

**Physical Activity within a  
Comprehensive School Health Model**

**School Policy 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.

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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<sup>1,2</sup>, some of whom are among the most obese in the world<sup>3</sup>. 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<sup>4,5</sup>.

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 include<sup>6</sup>:

- 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 School Policy 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 health<sup>7</sup> and educational outcomes<sup>8</sup> and encouraging healthy behaviours that last a lifetime.

In the classroom, Comprehensive School Health facilitates improved academic achievement and can lead to fewer behavioural problems<sup>9</sup>. 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>	<p>The social environment is:</p> <ul style="list-style-type: none"> <li>• the quality of the relationships among and between staff and students in the school</li> <li>• the emotional well-being of students</li> <li>• influenced by relationships with families and the wider community</li> </ul> <p>The physical environment includes:</p> <ul style="list-style-type: none"> <li>• the buildings, grounds, play space and equipment in and surrounding the school</li> <li>• basic amenities such as sanitation and air cleanliness</li> </ul>
<i>Teaching and Learning</i>	<ul style="list-style-type: none"> <li>• 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</li> </ul>
<i>Healthy School Policy</i>	<ul style="list-style-type: none"> <li>• 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</li> </ul>
<i>Partnerships and Services</i>	<p>Partnerships are:</p> <ul style="list-style-type: none"> <li>• the connections between the school and students' families</li> <li>• supportive working relationships within schools (staff and students), between schools, and between schools and other community organizations and representative groups</li> <li>• health, education and other sectors working together to advance school health</li> </ul> <p>Services are:</p> <ul style="list-style-type: none"> <li>• community and school-based services that support and promote student and staff health and wellbeing</li> </ul>

## 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 literature<sup>10</sup> 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; and
- initiatives are more successful if they take into account student diversity including ethnicity, physical ability, gender and age.

“We've learned that student ability to focus and concentrate on classroom work can be directly correlated to the amount of daily physical activity they are receiving. We also learned most students enjoy physical activity and will take part in it if they feel they can be successful.”

*Teacher, BC Healthy Schools Network case study*

“I have another view of my fitness level. I think I have been a bit more vigorous – a vigorous bike ride rather than a moderate one.”

*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.”

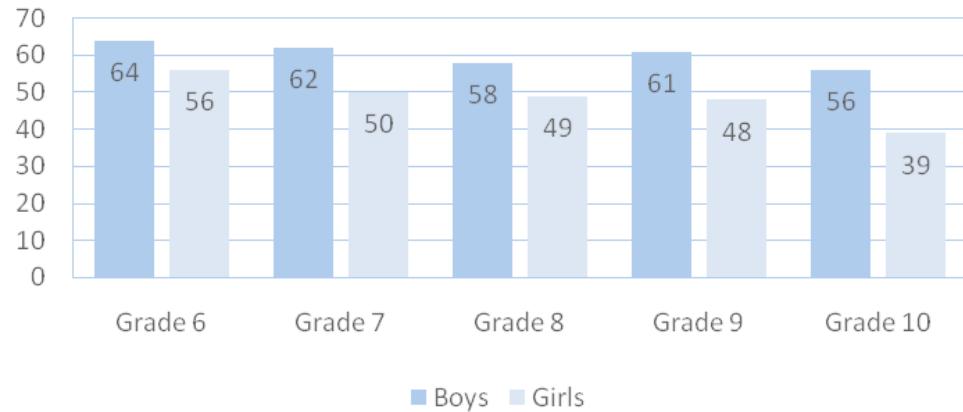
Despite that, recent research shows that a large percentage of Canadian youth between the ages of 12 and 17 are not active enough for optimal growth and development<sup>11</sup>. Between 56 and 64 percent of boys and 39 to 56 percent of girls report being physically active for 60 minutes a day at least five days per week. For both boys and girls, levels of activity tend to decline as they reach higher grades<sup>12</sup>. 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 habits<sup>13</sup>. Active Healthy Kids Canada’s 2009 Report Card once again gave Canadian children and youth a failing “F grade” for physical activity levels<sup>14</sup>.

**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.

Students Physically Active 5 or more Days per Typical Week for at Least 60 minutes Day



Adapted from *Healthy Settings for Young People*<sup>12</sup>

## 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 significantly<sup>15</sup> and the majority of Aboriginal youth do not meet the recommended guidelines for physical activity<sup>16</sup>.

Aboriginal youth who are physically active and whose diet is nutritious are less likely to have suicidal thoughts<sup>17</sup>.

### FEMALE ADOLESCENTS

Despite the many benefits associated with physical activity, the rate of participation by female youth remains low and decreases with age<sup>18</sup>. 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 adults<sup>19</sup>.

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 25<sup>20</sup>.

A British Columbia study found that once physical education classes become optional, only 10 percent of female high school students enrol<sup>21</sup>.

### 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 secnd language<sup>22</sup>. Challenges related to participation identified by Canadian ESL students include language difficulties, unfamiliarity with activities and other commitments<sup>23</sup>.

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.

## 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 curriculum
- 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

A more detailed discussion of specific policy follows, identifying where additional effort is required and what is actually making a difference.

### MANDATED PHYSICAL ACTIVITY

In the past five years, the number of schools that have implemented policies to provide daily physical activity (DPA) has increased. The provinces of Alberta, Ontario and British Columbia have led the trend of mandating DPA in schools. Research has shown that there has been no negative impact on academic performance and in fact daily physical activity appears to increase student performance, achievement and reduce behaviour problems<sup>24</sup>. In addition, research from daily physical activity programs (e.g., Action Schools! BC) that have been implemented within schools has demonstrated significant increases in physical

activity and greater improvements in cardiovascular fitness and bone strength compared to students in schools that did not receive the program<sup>25</sup>. When daily physical activity is an extension of a quality physical education program, the benefits are even greater.

## PROFESSIONAL DEVELOPMENT TO SUPPORT PHYSICAL ACTIVITY

In order to increase physical activity levels and promote lifelong engagement in physical activity, it is important to provide appropriate training to school staff, particularly teachers. A recent Canadian study by the Canadian Fitness and Lifestyle Research Institute observed that<sup>26</sup>:

- 42 percent of schools offer training and information related to physical activity guidelines to all staff;
- 38 percent of schools offer information to staff about how to promote physical activity;
- 24 percent of schools provide ongoing professional development on active living and physical education;
- 13 percent of schools offer physical activity or sport certification to staff; and
- 11 percent offer national coaching certification to all staff.

Teachers and school-based administrators are role models and knowledge providers for students. Therefore, providing physical activity resources and training to school staff is an additional means of increasing physical activity knowledge and behaviour of students.

## FACILITIES AVAILABLE FOR PHYSICAL ACTIVITY AND SPORT

Children and youths' physical activity levels at school increase when they are provided with physical activity equipment and facilities<sup>27, 28</sup>. Unfortunately, the number of schools that have access to physical activity facilities, particularly larger facilities (e.g., baseball diamonds, swimming pools, skating rinks) has decreased since 2001. Not all schools have equal access to adequate facilities to afford students optimal experiences related to physical activity in schools.

Smaller schools, for example those with fewer than 200 students, are less likely than larger schools to have access to a gymnasium although they are more likely to have access to playgrounds.

School policies can be developed to ensure appropriate and accessible physical activity facilities are available within and outside of schools (e.g., gymnasiums, playgrounds). Schools can also work in collaboration with community resources to gain access to facilities such as arenas and pools.

## EQUIPMENT

In addition to providing access to facilities, there must be adequate levels of funding for physical activity equipment in order to provide the opportunities for increased physical activity among students. In 2006, approximately 40 percent of schools reported having fully implemented policies to provide adequate physical activity equipment for students<sup>29</sup>. Private schools are more likely to have these policies in place, which indicates that public schools may need to collaborate with school boards and departments of education to ensure that funding is available to provide physical activity equipment.

## PROVISION OF A WIDE RANGE OF PHYSICAL ACTIVITIES

An effective means of increasing the physical activity of students outside physical education is providing opportunities to participate in both individual and team activities including sports, games and other forms of physical activities (e.g., team sports, intramurals, dance clubs). Approximately half of schools (53 percent) report that they have fully implemented policies to provide a range of physical activities to students (e.g., competitive, recreational, structured and unstructured)<sup>30</sup>.

As mentioned previously, the rate of participation by female youth is low and decreases with age<sup>31</sup>. The Nova Scotia Department of Education (2006) published a report highlighting promising practices related to increasing female youths' participation in physical education<sup>32</sup>. These promising practices include:

- a variety of course options that have a focus on lifelong activities
- the use of community resources and facilities as a part of the course
- student involvement and choice related to the content of the course
- student centred assessment and evaluation
- additional options such as certifications (e.g., fitness leader)
- a focus on personal health and fitness
- the option for gender segregated activities
- the opportunity to develop physical activity skills and physical literacy

This report also stated that the research has shown that when females discuss values related to physical education they consistently report the importance of an environment where respectful behaviour is expected of all participants (e.g., providing a safe and inclusive environment) and a positive social atmosphere where the focus is on having fun.

## INTEGRATION OF CULTURAL BACKGROUNDS

With increasing numbers of new Canadians within schools and increasing concerns over physical activity levels among Aboriginal youth, it is important to further examine and understand the impact of integrating culturally diverse forms of physical activity and having policies that promote inclusiveness. Research has shown that unfamiliarity with traditional physical activities and sports is a barrier to participation, particularly for new Canadians<sup>33</sup>.

Participation in traditional physical activities, outdoor activities, team sports and/or activities of greater intensity are preferred more by First Nation males, whereas individual activities of more moderate intensity and/or household chores are preferred by First Nation females<sup>34</sup>.

Recent research conducted by Halas (2004) provides an understanding of Canadian Aboriginal students' experience of physical activity, physical education and sport linked to schools in Manitoba<sup>35</sup>. Three main issues with regard to physical education were identified:

- changing for class
- being forced to participate in physical activities that held little personal value
- not being fully informed or prepared for the culture of extra-curricular activities

## SCHOOL-BASED AND BOARD-LEVEL CHAMPIONS IN PHYSICAL ACTIVITY INITIATIVES

There is a positive trend in Canada toward putting technical support (e.g., champions) in place at the board and school level to aid teachers and schools carry out mandated physical activity initiatives and physical education programming.

In Nova Scotia, every school board has an active living consultant and a sport animator. The active living consultant is responsible for supporting physical education teachers in terms of resources and regional in-service training days, etc. The Sport Animator, funded partially from the Nova Scotia Office of Health Promotion and Protection, is to provide support for non-curricular, school-based physical activity (i.e., before school, lunch time and after school) by building school-community partnerships.

In British Columbia, the Ministry of Education has a Healthy Schools Unit whose mandate is to support schools and teachers in implementing a Comprehensive School Health approach. One of the initiatives of the unit is Action Schools! BC. A number of school districts have adopted school health coordinators, many of whom are Action Schools! BC trainers and physical education specialists.

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