

# Comprehensive School Health in Canada

Paul J. Veugelers, PhD,<sup>1</sup> Margaret E. Schwartz, MEd<sup>2</sup>

## ABSTRACT

The Canadian education system is among the best in the world academically. In contrast, students' (children and youth) eating and activity levels are so poor that they have led to prevalence rates of overweight that are among the highest in the world. Given the enormous public health burden associated with poor nutrition and physical inactivity, Canada needs to address this health risk. Comprehensive school health (CSH) is a promising approach to promoting healthy eating and active living (HEAL). This article provides a review of CSH and discusses its four essential elements: 1) teaching and learning; 2) social and physical environments; 3) healthy school policy; and 4) partnerships and services. It also provides a common understanding of the implementation and broader benefits of CSH, which, in addition to health, include student learning and self-esteem. The article further discusses some complexities of a rigorous evaluation of CSH, which comprises proof of implementation, impact and positive outcome. Though such an evaluation has yet to be conducted, some studies did confirm successful implementation, and another study observed positive outcomes. Rigorous evaluation is urgently needed to provide a stronger evidence base of the benefits of CSH for learning, self-esteem and disease prevention. This evidence is essential to justify devoting more school time to promote HEAL and more resources to implement and support CSH to the benefit of both learning and health.

**Key words:** Schools; Canada; public health; education; health promotion; health policy

Schools have the mandate to deliver education. This may include health education delivered through subject areas, like science, or through specific health courses and physical education.<sup>1,2</sup> Students may learn effectively and may demonstrate learning of the acquired facts. However, the impetus for students to change their behaviour requires a more comprehensive approach that involves parents, community and stakeholders, and includes supportive policies, programs and environments.<sup>3-5</sup> Such an approach to health promotion in schools is referred to in Canada as comprehensive school health (CSH). This is synonymous with the term Health Promoting Schools (commonly used in Europe and Australia) or Coordinated School Health (used in the United States).

Health promotion in schools has been developing and evolving over several decades and seems to be gaining renewed interest in light of the obesity epidemic.<sup>5,6</sup> Changes over the past 25 years have refocused health promotion in schools from an individual, behavioural approach to providing supportive social and physical environments.<sup>4,7-9</sup> In 1985, the *Ottawa Charter for Health Promotion* provided the framework for CSH, which is currently implemented in over 43 countries around the world.<sup>4,6,9</sup>

Schools are widely acknowledged as an appropriate and logical setting in which to promote healthy behaviours.<sup>6,8-11</sup> They provide a setting in which to deliver health information to both the student and, indirectly, the home and community.<sup>12-14</sup> During their school years, students develop health habits through what they learn and through the health choices they can make in their school environment. These health habits acquired at a young age may lead to lifelong healthy behaviours. Therefore, CSH is essential to public health, as it has great potential to contribute to child health in the short term and chronic disease prevention in the long term.

Various descriptions of CSH exist. Although they all include the concepts of being multifaceted, planned and intersectoral, they vary with respect to contextual detail. Descriptions of CSH also vary

in perspective: those by governments may emphasize the role of policies, those by community members may emphasize partnerships, and those by school staff may emphasize teaching and learning. For the purpose of this article, we will use the definition provided by the Joint Consortium for School Health (JCSH):<sup>15</sup>

*"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."*

This article provides a review of CSH specific to the promotion of healthy eating and active living (HEAL) in Canada. It further provides some common understanding of the implementation and broader benefits of CSH for students and schools, as well as suggestions for future research to augment the evidence base of the public health benefits of CSH.

### Essential elements of CSH

The JCSH identifies four pillars for CSH: 1) teaching and learning; 2) social and physical environments; 3) healthy school policy; and 4) partnerships and services.<sup>16</sup> Elements of each pillar need to be implemented to realize CSH.

### Author Affiliations

1. Professor, Department of Public Health Sciences, School of Public Health, University of Alberta, Edmonton, AB

2. School Health Manager, School of Public Health, University of Alberta, Edmonton, AB

**Correspondence and reprint requests:** Paul J. Veugelers, PhD, Department of Public Health Sciences, School of Public Health, University Terrace, #6-50 8303 112 St., Edmonton, AB T6G 2T4, Tel: 780-492-9095, Fax: 780-492-5521, E-Mail: paul.veugelers@ualberta.ca

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### *Teaching and Learning*

Schools are the vehicle in society for providing education and preparing students to become productive citizens. As healthy citizens are more likely to be productive citizens, health education should be an integral element of education.

Each province/territory in Canada develops its own curriculum to meet the needs of its students. Provincial/territorial governments aim for curricula that are developmentally appropriate, equitable, sequential and holistic. To date, however, there is little documentation or assessment of student achievement related to health curricula. Teachers in Canada are well qualified to provide high-quality learning experiences. However, not all Canadian universities require mandatory course work in health education, physical education or CSH as part of their teacher education programs. Therefore, it is important that professional development be provided for those teachers who do not feel qualified or comfortable teaching health-related subject matter, such as nutrition and physical education, in order for them to contribute to good health education.<sup>4,12</sup>

### *Social and Physical Environments*

A school that supports HEAL is often recognized as such when one walks through the door and finds displays of HEAL-related messages, various activity spaces that will allow students to be active, welcoming spaces in which to eat snacks and lunches, and access to nutritious foods for all students.

The social environment is also important to CSH. A school community that engages its students in the development of programs and provides equitable opportunities for all students will increase the sense of engagement in the learning environment and thus increase health.<sup>17,18</sup> Positive peer support programs have reportedly been successful in improving the school's social environment and creating positive attitudes among students.<sup>18</sup> Positive students are not only more likely to make healthier choices, they are also more likely to respect their surroundings, which further contributes to a positive social environment.<sup>18</sup> Peer-led intramurals, student cooking classes, student leadership programs and refreshment stands organized by students are further examples of ways to engage students in HEAL activities and build on the social environment.

A successful CSH program in Nova Scotia uses the message of "the healthy choice is the easy choice" to frame its expectations of school environments.

### *Healthy School Policy*

Most Canadian provinces and territories have established school nutrition policies or guidelines. Policies can apply at the provincial or territorial level but also at the school district or school level and can be as simple as a classroom teacher deciding to no longer use candy as a reward for good behaviour.

Policies that support health in schools are a cornerstone of all CSH models. It is essential in CSH that policies be developed, implemented and tailored to capture the school-specific context, ideologies, cultures and priorities.<sup>14</sup> Participation by students, staff, parents and other stakeholders in the development and implementation of policy is essential. Further, considerations of new policies in CSH schools should be driven by the desire to serve all school participants. Most Canadian provinces and territories have currently implemented nutrition policy or guidelines for schools,

and several provinces have implemented daily physical activity or physical education for kindergarten to Grade 12. These policies strongly support HEAL behaviours, but to date few investments have been made to determine the effectiveness of the HEAL policies.

### *Partnerships and Services*

The JCSH lists Partnerships and Services as the fourth pillar of CSH. Partnerships can assist schools in using community facilities and resources to provide more opportunities for HEAL-related activities for students. The services aspect includes health services that may be vital to students with specific health needs or who require assistance. Allowing access to the school facilities after or before school hours increases not only community facility usage, it also engages health professionals in a meaningful way in the school community.

Involvement of parents and peers has demonstrated positive health results, particularly in areas related to healthy eating and active living.<sup>4,6</sup> Parents are key partners in the planning, implementing and tailoring of CSH. Improved partnerships with health authorities may improve the quality and quantity of their health services. For example, if a school is implementing a hot lunch program, its staff can work with public health dietitians or nutritionists to ensure that the food meets Canada's Food Guide and provincial/territorial policy.

Partnerships are typified by meaningful dialogue, transparent decision-making and collective agreements on policies, guidelines and strategic planning.<sup>18</sup> It is the act of engagement of partners that allows the community to develop, become sustainable and increase its capacity to meet the needs of all its members.

### **Implementation of CSH**

Canadian schools differ in their objectives, leadership, enrolment criteria, curricular demands due to language or religious instruction, socio-economic factors, physical structure and community support. A standard protocol for implementation of CSH is therefore not feasible. Implementation protocols are consequently not detailed but generic instead. They necessitate tailoring to the needs of individual school communities. Various organizations, including the Canadian Association for School Health, the JCSH and the Public Health Agency of Canada, provide information resources and supportive tools to assist this tailoring process.<sup>19-21</sup> Such resources include planning tools – for example, the Annapolis Valley Health Promoting Schools Program works with Innovation Configuration maps (IC maps or "I see" maps) as a planning tool. IC maps allow one to score the extent to which components of each of the essential elements of CSH are implemented. Periodic IC maps provide a visualization of the implementation process ("I see" maps) that allows judgement of progress and priority setting regarding next implementation steps.

### **Benefits of CSH**

Schools that provide supportive physical and social environments, as well as high-quality health and physical education, have been shown to have positive effects on fostering healthy lifestyle habits.<sup>14,22-24</sup> Where these actions are sustained, they will lower the risk of overweight and chronic diseases, improve quality of life and avoid future health care costs. Students attending CSH schools have

been shown to have more healthy eating habits, to be more active and less likely to be overweight.<sup>5,25</sup>

Less well documented and known are the benefits of HEAL for academic performance.<sup>26</sup> Canadian children with healthier diets were reportedly 30% less likely to fail their provincial achievement tests.<sup>2</sup> Other Canadian studies have shown that cutting back on time for classroom learning to make space for more physical education did not affect students' academic performance, suggesting that there are beneficial effects of physical education on learning.<sup>24,27</sup> These important observations justify more time being spent in school on the promotion of HEAL, as it is beneficial to both health and learning.

The benefits of promoting HEAL extend to self-esteem, an early indicator of mental health later in life. Canadian children with healthier diets and higher activity levels had reportedly better self-esteem.<sup>28,29</sup> These studies also confirmed the positive effect of HEAL on healthy body weights and good academic performance, both of which were found to improve self-esteem independently.

The benefits of CSH for learning and self-esteem have yet to be evaluated but are expected to exceed the combined effects of healthy eating and active living.<sup>30</sup> Other benefits of CSH that have been reported include the strengthening of family and other relationships, equity in education and health, and better school ethos to support HEAL.<sup>5,6,9</sup>

### Evaluating CSH

Evidence-based decision-making is fully developed for clinical interventions: new drugs and procedures are subjected to clinical trials to establish both efficacy and safety prior to marketing and implementation. In contrast, evidence-based decision-making in public health, and particularly population health, interventions such as CSH is in its infancy. Where clinical evidence tends to be universal and biological in nature, evidence for population health interventions is context specific and consequently in continued need of replication. Where clinical evidence focuses on outcomes, evidence for population health interventions should cover each of the following three areas:<sup>31</sup>

1. To what extent is CSH successfully implemented? Are advances made for each of the four essential elements of CSH?
2. What is the impact of CSH? Has its implementation demonstrated improvements in knowledge, and changes in attitudes and behaviours?
3. What are the improvements in terms of outcomes? Are students eating more healthily, being more active and have they healthier body weights?

One may establish the effectiveness of CSH when an evaluation confirms implementation, impact and positive outcomes. Rigorous evaluations have yet to be conducted and published for CSH, although some studies have confirmed implementation,<sup>4,6</sup> and another showed positive outcomes.<sup>5</sup> Confirmation of implementation generally makes use of qualitative methods and existing planning tools, such as the IC maps described earlier. Quantitative methods are most appropriate for demonstrating impact and outcome. Though an evaluation of CSH is time and resource intensive, it is essential to the identification of best practice, to informed public health decision-making and to justification of broader implementation of CSH.

In summary, the Canadian education system is among the best in the world academically. In contrast, eating and activity levels

among children and youth have led to prevalence rates of overweight that are among the highest in the world. CSH is a promising approach to promoting HEAL. Rigorous evaluations of CSH are urgently needed to provide a stronger evidence base of the benefits of CSH for learning, self-esteem and disease prevention. This evidence will help justify devoting more school time to promote HEAL and more resources for CSH, to the benefit of both learning and health.

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