addition, a junior leader program is emerging to respond to the demand of many school practitioners, who have seen the benefits on the social dynamics already taking place.
- » **Ambassador award:** This is an initiative still in development. It aims to recognize and promote the changes made by local leaders in the areas of built environment, policies, programming, etc., in settings such as schools, municipalities and day care.



Challenges

1. **Competing priorities:** The many competing priorities in a school setting make it difficult to meet both curricular and extra-curricular physical activity guidelines from both a time and resource perspective.
2. **Parental perceptions:** More than 70% of Saskatchewan parents believe their children are reaching recommended daily physical activity levels. In fact, only 15% of Saskatchewan children are reaching recommended levels.
3. **Access to community programs and facilities:** Access continues to be a pressing challenge. Barriers include geographic proximity, cost and cultural/ability inclusiveness.

Promising Strategies

Physical Activity/Active Living Research and Strategic Planning Project: This project is being implemented by the Ministry of Tourism, Parks, Culture and Sport, working with the University of Saskatchewan, Saskatchewan in motion and key stakeholders. The project will complete a regional and community trend analysis, measure the level of community engagement and capacity, and implement a consultation process.

Saskatchewan Supplement: Active Healthy Kids Canada and Saskatchewan in motion have developed a Saskatchewan Supplement and broad communication strategy. A comprehensive evaluation is currently underway.

School Guidelines and Standards: Saskatchewan in motion has developed guidelines and standards for schools to implement 30 minutes of physical activity every day. More than half of Saskatchewan schools are in motion. The effectiveness of the in motion schools strategy is measured using research, tracking and ongoing focused communication with stakeholders.

Social Marketing Campaign: Saskatchewan in motion is implementing a broad-based social marketing campaign aimed at adults who influence children and youth. The intent of the campaign is to educate them on the recommended level of physical activity for children and youth, and raise awareness of the incidence of inactivity. The public awareness campaigns are evaluated by an external research group through a telephone study, every 2 years.

11,718

Average steps taken per day
(CAN PLAY 2007-2009)

13%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

31%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

29.1%

Prevalence of overweight and obesity,
Canadian Community Health Survey 2004

Long-term Sustainable Physical Activity Strategies: Saskatchewan in motion communities develop long-term sustainable physical activity strategies that include projects aimed at providing campaigns, programs and projects to create changes to the built environment to increase physical activity. The effectiveness of the in motion community strategy will be measured using the Physical Activity/Active Living Research and Strategic Planning Project.

Policy Framework: The Ministry of Education, in partnership with the Ministry of Health, is developing a policy framework document related to physical activity. This work is intended to support school divisions in developing or revising physical activity policies and practices to ensure a minimum of 30 minutes of moderate to vigorous physical activity daily. The Ministry of Education website will have a clearinghouse of promising practices, which will include existing practices in school divisions.

Cross-ministry Collaboration: Discussions have been held with the Ministry of Tourism, Parks, Culture and Sport and the Ministry of Education regarding each sector's effort to increase physical activity, and the potential for cross-ministry collaboration.

Research Briefs: Based on a research study identifying challenges and opportunities in the delivery of physical education that was conducted by the University of Saskatchewan, Saskatchewan in motion and key stakeholders, a series of "research briefs" will be developed and distributed province-wide.

For more information about challenges and promising strategies within Saskatchewan, please contact Cathie Kryzanowski of Saskatchewan **in motion** (cathie@saskinmotion.ca).



YUKON

Challenges

1. **Infrastructure barriers:** “Volunteers burn out or move away” is a barrier to participation across the Yukon, particularly in small, rural communities.
2. **Social/interpersonal barriers:** The 2006 Northern Environmental Scan identified “lifestyle” barriers as impacting recreation participation for some Yukon children and youth. The top 3 are:
 - Television watching habits
 - Video and computer usage
 - Social issues such as drinking, gambling or family violence

A recent study in the Yukon (2009) found that 27% of Yukon youth spend twice as much time on TV/Internet/gaming as they do on physical activity.

3. **Environmental Barriers:** “Access to adequate equipment, supplies and/or clothing in communities” sometimes limits recreation participation in the Yukon, particularly in rural communities.

Promising Strategies

Volunteers: 52% of Yukon's population of 33,000 volunteer an average of 162 hours each year! These volunteers make many physical activities for children happen.

Everyone Gets to Play: Many Yukon organizations strive to remove cost as a barrier to physical activity. Find out about successful initiatives such as Canada Gets Active, the Whole Child Program and Kwanlin Koyotes at www.rpay.org/content.php?id=39

Active Healthy Kids Yukon – Toolkit Program: This program is designed to meet the needs of those who work or care for children 0 to 5 years to provide daily, quality physical activity.

The Kids Recreation Fund: This fund supports children living in low-income situations to actively participate in organized sport, art, cultural, social and recreational programs. In its 9 years of existence, the Kids Recreation Fund has provided more than \$900,000 to sponsor approximately 4,000 children in a wide variety of activities; this in a territory with 6,940 children under 18 (2006)!

Arctic Winter Games: This is a high-profile circumpolar sport and cultural event for northern participants who reside north of the 55th parallel.

12,588

Average steps taken per day (CAN PLAY 2007-2009)

14%

Proportion accumulating 90 min/day of MVPA on top of incidental activity levels in 2007-2009 (16,500 steps/day)

40%

Proportion accumulating 60 min/day of MVPA on top of incidental activity levels in 2007-2009 (13,500 steps/day)

NA

Prevalence of overweight and obesity, Canadian Community Health Survey 2004

NA = data not available

Financial Support from the Yukon Territorial Government: Annually, the Yukon Territorial Government contributes funding to community recreation, active living, and sport. In the 2006–07 fiscal year, \$703,384 was contributed to community recreation and active living, and another \$1,488,831 to sport.

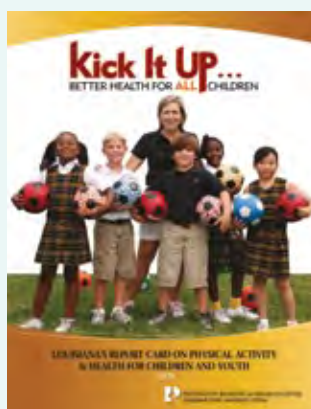
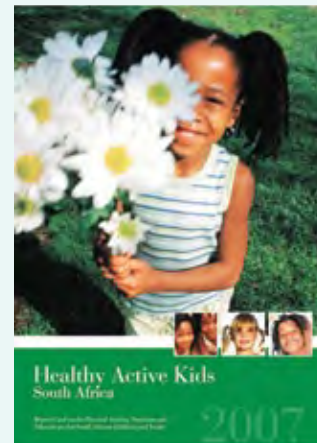
Yukon Aboriginal Sport Circle (YASC): This is a non-profit society dedicated to the advancement of Aboriginal recreation and sport in the Yukon, promoting both traditional and mainstream sports in all of the Yukon's Aboriginal communities. The YASC is one of 13 members of the National Aboriginal Sport Circle, and Yukon activities include the promotion of Traditional Sports (Inuit and Dene Games), the development of North American Indigenous Games teams, facilitation of the Aboriginal Coaching Manual Training course, coordination of coaching and officiating clinics, and supporting the execution of various sport skills camps.

For more information about challenges and promising strategies within Yukon, please contact Anne Morgan of Recreation and Parks Association of the Yukon (rpay@klondiker.com).

THE REPORT CARD IN OTHER JURISDICTIONS

The Report Card's influence is not limited to Canada. The model has now been replicated in several other jurisdictions including South Africa, Louisiana and Mexico. In 2007, South Africa produced the "Report Card on Physical Activity, Nutrition and Tobacco Use for South African Children and Youth" (www.mrc.ac.za/chronic/healthykids.pdf) modelled after the AHKC Report Card. The State of Louisiana in the United States has produced 2 Report Cards (2008, 2009; www.pbrc.edu/report_card/) titled "Louisiana's Report Card on Physical Activity and Health for Children and Youth." Researchers in Mexico and Canada have recently collaborated on a grant to initiate a Report Card in Mexico, and work on one is beginning in Kenya.

Within Canada, the province of Saskatchewan has long been a leader in the country's healthy, active living movement. In September 2009 Saskatchewan produced their own provincial supplement to the national Report Card. (www.saskatchewaninmotion.ca/whats_new/?a=95)



Data Sources

Best Start (www.beststart.org): Best Start is Ontario's Maternal Newborn and Early Child Development Resource Centre, which supports service providers across the province of Ontario working on health promotion initiatives to enhance the health of expectant and new parents, newborns and young children. The results included in the Report Card come from an online survey of 304 Ontario parents of children aged 2 to 5 conducted in December 2009.

Canadian Assessment of Physical Literacy (CAPL) (www.cheori.org/halo): The CAPL is a comprehensive tool aimed at measuring physical literacy among Canadian children. Physical literacy is a construct that captures the essence of what a quality physical education or community sport/recreation program aims to achieve; it is composed of physical fitness, motor behaviour, physical activity and psychosocial factors. The data included in the Report Card are from a preliminary sample of children measured in eastern Ontario in 2009.

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. 4 surveys were included in the Report Card:

- *Canadian Physical Activity Levels Among Youth (CAN PLAY)* – Undertaken in partnership with the Public Health Agency of Canada and the Interprovincial Sport and Recreation Council, CAN PLAY 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 2009.
- *Physical Activity Longitudinal Study (PALS)* – The PALS was conducted in 2002 as a follow-up to the 1981 Canada Fitness Survey and the 1988 Campbell Survey on Well-Being in Canada. The survey investigated involvement in physical activity, as well as social and environmental supports that are available for physical activity involvement. Other lifestyle behaviours and general health and demographic questions are also asked so that we can examine trends over time.
- *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.
- *Capacity Study* – The Capacity Study collects data from settings to examine the extent of systemic opportunities available to Canadians in line with PAM topics (schools, workplaces, municipalities, communication strategies). The analyses focus on regional differences, setting and community characteristics within topics.

Health Behaviour in School-Aged Children

(HBSC; www.hbsc.org/countries/canada): The Health Behaviour in School-Aged Children (HBSC) Study is led by the World Health Organization to increase understanding of health and health-related behaviour in young people. It is a repeated cross-sectional survey conducted every 4 years. In each cycle, the survey consists of a classroom-based questionnaire. A total of 40,795 Canadian youth have participated in the HBSC Survey from 1989/90 to 2005/06. Findings from the 5 cycles between 1989 and 2006 were included in this year's Report Card.

National Longitudinal Survey of Children and Youth – 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.

School Health Action, Planning and Evaluation System

(SHAPES; www.shapes.uwaterloo.ca): SHAPES is used to create health profiles of students and school environments. It collects data from elementary and high schools on topics such as smoking, eating and physical activity. The survey data are then used to generate profiles to help schools, public health and communities to take action to improve the health of young people. SHAPES was created by the Canadian Cancer Society's Centre for Behavioural Research and Program Evaluation, and the Population Health Research Group at the University of Waterloo. Results from Prince Edward Island are presented in this year's Report Card.

Spatial Health Assessment of Preschooler's Environments

(SHAPE; www.power.ualberta.ca/SHAPEs.cfm): The SHAPE study investigates the correlates of overweight among preschool children in the Capital Health Region (including Edmonton), Alberta. The population of interest was children, aged 4-6 years, who attended a health centre for preschool immunization within the region.

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.

The Web-Survey of Physical Activity and Nutrition

(Web-SPAN; www.power.ualberta.ca/webspan.cfm): Web-SPAN is a web-based survey of students in grades 7 through 10 that assesses nutrition, physical activity, smoking and related meal behaviours. The data included in the Report Card come from 2 cross-sectional surveys conducted in 2005 and 2008.

REFERENCES AND ACRONYMS

List of Acronyms

ADHD – Attention deficit hyperactivity disorder

BMI – Body Mass Index

CAAWS – Canadian Association for the Advancement of Women in Sport

CAN PLAY – Canadian Physical Activity Levels Among Youth

CAPL – Canadian Assessment of Physical Literacy

CFLRI – Canadian Fitness and Lifestyle Research Institute

CHEO – Children’s Hospital of Eastern Ontario

CHMS – Canadian Health Measures Survey

CIHR – Canadian Institutes of Health Research

CLASP – Coalitions Linking Action and Science for Prevention

CS4L – Canadian Sport for Life

DPA – Daily Physical Activity

FPT – Federal and Provincial/Territorial Governments

HALO – Healthy Active Living and Obesity Research Group

HBSC – Health Behaviour in School-Aged Children Survey

INC – Incomplete Grades

MPAL – Municipal Physical Activity Leadership Program

MRC – Medical Research Council

MVPA – Moderate-to-Vigorous Physical Activity

NLSCY – National Longitudinal Survey of Children and Youth

OECD – Organization for Economic Co-Operation and Development

PACY – Physical Activity Levels and Dietary Intake of Children and Youth in the Province of Nova Scotia Study

PALS – Participation and Activity Limitation Survey

PAM – Physical Activity Monitor

PE – Physical Education

QDPE – Quality Daily Physical Education

SHAPES – School Health Action, Planning and Evaluation System

STP – School Travel Planning

TTFM – Tell Them From Me

Web-SPAN – The Web-Survey of Physical Activity and Nutrition

WHO – World Health Organization

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