

Physical Activity within a Comprehensive School Health Model

Decision Makers' Toolkit
2009



This toolkit is part of a series of resources based on evidence, drawn from educators and researchers, as to the strategies most effective in addressing physical activity in schools. The Physical Activity within a Comprehensive School Health Model toolkit series provides an in-depth understanding of how Canadian schools can use a Comprehensive School Health approach to increase physical activity levels. This toolkit is designed for decision makers at the provincial government level, school board level and school level.

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This toolkit was developed for the Joint Consortium for School Health. While the views expressed herein are those of the authors, the authors wish to acknowledge the many people who provided assistance by critiquing early drafts, drawing attention to examples of good practice or sharing their personal knowledge. The authors hope that this document will encourage dialogue and action and result in improved outcomes for Canadian students.

The *Physical Activity within a Comprehensive School Health Model* series includes four toolkits:

Best Practices Toolkit

Decision Makers' Toolkit

Researchers' Toolkit

School Policy Makers' Toolkit

and four related fact sheets:

The Rationale for School as a Setting for Physical Activity

The Benefits of Physical Activity

Populations with Additional Barriers to Physical Activity

The School Community's Role in Physical Activity

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INTRODUCTION

Increases in childhood overweight and obesity have become a major public health concern, with rates of obesity among Canadian children having more than doubled in past decades. Recent estimates indicate that about 30 percent of school-aged children in Canada are overweight or obese^{1, 2}, some of whom are among the most obese in the world³. While physical inactivity and unhealthy eating habits are acknowledged as the primary risk factors for the increasing rates of childhood overweight and obesity, research suggests that physical inactivity may play the more important role^{4, 5}.

The benefits of physical activity in children and youth are not limited to just decreasing the risk for chronic conditions such as obesity, type II diabetes and cardiovascular disease. Additional benefits include⁶:

- increased academic achievement
- decreased behavioural problems
- increased ability to focus
- increased self-esteem and positive mental health
- increased social connection

Because virtually all children, regardless of age, ability, gender, culture or socio-economic background can be reached in school, schools are positioned to play a key role in increasing children's physical activity levels. This *Physical Activity within a Comprehensive School Health Model Decision Makers' Toolkit* is part of a series that provides an in-depth understanding of how Canadian schools can use a Comprehensive School Health approach to increase physical activity levels.

Providing age and developmentally appropriate and culturally relevant physical education curricula, along with opportunities to be physically active both in and outside of the classroom is an ideal combination for preparing Canadian students for a physically active life.



WHAT IS COMPREHENSIVE SCHOOL HEALTH?

Comprehensive School Health is an internationally recognized framework for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated and holistic way. It is not just about what happens in the classroom. Rather, it encompasses the whole school environment with actions addressing four distinct but inter-related pillars that provide a strong foundation for Comprehensive School Health:

- social and physical environment
- teaching and learning
- healthy school policy
- partnerships and services

When actions in all four pillars are harmonized, students are supported to realize their full potential as learners – and as healthy, productive members of society.



WHY DO WE NEED COMPREHENSIVE SCHOOL HEALTH?

Health and education are interdependent: healthy students are better learners, and better-educated individuals are healthier. Research has shown that Comprehensive School Health is an effective way to tap into that linkage, improving both health⁷ and educational outcomes⁸ and encouraging healthy behaviours that last a lifetime.

In the classroom, Comprehensive School Health facilitates improved academic achievement and can lead to fewer behavioural problems⁹. In the broader school environment, it helps students develop the skills they need to be physically and emotionally healthy for life.

PILLARS OF COMPREHENSIVE SCHOOL HEALTH

When We Say	We Mean
<i>Social and Physical Environment</i>	The social environment is: <ul style="list-style-type: none"> the quality of the relationships among and between staff and students in the school the emotional well-being of students influenced by relationships with families and the wider community
	The physical environment includes: <ul style="list-style-type: none"> the buildings, grounds, play space and equipment in and surrounding the school basic amenities such as sanitation and air cleanliness
<i>Teaching and Learning</i>	<ul style="list-style-type: none"> resources, activities and provincial/territorial curricula where students gain age-appropriate knowledge and experiences, helping to build the skills to improve their health and wellbeing
<i>Healthy School Policy</i>	<ul style="list-style-type: none"> management practices, decision-making processes, rules, procedures and policies at all levels that promote health and wellbeing, and shape a respectful, welcoming and caring school environment
<i>Partnerships and Services</i>	Partnerships are: <ul style="list-style-type: none"> the connections between the school and students' families supportive working relationships within schools (staff and students), between schools, and between schools and other community organizations and representative groups health, education and other sectors working together to advance school health
	Services are: <ul style="list-style-type: none"> community and school-based services that support and promote student and staff health and wellbeing

COMPREHENSIVE SCHOOL HEALTH:

- recognizes that healthy children learn better and achieve more
- understands that schools can directly influence children's health and behaviours
- promotes the health and wellbeing of students
- integrates health into all aspects of school and learning
- links health and education issues and systems
- involves families and the community at large

Effective, sustainable progress in Comprehensive School Health depends on a common vision, shared responsibilities and harmonized actions among educators, health professionals and others. The challenge is to coordinate these efforts so that partners pool resources and develop action plans together with, and in support of schools.

PHYSICAL ACTIVITY WITHIN A COMPREHENSIVE SCHOOL HEALTH APPROACH

In Comprehensive School Health's holistic approach, physical activity is broadly defined and includes not only physical education classes but also daily physical activity programs, intramural programs/clubs, interscholastic sports, walk-to-school programs, ride-your-bike-to-school programs, classroom walking programs and other programs or activities that get students and staff moving.

Physical activity: *any body movement of skeletal muscles (i.e., muscles that attach to bones) that uses energy.* Public Health Agency of Canada

A review of the literature¹⁰ over the last 25 years on initiatives promoting health in schools suggests that:

- physical activity initiatives in schools are most effective if they adopt a comprehensive approach (e.g., they develop skills, establish and maintain suitable physical environments and resources, uphold supportive policies to enable all students to participate);
- there is a strong direct correlation between being physically active at school and undertaking physical activity in adulthood;
- students gain more benefit from physical activity if they have opportunities to be active at regular times during the school day;
- students are more willing to participate in physical activity if they have the opportunity to collaborate with school staff in deciding the type of physical activity to be undertaken, which could include other activities not viewed as sport, like dance;
- initiatives are more successful if they take into account student diversity including ethnicity, physical ability, gender and age.

“One of the realizations that we have come to is that daily physical activity is about far more than just student physical fitness. It has become a part of the culture of our school and we are noticing changes in the tone and academic focus for the better. A grade 2 student recently explained to his mom during a morning walk ‘You know those boys that were always getting in trouble before? Well they are not anymore since we started walking’.”

Teacher, BC Healthy Schools Network Case Study

““I think the benefits are that being active makes you strong and healthy and you can have fun.”

Student, BC Healthy Schools Network Case Study

WHY ARE WE CONCERNED ABOUT PHYSICAL ACTIVITY?

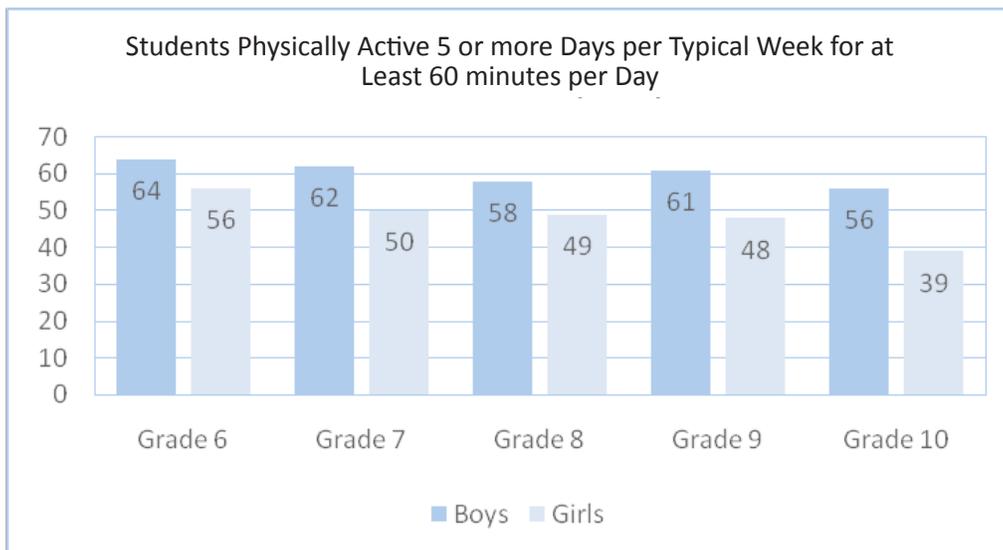
In 1997 the World Health Organization stated: “regular physical activity provides people of all ages with substantial health gains that are physical, mental and social and contribute significantly to increased quality of life.”

Despite that, recent research shows that a large percentage of Canadian youth between the ages of 12 and 17 are not active enough for optimal growth and development¹¹. Between 56 and 64 percent of boys and 39 to 56 percent of girls report being physically active for 60 minutes a day at least five days per week. For both boys and girls, levels of activity tend to decline as they reach higher grades¹². Moreover, data from the 2005/06 CANPLAY study that assessed children’s total number of steps per day using pedometers shows that 96 percent of Canadian youth between the ages of 15 and 19 are not meeting Canadian guidelines on being healthy and developing lifelong physical activity habits¹³. Active Healthy Kids Canada’s 2009 Report Card once again gave Canadian children and youth a failing “F grade” for physical activity levels¹⁴.

[Canada’s Physical Activity Guides for Children and Youth!](#) recommends that children and youth (ages 6–14) be physically active for at least 90 minutes per day.

Less active children and youth should:

- gradually increase the amount of time they spend being physically active, starting with at least 30 minutes more per day (combining moderate and vigorous physical activity) until they achieve the recommended levels;
- gradually decrease the time they spend on TV, playing computer games and surfing the Internet by starting with at least 30 minutes.



Adapted from *Healthy Settings for Young People*¹²

PARTICULAR POPULATIONS OF CONCERN

Physical inactivity is an issue for all Canadian children. However there are a number of sub-populations where there are additional barriers and concerns.

ABORIGINAL YOUTH

Physical activity levels of Aboriginals have traditionally been very high. However, over the years these levels have decreased significantly¹⁵ and the majority of Aboriginal youth do not meet the recommended guidelines for physical activity¹⁶.

Aboriginal youth who are physically active and whose diet is nutritious are less likely to have suicidal thoughts¹⁷.

FEMALE ADOLESCENTS

Despite the many benefits associated with physical activity, the rate of participation by female youth remains low and decreases with age¹⁸. There is a dramatic drop off between grades 6 and 10. Females who are inactive as children and adolescents are less likely to be physically active as adults¹⁹.

If a female does not participate in sport by the time she is 10 years old, there is only a 10 percent chance she will be physically active when she is 25²⁰.

A British Columbia study found that once physical education classes become optional, only 10 percent of female high school students enrol²¹.

NEW CANADIANS

Youth who have recently immigrated to Canada are less likely to participate in organized sport compared with youth born in Canada – particularly if English is a second language²². Challenges related to participation identified by Canadian ESL students include language difficulties, unfamiliarity with activities and other commitments²³.

The 2001 census indicated that the percentage of foreign-born Canadians was at its highest (18 percent) for 70 years. Since 1996, one-third of new Canadians have been younger than 25.

EVIDENCED RATIONALE FOR SCHOOLS AS A SETTING FOR PHYSICAL ACTIVITY

Schools are positioned to play a significant role in the promotion of physical activity, as they have the ability to reach almost every child regardless of age, ability, gender, culture or socio-economic background²⁴. In addition, youth spend more time within the school setting than any other context; therefore, schools play a critical role in the development of youth²⁵. Schools may provide the most efficient and cost-effective means of improving the health and physical activity levels of Canadian children²⁶.

“Ensure that every student attending primary and secondary school across Canada receives a quality physical education program on a regular basis (i.e., 150 minutes per week) from a teacher qualified to teach in physical education .”

CAHPERD & CCUPEKA, 2005

A number of national and international organizations that have advocated the importance of physical activity have recognized the provision of physical education as well as other opportunities to be physically active within schools as critical. This provision is linked to the Comprehensive School Approach in that it encompasses a major portion of the teaching and learning construct of the model.

- The World Health Organization (WHO) (2000) stressed the importance of the use of physical education programs in schools to enhance physical activity among school-aged children and youth.
- The World Summit on Physical Education (2001) called upon the international community to recognize the fundamental right of all children to have access to quality physical education programs taught by qualified teachers to ensure that all children receive and develop the necessary skills to lead healthy lives.
- The United States Surgeon General’s Report on Physical Activity and Health
- (1996) recommended that 1) schools provide quality, preferably daily, physical education classes and hire specialists to teach them and 2) schools create opportunities for physical activities that are enjoyable and promote confidence.

Schools can provide physical and health education classes and access to facilities, equipment and an outdoor environment for physical activity engagement based on mandated and/or recommendations from provincial and territorial governments.

Schools also have the potential to hire personnel who have the knowledge and skills to positively influence physical activity knowledge, attitudes, values and physical literacy among students. More specifically, schools can increase awareness, set guidelines, develop skills and enhance confidence related to physical activity for youth of all ages.

If schools are to increase physical activity levels in students and, therefore, enhance students' health and well-being, they must provide students with opportunities to develop the knowledge, skills and attitudes that will help them to be active now and into the future. A Comprehensive School Health approach should seek to supplement curricula (teaching and learning) with other initiatives rather than implement physical activity interventions in lieu of teaching and learning.

POLICIES TO SUPPORT PHYSICAL ACTIVITY WITHIN A COMPREHENSIVE SCHOOL HEALTH APPROACH

Departments of education, school boards and school administrators have a significant impact on the levels and quality of physical activity students receive within the school environment. One of the most influential ways is through the creation and implementation of policies that support adequate/increased physical activity opportunities for all students. Such policies include:

- mandated physical education and daily physical activity time
- physical education credit requirements at the high school level
- mandated curricula
- adequate resources to support effective curriculum instruction
- ongoing training for teachers and other school staff involved in physical activity program delivery
- appropriate and accessible physical activity facilities available within and outside of schools (e.g., gymnasiums, playgrounds)
- collaboration with community resources (e.g., arenas, pools)
- variety of physical activity opportunities
- integration of different cultural backgrounds
- inclusion of individuals with disabilities
- family and community involvement
- program evaluations

More information on school-based policies related to physical activity can be found in *Physical Activity within a Comprehensive School Health Model: A Toolkit for School Policymakers*²⁷.

EVIDENCED-BASED PRACTICES OF SCHOOL INITIATIVES

A number of evidenced-based initiatives have been implemented in schools with the aim of increasing physical activity and overall health and well being of students within a Comprehensive School Health approach. These initiatives share a number of key elements. A sample of the Canadian evidences-based initiatives can be found in the *Best Practices for Physical Activity within a Comprehensive School Health Model Toolkit*.

An evidence-based program is one in which a formal evaluation has been designed, executed and the results have been published.

ELEMENTS OF SUCCESSFUL SCHOOL INITIATIVES

- Ensure that a program is comprehensive. A comprehensive program is one that develops skills, establishes and maintains suitable physical environments and resources and upholds supportive policies to enable all students to participate.
- Ensure that the program integrates program activities both in and outside of the classroom (e.g., classroom-based activities, outside of physical education class, and out-of-class activities such as active assemblies or active lunches).
- Provide adequate training and support for teachers, administrators and/or additional individuals responsible for implementing activities to ensure that programs are implemented effectively.
- Shift the focus of physical education classes from specific skills development to a balanced focus on skills development in a variety of activities and exercise to increase the amount of time students engage in physical activity during class.
- Hire physical education specialists to lead physical education classes and curricula as this has been shown to increase students' levels of moderate to vigorous physical activity in class.
- Encourage and support all staff members to engage students in daily physical activity throughout the school day.

RESEARCH NEEDS

There are numerous knowledge gaps in the literature on physical activity within a Comprehensive School Health model. An over-arching theme in all of the knowledge gaps is the scarcity of Canadian data. It is important that Canadian policy and decision makers have Canadian data on which to base their decisions, and are not left to infer from studies conducted in other countries. In terms of general research practices, there is an urgent need for:

- a detailed monitoring and evaluation procedure that schools can follow to determine short- and long-term effects of physical activity initiatives within a Comprehensive School Health model;

- direction on whether future research should concentrate on single focus work or a more comprehensive approach; and
- a more feasible way to safely collect data from students attending schools so that the needs of all parties are carefully considered and detailed data is collected rather than estimated reports from one spokesperson in the school.

Specific topics that need to be explored through future research should determine:

- physical activity initiatives and student activity rates in schools located in rural and Aboriginal communities;
- school-based physical activity practices of Canadians who live with disabilities (including physical activity initiatives and physical education classes);
- a widely accepted definition of a “successful” school-based physical activity program or initiative;
- the most effective means for monitoring and evaluating (both short- and long-term) school-based physical activity initiatives;
- implications of school and/or board level champions for physical activity; and
- short- and long-term implications of mandated physical activity in lieu of, as well as in addition to, physical education classes

WHAT CAN DECISION MAKERS DO?

Education decision makers have an important role in increasing the physical activity of their students. Specifically, they can:

- link health and education issues and systems related to physical activity – through joint committees, shared resources and shared objectives;
- work with school districts to develop and implement policies that address physical activity within a Comprehensive School Health Model (see *Physical Activity within a Comprehensive School Health Model: A Toolkit for School Policymakers*);
- work with school districts to ensure that supports are in place for teachers to provide quality physical education programs and a variety of physical activity options for children and youth;
- support the implementation of initiatives that encompass the key elements of a successful school practice (see *Physical Activity within a Comprehensive School Health Model: A Best Practices Toolkit*); and
- support research in the area of physical activity within a Comprehensive School Health model.

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