

Comprehensive School Health Highlights

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Comprehensive School Health Highlights is designed to provide an accessible look at some of the more interesting Comprehensive School Health research and policy reports currently being published. Each issue contains “Headlines and Conclusions” for each article, followed by a one-page summary of each article.

Comprehensive School Health Highlights is prepared by the Joint Consortium for School Health Secretariat and is made available either at www.jcsh-cces.ca or by email inquiry@jcsh-cces.ca.

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This issue of *Comprehensive School Health Highlights* addresses the following questions:

1. How can Canadian youth improve their failing grades in after-school physical activity?
2. What is the extent of research available on CSH?
3. Does youth resilience reflect socioeconomic, geographic, or cultural differences?
4. Should positive mental health promotion begin with pre-schoolers?
5. What do non-traditional smoking methods, such as bidi and hookah use, say about current prevention programs?
6. Does a pre-schooler’s health status affect educational outcomes?
7. How can the public health sector improve relationships with educators to address the needs of the whole child?

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1. Statistics Canada reports that kids are sedentary 59% of the time between 3-6pm, getting an average of only 14 minutes of moderate-vigorous physical activity during this time period.

While children and, more so, teenagers, have some responsibility for their own health and physical activity levels, governments, educators, administrators, and community groups have significant room for improvement in terms of promoting and facilitating physical activity for Canadian children.

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2. Comprehensive School Health research has been alive and well in Canada and internationally for the past 20 years – it has not received widespread attention.

By exploring the roles and contributions of different stakeholders, evaluating the state of health risk factors in a school context, and determining the processes of adoption, implementation, and sustainability of these approaches – improvements in CSH initiatives will be of great value to Canadian schools and research communities.

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3. Youths’ resilience, or capacity to cope under stress, reflects different degrees of access to 7 mental health-enhancing experiences.

It is important to realize in multi-national research studies that a country such as Canada does not have a homogeneous population. Studies that assume the citizens of Canada have the same background, access to health and education services, and social development overlook clear signs of resilience and positive functioning that are demonstrated in ethnically and geographically diverse populations within the country.

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4. The early years are critical for development of self-regard, mental fitness, and learning success through school years and into adulthood.

Early childhood educators build positive mental health into the school experiences of toddlers and pre-school children by respecting the contexts in which these children live. They also must understand that the parents are the primary teachers and advocates. Relationships built among the children that are collaborative and respectful will be met with similar behaviour and self-respect in the children. A holistic, integrated curriculum will pave the way for development of collaborative relationships and a positive sense of self which the child will carry throughout life

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5. The increase in bidi and hookah use among Canadian youth points to the need to provide multi-substance prevention programs in schools.

Teens are exploring alternative smoking behaviours outside of the more traditional cigarettes. Those who use bidis or a hookah find in them an affordable way to access tobacco in a variety of flavours; they also tend to have tried/used alcohol and/or marijuana.

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6. The health of children at birth and in their first years of life will impact on their learning outcomes, but their family and community contexts have a greater significance on how well the children succeed in school.

The health of children from birth to school-age will impact their later achievements in school. However, the relationship between

health and academic attainment is really only significant in the case of a major illness. Even then, a child’s family and community environment will play a greater role in his/her learning outcomes.

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7. The public health sector needs to collaborate with other partners in child health, particularly educators, in order to meet the needs of the whole child and to combat chronic diseases that have their beginnings in the early years.

In the United States, the Learning Compact for Children is a model that combines health and education interventions to address the social determinants of health and promote academic outcomes and positive lifestyle choices. By concentrating on improving the high school graduation potential of every student, schools enhance both the school environment and connections with students, families, and the wider community.

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Active Healthy Kids Canada

Report card 2011 focusing on the after-school time period: 3-6pm.

Intuitively you would expect children to be more active after school as it is their “free time”, and was traditionally used for active play – running, biking, playing outside with their friends; unfortunately, this is no longer the case. Statistics Canada reports that kids are sedentary 59% of the time between 3-6pm, getting an average of only 14 minutes of moderate-vigorous physical activity during this time period.

Some groups are at an increased risk of inactivity: Boys are more likely than girls to engage in physical activity after school and children from families of a lower socio-economic status are less able to play in organized sport and participate in physical activity after school.

After school programming involving physical activity is not accessible to every child, making it difficult for them to meet the new physical activity guidelines. Seventy-two per cent of parents say their children do not have access to a supervised after-school program. However, less than half of the after-school programs reported physical activity as their primary purpose.

Lack of programming may also be leaving teens vulnerable to sedentary and risky behaviours: 88% of after school programs are targeted to children aged 5-12, with only 49% of programs open to teenagers. As the length of unsupervised time in the teenage group increases, the risk of experimentation with sexual activity, alcohol, and marijuana increases.

Recommendations for increasing Physical Activity during the after school time period:

- **Get outside** – kids who are outside after school take approximately 2,000 more steps per day than kids who remain indoors, roughly the equivalent to walking 2 more kilometres every day.
- **School-Community partnerships and training** – effective links between school administrators and those who offer sport, recreation, and child-care, help to engage students in programs at nearby facilities or within the school itself.
- **Youth leadership** – involving youth in the development of physical activity programs results in higher levels of youth engagement and fosters connections with peers.
- **Policy and investment support** – The after-school period has been identified by the Public Health Agency of Canada and all provincial and territorial governments as a target time for physical activity. Policy changes by governments and partners are needed to ensure that resources and training for physical activity are available.

F	Physical activity lens – 9% of boys and 4% of girls meet Canadian physical activity guidelines (60 minutes of moderate-vigorous intensity physical activity daily)
C	Organized sport and physical activity participation – 75% of parents say their children

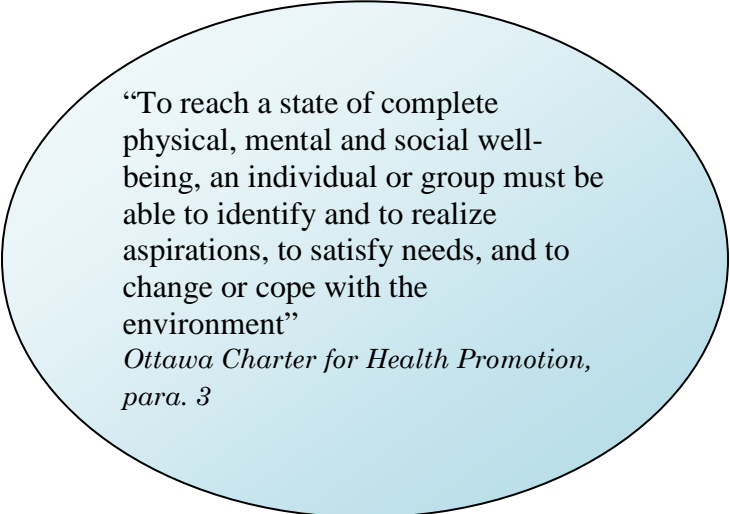
	participate in sport; organized sport during childhood is positively related to leisure time physical activity in adulthood
F	Active play – One Quebec study noted that only 1 in 8 children are engaged in active play 5 days/week after school
D	Active Transportation – 24% of parents say their children use only active modes of transport in trips to and from school while 42% say they drive their children to school
F	Screen-based sedentary behaviours – Youth are getting an average of 6 hours per day of screen time outside of school hours
C-	Physical Education – 22% of children get no daily physical education, 44% get 1-2 days/week.
B	Sport and physical activity opportunities at school – school sport participation declines at the transition into high school and continues to decline throughout high school
B	School infrastructure and equipment – Children at schools with no playground equipment are less active
D+	Family PHYSICAL ACTIVITY – Children who received greater parental support for physical activity and whose parents rated physical activity as highly enjoyable, were more likely to engage in one or more hours of physical activity per day
C	Federal Government Strategies – While other countries have national strategies in place to promote Physical Activity, Canada remains without a comprehensive national physical activity strategy, indicating a low priority in the area
B+	P/T Government Strategies - There is encouraging policy development at the P/T level
F	Federal Government Investments - Despite a robust body of evidence that physical inactivity is a major public health issue in Canada, significant new investment has not been seen in response
A-	Proximity and Availability – 93% of parents say public facilities and programs are available locally
C	Usage of Facilities, Programs, Parks and Playgrounds - 61% of parents say their children use public facilities and programs very often and 69% of parents say their children use parks and outdoor spaces at least sometimes

Reference: Active Healthy Kids Canada. 2011. Don't Let This Be the Most Physical Activity Our Kids Get after School. The Active Healthy Kids Canada 2011 report Card on Physical activity for Children and Youth. Toronto, ON: Active Healthy Kids Canada.
<http://www.activehealthykids.ca/ecms.ashx/ReportCard2011/AHKCReportCard20110429FINAL.pdf>

Comprehensive School Health Research Review

Comprehensive School Health was born out of the **Ottawa Charter for Health Promotion**.

Many organizations around the world have implemented the CSH approach, using their own unique processes. However, despite a growing body of scientific literature on risk factors, healthy lifestyles and youth, and the growing number of CSH initiatives in schools, there is a lack of literature to document the effectiveness of the CSH approach.



“To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment”

Ottawa Charter for Health Promotion, para. 3

Physical Activity

Positive changes were seen when more opportunities were provided for students to be active, and when changes in class

curriculum and school community offered ways to be healthier. Students showed an increase in fitness levels when teachers delivered more physical activity during classroom times.

- ✓ “Greening school yard:” Every area of the school grounds was used to promote varying levels of physical activity, which provided greater accessibility to a wider range of students.
- ✓ To provide support to enhance children’s play some key factors were identified:
 - 1) Integrating the exploration of the natural environment into PA;
 - 2) Promoting more cooperative play and civil behaviour; and
 - 3) Contributing to the inherent link between play and cognitive development by offering the potential for formal and informal learning.

Healthy Eating

Eating behaviours were influenced by factors such as the support system, resources and student enthusiasm for taking part in the initiatives.

Barriers to sustaining these initiatives were decreases in funding and varying support from volunteers and staff.

Reference: Beaudoin, C.(2011). Twenty Years of Comprehensive School Health: A Review and Analysis of Canadian Research Published in Refereed Journals (1989-2009). PHENex Journal 3(1).

Resilience and Diversity among Canadian Youth

Research into resilience is beginning to view this as not only an individual's capacity to cope during times of stress but also the capacity of the community to provide supports in ways that are "culturally meaningful" (p. 3)

Coping behaviours, when seen in the context of a child's life circumstances, may be much more healthy and positive than assumed when the context is not considered.

As part of a larger international study, interviews conducted with at-risk Canadian youth from Halifax, Winnipeg (two sites, one with urban Aboriginal youth, the other with non-Aboriginal youth in residential care), and Sheshatshiu, an Innu First Nations community in Labrador.

Youth were chosen from the following groupings: (1) aged between 15 and 18; (2) exposed to at least three factors thought by community members to pose significant risk to youth in their community (risks included family breakdown, poverty, cultural disintegration, multiple relocations, being a child in care, drug and alcohol addictions, discrimination based on race, gender, or sexual orientation, and mental illness, their own or that of their parents); and (3) the youth were known by members of their communities to be "coping well" (p. 4).

Resilience was found in the ways the youth were able to simultaneously negotiate between and balance themselves in seven mental health enhancing experiences or "Tensions" (because of the impact each of the seven had on the youth's ability to look after himself/herself).

Even serious and significant issues can be determined as "a mastery over crisis" (p. 7).

"Youth find creative ways to cope, compromising to find a balance between the resources that sustain resilience" (p. 10)

7 "Tensions" of Resilience:

1. access to material resources;
2. access to supportive relationships;
3. development of a desirable personal identity;
4. experiences of power and control;
5. adherence to cultural traditions;
6. experiences of social justice; and
7. experiences of a sense of cohesion with others (p. 4)

Reference: Ungar, M., Brown, M., Liebenberg, L., Cheung, M., & Levine, K. (2008). Distinguishing differences in pathways to resilience among Canadian youth. *Canadian Journal of Community Mental Health, 27* (1), 1-13.

Early Childhood Education and Positive Mental Health Promotion

Whole Child Approach

A whole child approach is the best way to provide an individual child with the nurturing and guidance he and she needs in early childhood education (ECE) in order to develop a sense of self-worth, mental fitness, self-trust. Research finds that a collaborative curriculum in ECE will take an educator a long way.

Collaboration among early childhood providers, educators, and parents leads to better outcomes for all involved: fewer conduct problems for children, increased parenting skills for mothers, and better classroom management skills for teachers.

Recognize each child's environment

Many toddlers will come to school with the teachings from their parents, their homes, and their communities that will serve them well in school and throughout life. Many other children will bring behaviours or personal characteristics, such as attention deficits, which will not allow them to transition into the school system easily and confidently.

“What happens during the first months and years of life matters a lot, not because this period of development provides an indelible blueprint for adult well-being, but because it sets either a sturdy or fragile stage for what follows” (Shonkoff & Phillips, 2000, p. 5)

Role of ECEs

Early childhood educators are key to each young child's development during the school hours. They promote positive mental health in the following ways:

- Developing and maintaining collaborative relationships and communication with each child's parents/caregivers
- Understanding that a positive school environment that promotes and supports mental fitness in the child also recognizes risk factors that would influence a child's emotional health
- Being aware of the influence of classroom relationships in the life of a child, from pre-school to high school

- Nurturing educator-toddler relationships will produce long-term benefits in both risk and non-risk children
- Building early childhood classrooms and school environments as a community where everyone cares about each other and everyone has skills and strengths.
- Knowing the importance of prevention, promotion, and intervention in the mental health development of every child
- Supporting parents to feel confident that they, the parents, are the child's primary teacher, guide, and advocate
- Ensuring that, in the holistic approach, the focus of learning and support is not just on the child but on the child in his and her context of family, neighbourhood, and larger community.

Reference: Bagdi, A., & Vacca, J. (2005). Supporting Early Childhood Social-Emotional Well Being: The Building Blocks for Early Learning and School Success. Early Childhood Education Journal, 33(3), pp. 145-150. doi: 10.1007/s10643-005-0038-y

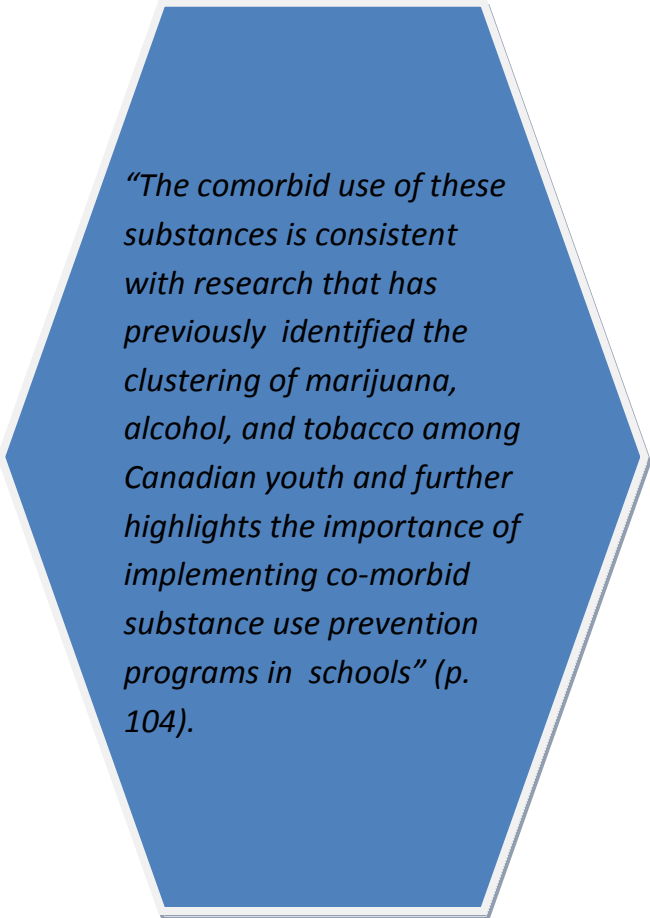
Alternative tobacco products – bidis and hookahs – and youth risks

Bidi and hookah use among Canadian teenagers is on the rise. These tobacco products are inexpensive, are seen to be intriguing and hip, and come in a variety of flavours; all of these factors appeal to youth interested in trying alternative forms of tobacco use.

In addition to the appeal of bidis and hookahs, the health risks are at least as high as they are for other tobacco products, including cigarettes: they contain nicotine, tar, and carbon monoxide; and they increase risk for cancer and heart disease.

Data from the Youth Smoking Survey (YSS) on almost 42,000 Canadian students in Grades 7-12 conducted in 2006-2007 indicated that more students have tried hookah than bidis, were more likely to be males, and in the higher grades in school. In addition, there was greater likelihood that students who used hookah or bidis have used cigarettes, marijuana, and/or alcohol.

The research results showed the benefit of moving beyond the typical school prevention program highlighting individual substances in order to target the use of substances in general.



“The comorbid use of these substances is consistent with research that has previously identified the clustering of marijuana, alcohol, and tobacco among Canadian youth and further highlights the importance of implementing co-morbid substance use prevention programs in schools” (p. 104).

*Reference: Chan, W.C., Leatherdale, S.T., Burkhalter, R., Ahmed, R. (2011). Bidi and hookah use among Canadian youth: An examination of data from the 2006 Canadian Youth Smoking Survey. *Journal of Adolescent Health, 49*, 102-104. doi: 10.1016/j.jadohealth.2010.11.250*

Pre-school Health Status and Learning Outcomes

The health of a child at birth does affect learning outcomes, but especially so if the health is connected to a major illness; if the child's health status is related to a minor illness, then learning outcomes are not significant and can be offset – or elevated – by other factors, particularly socioeconomic status and neighbourhood income levels.

A cohort of almost 6,000 Winnipeg children was followed from birth in 1991 until the end of Grade Three in 1999. The researchers hypothesized that health status at birth, and health status prior to commencement of school would impact on a child's learning outcomes. What they found was that the health of a child at birth had a bearing on academic performance if it signalled a chronic illness, but was not a significant factor in and of itself. As could be expected, the more serious the child's illness, the more severe are the cognitive impacts and school outcomes.

However, the most significant indicators of a child's school performance in the first three grades were social determinants of health: the family income, health of the mother, income of the neighbourhood where the child lived.

“Almost all of the social, economic, and demographic factors were significant predictors of progress and performance in school, and most were more strongly related to the outcome than were the health factors” (p. 346).

The study also found, because of its length – 8 years – and the size of the sample of children that other protective and risk factors impacted a child's learning. These factors were seen as significant and point to the benefit of longitudinal studies. Children have an advantage in school if they have one or more of the following characteristics:

- Born earlier in the year (older children)
- Family residence in higher income neighbourhood
- Born to an older mother
- Family never on income assistance
- Girls
- Breastfed at birth
- Born into smaller family

- “Almost all of the social, economic, and demographic factors were significant predictors of progress and performance in school, and most were more strongly related to the outcome than were the health factors” (p. 346).

Recommendations

- Many children can be targeted for education support as pre-schoolers if the strong linkage between health status at birth and major illness is identified early.
- “The overwhelming strength of the social, economic, and demographic factors underscores the continuing need to address the broader social determinants of health and educational outcomes, including the development of a comprehensive program for early child health and development” (p. 347).

Reference: Fransoo, R.R., Roos, N.P., Martens, P.J., Heaman, M., Levin, B., Chateau, D. (2008). How health status affects progress and performance in school. Canadian Journal of Public Health, 99(4), 344-349.

Public Health and Education Improve Partnerships for Whole Child Health

“Evidence suggests that improving high school graduation rates may be more cost-effective than most medical interventions in reducing health disparities” (p. 1).

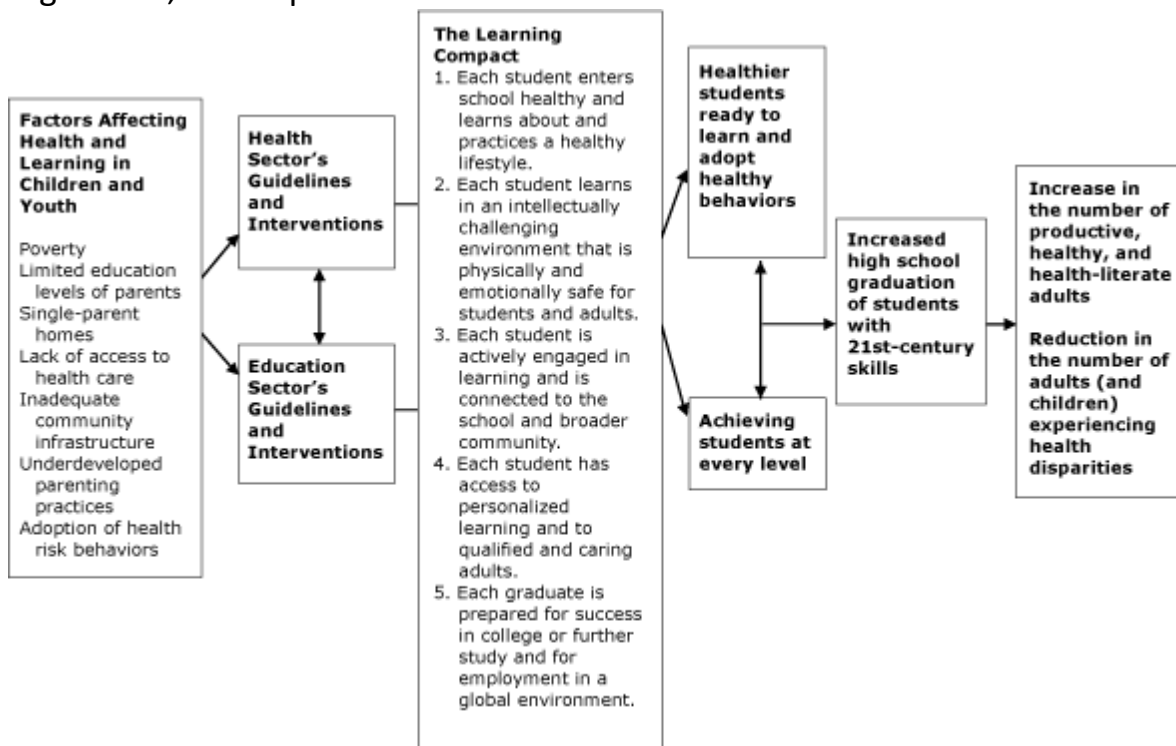
The role of public health is to work with not only the individual but the greater society in order to prevent disease and improve the health of the population.

Children and youth from socially deprived and excluded populations (because of ethnic, geographic, or socioeconomic stigma) are at much greater risk to develop lifestyle behaviours that will pose disease risks throughout adulthood.

Rather than tackling individual behavioural issues, the goal of the U.S. public health-education collaboration known as *The Learning Compact for Children* is on academic success, defined as high school graduation. Schools are the common centres for virtually all children/youth and, in them, healthy behaviours can be

developed; it is much easier to create healthy behaviour patterns in childhood than to try to change them in later years.

The *Learning Compact for Children* sees each day as “an opportunity... to learn about health” (p. 2). Examples of results at schools that have adopted the compact are: (1) student attendance and discipline referrals improved at schools that added wellness centres providing services to students, families, and communities; (2) academic results and discipline improved in schools that provided fruits and vegetables, and improved the school climate.



Reference: Allensworth D, Lewallen TC, Stevenson B, Katz S. (2011). Addressing the needs of the whole child: what public health can do to answer the education sector's call for a stronger partnership. *Preventing Chronic Disease*, 8(2).
http://www.cdc.gov/pcd/issues/2011/mar/10_0014.htm.