



CORE

Public Health Functions for BC

**Model Core Program Paper:
Healthy Child and
Youth Development**

This Model Core Program Paper was prepared by a working group consisting of representatives of the BC Ministry of Healthy Living and Sport and BC's health authorities.

This paper is based upon a review of evidence and best practice, and as such may include practices that are not currently implemented throughout the public health system in BC. This is to be expected, as the purpose of the Core Public Health Functions process—consistent with the quality improvement approach widely adopted in private and public sector organizations across Canada—is to put in place a performance improvement process to move the public health system in BC towards evidence-based best practice. Where warranted, health authorities will develop public performance improvement plans with feasible performance targets and will develop and implement performance improvement strategies that move them towards best practice in the program component areas identified in this Model Program Paper.

This Model Program Paper should be read in conjunction with the accompanying review of evidence and best practice.

Model Core Program Paper approved by:

Core Functions Steering Committee (March 2010)

Population and Public Health, BC Ministry of Healthy Living and Sport (March 2010)

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TABLE OF CONTENTS

Executive Summary	i
1.0 Overview/Setting the Context.....	1
1.1 An Introduction to This Paper.....	2
1.2 Introduction to Healthy Child and Youth Development.....	2
1.2.1 Protective Factors.....	6
1.2.2 Risks/Vulnerability Factors	6
1.2.3 Collaborative Linkages and Partnerships.....	7
2.0 Scope And Authority For Healthy Child and Youth Development	8
2.1 National/International Roles and Responsibilities.....	8
2.2 Provincial Roles and Responsibilities.....	8
2.2.1 Ministry of Healthy Living and Sport.....	8
2.2.2 Ministry of Health Services	9
2.2.3 Ministry of Education	10
2.2.4 Ministry of Children and Family Development.....	10
2.2.5 Representative for Children and Youth for British Columbia	11
2.2.6 Other Provincial Ministries.....	11
2.2.7 Provincial Health Services Authority	11
2.2.8 Other Provincial Organizations.....	12
2.3 Health Authorities Roles and Responsibilities	12
2.4 Local Roles and Responsibilities	14
2.5 Aboriginal Communities.....	14
2.6 Legislation and Policy Direction	14
3.0 Goals and Objectives	15
4.0 Principles/Fundamental Concepts.....	16
4.1 Multi-Disciplinary/ Multi-Sectoral Collaboration	16
4.2 Collaborative Strategies	18
4.3 A Population Health and Determinants of Health Approach.....	19
4.4 A Focus on Protective Factors	20
4.5 Continuum of Growth and Key Developmental Stages.....	20
4.6 Responsiveness to Vulnerable and At-risk Population Groups	21
4.6.1 Children and Youth Who Experience Violence, Abuse and Neglect	21
4.6.2 Children and Youth Living in Poverty.....	21
4.6.3 Aboriginal Children and Youth	21
4.6.4 Multicultural, Immigrant, Refugee, and Visible Minority Populations.....	22
4.6.5 Children-In-Care	22
4.6.6 Children and Youth who are Gay, Lesbian, Bisexual and Transgendered ..	23
4.6.7 Other Vulnerabilities.....	23
5.0 Main Components and Supporting Evidence	24
5.1 Leadership and Advocacy.....	24
5.1.1 Summary of Supporting Evidence	25

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

5.2	Health Promotion	25
5.2.1	Summary of Supporting Evidence	27
5.3	Prevention Initiatives and Early Identification of Risk or Vulnerability	27
5.3.1	Universal Programs for Children 6 to 8 Years	27
5.3.2	Universal Programs for Middle Childhood, 9 to 12 years	28
5.3.3	Targeted Interventions for At-risk Children, 6-12 Years	29
5.3.4	Universal Programs for Younger Teens, 13-16 Years	30
5.3.5	Universal Programs for Older teens, 17 to 19 years	31
5.3.6	Targeted Interventions for At-risk Youth, 13-19 Years	32
5.3.7	Summary of Supporting Evidence	34
5.4	Surveillance, Monitoring and Program Evaluation	37
5.4.1	Summary of Supporting Evidence	37
6.0	Best Practices	39
7.0	Indicators, Benchmarks and Performance Targets	40
7.1	Introduction	40
7.2	Indicators for the Program on Healthy Child and Youth Development	41
8.0	External Capacity and Support Requirements	42
8.1	Key Success Factors/System Strategies	42
8.2	Information Management for the Program on Healthy Child and Youth Development	42
References	43
Glossary	48

Appendices

Appendix 1: The Evidence Base for a Model Core Program for Healthy Child and Youth Development	52
Appendix 2: Program Schematic - Model Core Program for Healthy Child and Youth Development	56

EXECUTIVE SUMMARY

This paper identifies the core elements that should be provided by British Columbia health authorities to support healthy child and youth development. It is intended, as part of the BC Core Functions in Public Health, to reflect evidence-based practice and support continuous performance improvement.

A Working Group of representatives from the Ministry of Healthy Living and Sport, Ministry of Children and Family Development British Columbia Centre for Disease Control and the health authorities worked together in the development of this paper. They agreed that the main program components are:

A Working Group of representatives from the Ministry of Healthy Living and Sport, Ministry of Children and Family Development, the Provincial Health Services Authority and the health authorities worked together in the development of this paper. The Working Group agreed that the goal of the program for healthy child and youth development is to maximize the healthy physical, emotional, cognitive and social development of children and youth, ages 6 to 19, to enable them to achieve their full potential. The specific objectives are to:

- Enhance the physical, emotional, intellectual, and mental health of children and youth.
- Strengthen connectedness with family, school, peers and community.
- Increase systemic support for promoting and maintaining healthy environments and healthy development at the school and community levels.
- Prevent or reduce vulnerabilities, risks and health disparities that represent a threat to healthy development of children and youth.

A number of key principles and overarching strategies are necessary to achieve these objectives:

- Multidisciplinary and multi-sectoral collaboration through strong partnerships across sectors, issues and levels.
- Facilitation of community development and community capacity building.
- A positive, strength-based approach to the determinants of health focusing on protective factors and healthy environments.
- Promotion of health and well-being to enhance positive outcomes through broad-based programs at a population level which empower children, families and communities.
- Support across the continuum / stages of growth with particular emphasis on key transition points, including continuity with early childhood development and transitions to adulthood.
- A child-centred focus within the context of developmental capacity and ability, consistent with the UN Rights of the Child.

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

- Responsiveness to the needs of vulnerable and at-risk children, families and population groups such as those experiencing social, economic or environmental barriers to health (e.g., people living in poverty, the working poor, Aboriginal children and families, those experiencing inequities based on gender, culture, race, mental and physical disabilities, sexual orientation, etc.).
- Involvement of older children/youth in planning, developing and delivering programs.
- Advocacy for best or promising policies and practices by local and regional partners.
- A culture of evidence-based practice, evaluation and continuous quality improvement.

The major program components for healthy child and youth development are:

- Leadership and advocacy.
- Health promotion.
- Prevention initiatives and early identification of risk or vulnerability.
- Surveillance, monitoring and program evaluation.

Best practices and promising practices for each program component, based on the evidence and experience of experts in the field are:

Leadership and Advocacy

- Collaborating in development and implementation of a long-term, comprehensive, multi-sectoral regional strategy.
- Collaborating in the planning of related core public health programs to integrate and enhance responsiveness to, and support for healthy child and youth development.
- Advocating for healthy public policies and programs on regional child/youth development priorities.

Health Promotion

- Collaborating in comprehensive school health models.
- Collaborating with partners in delivery of public education, awareness and social marketing interventions to address key priorities in child/youth development.
- Supporting local governments and schools in enhancing healthy built environments.
- Facilitating community development and capacity building to strengthen protective factors for children and youth.
- Supporting schools in implementing school food guidelines and healthy school food environments.

Prevention Initiatives and Early Identification of Risk and Vulnerability

Work with school and community partners to implement multi-strategy initiatives that support successful completion of key developmental tasks for each development stage of children and youth, including proven practices such as:

Universal Initiatives

- Younger children, 6 to 8 years
 - Encouragement of school readiness through parenting skill development and parenting/caregiver support (e.g., multi-modal strategies such group sessions, written information/instruction, and home visits where appropriate).
 - Promotion of parent-child healthy eating practices, physical activity, and healthy social, emotional and cognitive development through multiple settings such as child care programs, early learning programs and family support agencies, e.g., promote daily reading/storytelling to support speech and language development.
 - Support for evidence-based school-based physical activity and healthy eating programs which include both skill-building and educational components to enhance health benefits as well as self-esteem and well-being.
 - Delivery of an immunization program that increases the uptake of vaccines that prevent vaccine preventable diseases.
- Middle childhood, 9 to 12 years
 - Support for enhancement of emotional competence strategies to increase empathy, emotional knowledge, social understanding and pro-social peer behaviours.
 - Community-based skill building arts initiatives which promote positive social development, communications, conflict resolution and team building skills.
 - Healthy sexual development through school-based sex education and exploration of attitudes and beliefs toward sexuality.
 - Physical activity and healthy nutrition that includes both educational and skill-building components in multiple settings.
 - Positive body image programs to prevent or reduce disordered eating.
 - School-based, high quality, interactive and evidence-based education to build literacy about alcohol, cannabis and tobacco.
- Younger teens, 13 to 16 years
 - Increased intensity of physical activity programs through both school and community resources.

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

- Promotion of nutrition through knowledge-building and skills development strategies integrated into school learning resources and school policies.
 - Sexual health education focused on knowledge, fostering positive views and attitudes, and skill building related to healthy intimate relationships.
 - Education and skill building related to healthy relationships to foster healthy peer interactions through enhancing communication, ability to negotiate conflict, healthy attitudes towards risk behaviours, and understanding and valuing diversity.
 - Healthy emotional and cognitive development through strategies focused on enhancing self-esteem and positive body image.
 - Prevention, delay and reduction of tobacco, alcohol and cannabis use through: evidence-based literacy programs in schools; school-based social influence to reduce and prevent early drug use; and engagement community participation in influencing social attitudes and responses to tobacco, alcohol, and cannabis.
 - Peer counselling education and support programs to reinforce equal opportunities, anti-bullying and emotional support.
- Older teens, 17-19 years
 - Healthy emotional and cognitive development through strategies focused on enhancing self-esteem and positive body image.
 - Education and skill-building on relationships to foster healthy peer interactions through enhanced communication, ability to negotiate conflict, healthier attitudes towards risk behaviours and understanding diversity.
 - Support for community service, or service-learning involvement, as part of educational requirements for high-school.
 - School-based social influence to prevent tobacco use.
 - Multi-strategy initiatives to prevent or reduce problematic alcohol and drug use.
 - Access to sexual health clinical services appropriate for this age group.
 - Encourage and support, with school boards and community groups, a smooth transition to independent and adult life and responsibilities, including: learning resources to assist in the transition to post-secondary education or the workforce; community support and training programs that target young adults and address financial matters, positive relationships and independent living; and referrals to community health care centres and other support programs that assist in the transition from high school to career preparation, employment and/or healthy living lifestyles.

Targeted Initiatives for At-risk Children and Youth

Work with school systems, child protection and welfare systems, primary health care, and community partners to implement:

- Early detection of at-risk children and youth, through linkages and consultation with school systems, primary health care providers, and community service agencies, and referrals to specialized health resources.
- Positive school adjustment through a multi-component strategy, in partnership with school boards, to address the needs of teachers, parents and children.
- Interventions for parents to build parenting skills, foster positive family relationships and behaviours, and reduce neglect and abuse.
- Resilience-focused programs for children and youth at risk for anxiety, depression or behavioural problems that combine child, family and school-based interventions (e.g., cognitive-behavioural therapy and social competence skill building).
- Interventions to increase healthy eating among at-risk groups through knowledge-building and skills development.
- Delivery of expanded one-to-one mentorship programs which match at-risk children with caring adults to provide social support, role models and/or tutors.
- A range of additional targeted initiatives that have been identified in other core public health programs such as the Healthy Living Program, Mental Health Core Program, Prevention of Harms Associated with Substances, etc.

Surveillance, Monitoring and Program Evaluation

- Gathering and analyzing information to identify trends, issues, and community protective factors and risk factors for program planning and evaluation.
- Developing an information system to integrate data on child and youth development.
- Conducting program evaluation.

1.0 OVERVIEW/SETTING THE CONTEXT

As demonstrated in recent Canadian reports, public health needs to be better structured and resourced in order to improve the health of the population. The Framework for Core Functions in Public Health is a component of that renewal in British Columbia. It defines and describes the core public health activities of a comprehensive public health system. This policy framework was accepted in 2005 by the Ministry of Health and the health authorities.

Implementation of core functions will establish a performance improvement process for public health, developed in collaboration between the Ministry of Healthy Living and Sport, the health authorities and the public health field. This process will result in greater consistency of public health services across the province, increased capacity and quality of public health services and improved health of the population. To ensure collaboration and feasibility of implementation, the oversight of the development of the performance improvement process is managed by a Provincial Steering Committee, with membership representing all health authorities and the ministry.

What are core programs? They are long-term programs representing public health services that health authorities provide in a renewed and modern public health system. Core programs are organized to improve health; they can be assessed ultimately in terms of improved health and well-being and/or reductions in disease, disability and injury. In total, 21 programs have been identified as “core programs,” of which the program for healthy child and youth development is but one.

In a “model core program paper,” each program will have clear goals, measurable objectives and an evidentiary base that shows it can improve people’s health. Programs will be supported through the identification of best practices and national and international benchmarks (where such benchmarks exist). Each paper will be informed by an evidence paper, other key documents related to the program area and key expert input obtained through a working group with representatives from each health authority and the Ministry of Healthy Living and Sport.

The Provincial Steering Committee has indicated that an approved model core program paper constitutes a model of good practice, while recognizing it will need to be modified to meet local context and needs. In addition, over time, model core programs will need to be reviewed and updated, and a process of renewal is currently being developed by the Provincial Steering Committee. While health authorities must deliver all core programs, how each is provided is the responsibility of the health authority, as are the performance improvement targets they set for themselves.

It is envisioned that the performance improvement process will be implemented over several years. During that time the process will contribute to and benefit from related initiatives in public health infrastructure, health information and surveillance systems, workforce competence assessment and development, and research and evaluation at the regional, provincial and national levels.

1.1 An Introduction to This Paper

This model core program paper is one element in an overall public health performance improvement strategy. It builds on previous work from a number of sources.

In March 2005, the Ministry of Health released a document entitled *A Framework for Core Functions in Public Health*. This document was prepared in consultation with representatives of health authorities and experts in the field of public health. It identifies the core programs that must be provided by health authorities, including healthy child and youth development, and the public health strategies that can be used to implement these core programs. It provides an overall framework for the development of this document.

Other documents that have informed this paper include:

- *Evidence for Healthy Child and Youth Development Interventions for Core Public Health Functions* (2008), prepared by E. Saewyc and D. Stewart, McCreary Centre Society and University of British Columbia School of Nursing, for the Ministry of Healthy Living and Sport, Population and Public Health.

In addition, evidence reviews prepared for a number of other related model core programs have been references where these address the needs of children and youth. Where appropriate this paper is aligned with related model core programs such as healthy living, prevention of harms associated with substances, mental health promotion and mental disorders prevention, prevention of violence and abuse, prevention and control of communicable diseases, prevention and control of chronic diseases, prevention of unintentional injuries, etc.

A Working Group on Healthy Child and Youth Development, including experts from the Ministry of Healthy Living and Sport and the regional health authorities, was formed in Spring 2008. The group provided guidance and direction in the development of the model core program paper during meetings in the Spring and Fall 2009, as well as through telephone and e-mail discussions.

1.2 Introduction to Healthy Child and Youth Development

This model core program, addressing children from 6 to 19 years of age, is part of a continuum that includes core programs on reproductive health and prevention of disabilities, and the healthy infant and early childhood development program.

The school years are important periods of physical, cognitive, social and moral development. Choices made during this time influence health and behaviours throughout a child's life. The public health services and support systems for childhood and youth are somewhat fragmented, often with a lack of continuity across age groups. Unlike the period from 0 to 5 years which is known to be a key formative period, there has been limited recognition of the importance of later developmental stages. Although awareness and support for adolescent issues has been growing, younger children tend to be overlooked.

This paper focuses on strategies that will enhance and facilitate the capacity of children and youth for healthy development and positive growth. Increasingly, researchers and health care

professionals are stressing the importance of strengthening healthy development and protective factors that equip young people with the skills and resources to negotiate risk exposures without harmful effects. Healthy development involves successfully achieving specific developmental tasks at each stage of growth. These include:¹

- **Healthy Physical Growth and Pubertal Development** – children and adolescents will attain their peak growth, experience puberty and develop secondary sex characteristics, deposit calcium in their bones, and establish more complex neural connections and pathways in their brains.
- **Healthy Emotional and Cognitive Development** – younger children are predominately concrete thinkers, and gradually develop, in their teen years, the capacity for formal operational thought, perceptions of self, and increasingly sophisticated decision-making skills. Emotional responses shift from somewhat impulsive to more reasoned and self-regulating states.
- **Healthy Sexual Development** – as young people become aware of sexual attraction and arousal, positive development is reflected in an increasingly safe, healthy and mature approach to intimate relationships and sexuality.
- **Healthy Social Development and Community Engagement** – social environments outside the family gradually expand as children grow and move into adolescence, with increasing school connectedness, community involvement and associated development of being caring and contributing members of society.
- **Healthy Peer Relationships and Supportive Peer Networks** – Positive peer networks can support academic achievement, reduced emotional stress, and promote healthy decision-making around risk behaviours.
- **Healthy Moral Development** – Early school aged children begin to understand moral precepts as well as develop internal motivation to do what is right, while adolescents develop both strong idealism and a questioning approach, as part of the process of deciding who they are, what they believe in, and what they consider right.”

While a positive protective approach is a key consideration, additional factors also require attention in developing public health services for children and youth. These include:

1. An obligation to support the healthy development of children as expressed by the *United Nations Convention on the Rights of the Child*, which states that every child has:

The right to survival;
The right to develop to the fullest;
The right to protection from harmful influences, abuse and exploitation; and
The right to participate fully in family cultural and social life.

2. A responsibility to address health compromising conditions and behaviours. The following statistics reflect pressing issues that require strong action and pro-active support for children and youth:
- Eighteen percent of Canadian children, 2 to 17 years, were obese in 2004. The number of overweight and obese children has nearly tripled in the last 20 years.² In 2008 in BC, 13% of youth were overweight, 4% obese, and 5% underweight.³
 - Body image and unhealthy dieting are issues for a number of young people. For example, of healthy weight youth in BC in 2008, 53% of female youth and 14% of male youth were trying to lose weight. 3% of males and 8% of female youth vomited on purpose after eating.⁴
 - The overwhelming majority (87%) of Canadian children and youth, ages 5 to 19, did not meet the physical activity guidelines (2007-08) set by Canada's Physical Activity Guide (optimal level is equivalent to 90 minutes of moderate-to-vigorous activity per day). Data also indicates that boys are more active than girls, and younger children more active than teens.⁵
 - The number of youth who experience physical abuse increased from 15% in 2003 to 17% in 2008. 8% of youth reported sexual abuse, and 5% reported both physical and sexual abuse (2008).⁶ Youth particularly vulnerable to relationship violence include those who: had been sexually abused; had a disability or chronic illness; and gay, lesbian and bisexual students.⁷
 - Nine percent of youth ran away from home in 2008: students who ran away were more likely to have experienced extreme stress and despair, and to have attempted suicide [data comparison to earlier years not available].⁸
 - Nine percent of youth experienced hunger some of the time and 2% went to bed hungry often or always: they were more likely to report poor/fair health and to have considered suicide [data comparison to earlier years not available].⁹
 - More than 1 in 5 females and 1 in 10 males (ages 12-17) reported that they had deliberately self harmed (cut or injured themselves) [data comparison to earlier years not available].¹⁰
 - The number of youth who seriously considered suicide was 12% in 2008 (down from 16% in 1992). The number who actually attempted suicide was 5% (down from 7% in 1992).¹¹

3. A number of population groups of children and youth are also vulnerable to the risks associated with social environments and the broader determinants of health:
- Many aboriginal children face multiple barriers to healthy development and school achievement. For example, a survey of marginalized and street-involved youth in BC found that more than half (54%) of the youth were Aboriginal.¹²
 - Lesbian, gay and bisexual (LGB) youth in BC are more likely to experience physical and sexual abuse, harassment in school, and discrimination in the community. Also, they are more likely to report emotional stress, suicidal thoughts, and suicide attempts.¹³
 - Students who moved were more likely to experience extreme stress and despair and to feel less connected to school.¹⁴
 - Seventeen percent of BC youth moved once in the past year (2008), 5% moved twice, and 6% moved three or more times;
 - Eighteen percent of youth were born outside Canada: 3% had lived in Canada less than 2 years and 6% had lived in Canada for 2-5 years. 8% were from South Asia, and 5% from Southeast Asia (2008);¹⁵
 - Three percent of students have been in government care at some point in their lives, living in a foster home or group home.¹⁶
 - At the same time, it is important to recognize that most young people are surrounded by supportive families and communities, do well in school and avoid the negative experiences and risk behaviors that can lead to long-term health problems. Overall, there are many positive trends. For adolescents, age 12-17:¹⁷
 - The majority of students (84%) reported that their health was good or excellent and the number who reported a debilitating health condition or disability, declined from 13% in 1998 to 9% in 2008.¹⁸
 - The number of students who were injured to the point of requiring medical attention declined from 39% to 29% in the past decade. The majority were injured in sport or recreational activities.
 - The number of youth smoking cigarettes has declined since 2003 (14% smoked occasionally or daily in 2006-07 compared to 18% in 2003)¹⁹; although, those who smoked were smoking more regularly than their peers in 2003. Male and female students were equally likely to smoke in 2007.²⁰
 - Teen pregnancy and birth rates have been declining over the past decade. The rate of teen pregnancies has decreased from 44/1000 in 1997 to 24/1000 in 2006.²¹
 - The use of methamphetamines decreased from 4% in 2003 to 2% in 2008.

1.2.1 Protective Factors

Protective factors decrease the likelihood that vulnerable children and youth will adopt negative behaviors and enhance the possibility they will embrace positive attitudes and goals. Positive child and youth development focuses on strengthening protective factors as a way to support children and youth in building adaptive coping skills, positive attitudes and values, healthy behaviours and supportive social networks. Thus risk exposures become less influential and less likely to impact lifelong behaviour. Studies indicate the most potent protective factors for vulnerable teens include positive relationships in key settings, including: connectedness to people at school and in their families; having someone in their family they can talk to about problems; and having friends with healthy attitudes towards risky behaviours.²²

Overall, factors such as affectionate and stable relationships, social support and social and school connectedness, are effective in supporting the development of emotional health and positive relationships.²³ Stable family and social relationships, effective parenting skills, adequate family income, safe housing, safe neighbourhoods, and healthy supportive community environments are important predictors of healthy development.^{24 25}

1.2.2 Risks/Vulnerability Factors

Children deprived of attentive and stable care, safe and adequate housing, and children who experience social isolation, abuse, neglect or violence are at risk for a number of behavioural, social and cognitive problems later in life.²⁶ “Vulnerable populations are those with a greater-than-average risk of developing health problems²⁷ and learning difficulties²⁸ by virtue of their marginalized socio-cultural status, their limited access to economic resources, or personal characteristics such as age and gender.”²⁹ For example, a UBC study recently found kindergarten children who lived in neighbourhoods with higher rates of poverty and were vulnerable (based on the EDI – Early Development Instrument) showed reduced scores on standardized reading comprehension tests seven years later, even after moving out of the improvised neighbourhood.³⁰ While there are no widely accepted determinants of child health, the factors considered by a number of experts^{31,32} to be important influences are:

- Socio-economic status (e.g., experiences of poverty, low family income and lower parent education are risk factors);
- Parenting style (e.g., positive styles are related to positive outcomes);
- Social and emotional learning and cognitive stimulation (and conversely, social isolation, neglect, abuse and violence are risk factors);
- Neighbourhood safety, cohesion and socio-economic character;
- Physical characteristics including genetic make-up, hearing, vision and speech abilities;
- Access to quality child care and developmental opportunities;
- Gender, race and ethnicity;

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

- Environmental conditions (e.g., the built environment, living close to hazardous waste sites, or smelters);
- Nutrition and food security.

Childhood vulnerabilities in BC are frequently assessed by school districting using the Early Development Instrument (EDI).

1.2.3 Collaborative Linkages and Partnerships

The educational system is the primary point of interaction with children and youth, thus the health authority role is substantially different, though no less important, than the one they play in early childhood development. As a result, pro-active health promotion strategies based on collaborative, consultative activities and vigorous partnerships with the school system, family and community agencies, are necessary for successful initiatives. (Multi-disciplinary partnerships and multi-sectoral collaborative measures are discussed in section 4.1.)

2.0 SCOPE AND AUTHORITY FOR HEALTHY CHILD AND YOUTH DEVELOPMENT

In order to implement the program for healthy child and youth development, there must be clarity on the roles and responsibilities of the Ministry of Healthy Living and Sport, the Ministry of Health Services, the Provincial Health Services Authority, the health authorities, and other ministries and levels of government.

2.1 National/International Roles and Responsibilities

The Public Health Agency of Canada (PHAC), Division on Childhood and Adolescence focuses on policy development, research and strategic analysis of trends related to broad determinants of child and youth health in Canada. It provides:

- Four Centres of Excellence for Children’s Well-Being across the country, each of which focuses on a specific topics i.e., Centre of Excellence for Child Welfare located at the University of Toronto, the Centre of Excellence for Children and Adolescents with Special Needs, sponsored by Lakehead University, the Centre of Excellence for Youth Engagement based at the Students Commission of Canada, and the Centre of Excellence on Early Childhood Development located at the Universite de Montreal;
- Health promotion initiatives to protect children from violence, abuse, exploitation, injury and neglect; and promotion of safe, supportive environments for children including safe built environments, safe play spaces, safe transportation, water safety and a safe physical/natural environment;
- A Family Violence Initiative and the National Clearinghouse on Family Violence; and
- Promotion of, and reporting related to, the UN Convention on the Rights of the Child.

Health Canada’s First Nation and Inuit Health Branch, provides health promotion and health care services for children and families on reserves. Other federal government programs include the Canada Child Tax Benefit Program through the Canada Revenue Agency.

2.2 Provincial Roles and Responsibilities

2.2.1 Ministry of Healthy Living and Sport

The mandate of the Ministry of Healthy Living and Sport is to:

- Promote health and prevent disease, disability and injury.
- Protect people from harm.
- Facilitate quality opportunities to increase physical activity, participation and excellence in sport.
- Support the health, independence and continuing contributions of women and older people.

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

In its stewardship role, the Ministry of Healthy Living and Sport provides leadership, strategic policy direction, legislation and monitoring for public health and sports programs to support the delivery of appropriate and effective public health services in the province. The ministry has a role in addressing health inequalities, with a specific focus on the development of policies and programs to close the gap in Aboriginal health status. The ministry works with the health authorities to provide accountability to government and the public for public health service outcomes.

Specifically in the area of healthy child and youth development, the Ministry of Healthy Living and Sport is responsible for the following:

Advising the Minister on healthy child and youth development policies and legislation;

- Collaborating, coordinating and advocating in cross government policy development and long-term planning for healthy child and youth development, and related healthy living and aboriginal child and youth development policies and programs;
- Facilitating collaborative partnerships with other provincial Ministries and agencies, the federal government, and Federal/Provincial forums on child and youth health and development;
- Collaborating and consulting with health authorities, clinical and academic partners in the development of plans and strategies to outline provincial priorities and establish policy, best practices, and service frameworks to maximize healthy child and youth development and prevent disease, disability and injury;
- Supporting research on prevalence, effective interventions, and estimated costs and benefits to enhance child and youth development; and
- Providing leadership for ActNow BC with respect to healthy child and youth development.

2.2.2 Ministry of Health Services

The Ministry of Healthy Living and Sport has a unique relationship with the Ministry of Health Services, which is the primary linkage to the regional health authorities, who have responsibility for actual service delivery of public health programs. The roles and functions of the Ministry of Health Services are predominately focused on:

- Leadership for the delivery of health care services and programs.
- Funding and accountability for regional health authorities.
- Ensuring the long-term sustainability of the health care system.
- Improved patient care.
- Leadership, direction and support to health care service delivery partners.
- Establishment of province-wide goals, standards and expectations for health care services delivery by health authorities.

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

- Management of the Medical Services Plan, Pharmacare, Ambulance Services and HealthLink BC self-care programs.

2.2.3 Ministry of Education

The Ministry of Education has a major role in supporting child and youth development through its curriculum development and a range of programs that support healthy development. The “Healthy Schools” initiative promotes a comprehensive school health approach to support improvements in students’ educational outcomes. It recognizes that health and learning are interdependent, and encompasses children’s physical, social and emotional wellbeing. It addresses health in every aspect of the school environment, including teaching and learning, healthy social and physical environments; healthy school policy, and services and community partnerships.

The BC Healthy Schools Network was established to address a variety of academic, social and emotional concerns of students through a comprehensive school health approach. The Healthy Schools Network is a component of the Network of Performance Based Schools. The initiative is a partnership between the Ministry of Education and Ministry of Healthy Living and Sport and is supported by the Directorate of Agencies for School Health.

The Healthy Schools Network will enhance the ability of the education and health sectors to work more effectively in this collaborative effort to promote health through the school setting. Network members and guests receive information and helpful resources to enhance their capacity to promote and foster healthy school communities.

2.2.4 Ministry of Children and Family Development

The BC Ministry of Children and Family Development (MCFD) provides support to children and their families and plays a major role with respect to healthy child and youth development. Programs include:

- Community-based interventions and child care services for children with special needs including Autism disorders, Fetal Alcohol Spectrum Disorder, developmental delays, and specialized needs of Aboriginal children and youth;
- Provision of child and youth mental health services including primary prevention measures and a wide range of community-based specialized mental health services to mentally ill children and their families;
- Child protection services for children who are abused, neglected or in need of protection for any reason, including support services for families or placement with relatives or foster families;
- Adoption services and foster homes for children who cannot live with their parents;
- Child care subsidies and early childhood development services;
- Collaboration with, and support for Aboriginal people in delivering their own child and family services;

- Community youth justice services, and youth custody services for young people involved in the justice system.

2.2.5 Representative for Children and Youth for British Columbia

The Representative for Children and Youth is responsible for advocating for children and youth, protecting their rights, and improving the system for the protection and support of children and youth, particularly those who are most vulnerable. This responsible does not include all children as the Representative can only advocate for a health or education service for children receiving a designated or reviewable services, specifically, those services provided by MCFD). The Representative may initiate reviews, investigate and make recommendations related to these services and the work of Ministry of Children and Families. The Representative for Children and Youth is appointed as an independent office of the BC Legislature.

2.2.6 Other Provincial Ministries

Other key partners within the government include the Ministry of Housing and Social Development, Ministry of Aboriginal Relations and Reconciliation, Ministry of the Environment, Ministry of Attorney General, Ministry of Public Safety and Solicitor General, and Ministry of Advanced Education and Labour Market Development.

2.2.7 Provincial Health Services Authority

The Provincial Health Services Authority (PHSA) is responsible for ensuring that high-quality specialized services and programs are coordinated and delivered within the regional health authorities. PHSA operates eight provincial agencies: BC Mental Health and Addiction Services, BC Children’s Hospital, BC Women’s Hospital & Health Centre, BC Centre for Disease Control, BC Cancer Agency, BC Provincial Renal Agency, BC Transplant Society and Cardiac Services BC.

One of PHSA’s four key strategic directions is population and public health. A steering committee consisting of representation from all PHSA agencies and programs oversees population and public health activity across PHSA. Due to the provincial scope of PHSA’s mandate, a dual role for PHSA is emerging: improvements aimed at streamlining population and public health activities within PHSA agencies and programs, as well as potential provincial coordination in areas such as surveillance, consistent messaging, expert advice, and supporting development of healthy public policy.

With respect to child and youth development, PHSA encompasses a wide range of services:

- The PHSA Centre for Child and Youth Health, a Centre for Population and Public Health, facilitates coordination of primordial and primary prevention practices;
- BC Autism Assessment Network (BCAAN) is responsible for assessing and diagnosing children who may have autism, through services provided by regional health authorities;
- The BC Mental Health and Addiction Services oversees the delivery of a number of child and youth mental health literacy programs, as well as specialized treatment services; and

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

- Child Health BC, an initiative of BC's Children's Hospital, links the province's health authorities, PHSA, health professionals and care facilities through a collaborative approach to improve services and resources including development of guidelines, delivery of workshops and other resources; and
- BC Children's Hospital and Sunny Hill Health Centre for Children provides specialized treatment, teaching and research programs.

2.2.8 Other Provincial Organizations

There are also many other organizations at the provincial level that are active in supporting healthy child and youth development. Examples include:

- The BC Council of Families provides parent resources, training, research and a website.
- The BC Healthy Child Development Alliance, a coalition of about 40 health, social, education, research and community organizations focused on strengthening healthy early childhood development.
- First Call: BC is a cross-sectoral child and youth advocacy coalition of 90 provincial organizations and 25 mobilized communities as well as a network of community groups and individuals.
- The McCreary Centre Society, a non-profit organization focused on the health of young people in British Columbia, conducts multi-disciplinary community-based research and projects addressing current youth health issues.
- Colleges and universities play an important role in educating and training child and youth workers, nurses, physicians, dietitians and other health care professionals who provide child and youth development services.
- The Family Research Institute at UBC includes a 'developmental neuroscience and child health cluster' which conducts research to improve the health and well-being of children and their families by understanding the determinants of health and applying this knowledge to community-focused prevention, intervention and health promotion.
- Other groups include the UBC BC Injury Research and Prevention Unit, the Public Health professional practice councils, and many NGOs and private sector groups work to enhance the health and development of children and youth.

2.3 Health Authorities Roles and Responsibilities

The role of health authorities is to identify and assess the health needs in the region, to deliver health services (excluding physician services and BC Pharmacare) to British Columbians in an efficient, appropriate, equitable and effective manner, and to monitor and evaluate the services they provide.

In the area of healthy child and youth development, many factors are outside the direct control of health authorities so that they must work closely with partners and other sectors to influence

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

them in strengthening healthy child and youth development. Key roles of the health authorities are summarized below (Section 5.0 provides a more complete description):

- Leadership and Advocacy
 - Collaborating in development and implementation of a long-term, comprehensive, multi-sectoral regional strategy;
 - Collaborating in the planning of related core public health programs to integrate and enhance responsiveness to, and support for healthy child and youth development;
 - Advocating for healthy public policies and programs on regional child/youth development priorities.
- Health Promotion
 - Collaborating with partners in delivery of public education, awareness and social marketing interventions to address key priorities in child/youth development;
 - Facilitating community development and capacity building to strengthen protective factors for children and youth.
- Prevention Initiatives and Early Identification of Risk or Vulnerability
 - Working with school and community partners to implement multi-strategy initiatives that support successful completion of key developmental tasks for each development stage of children and youth.
 - Early detection of at-risk children and youth, through linkages with school systems, primary health care providers, and community service agencies;
 - Positive school adjustment through a multi-component strategy, in partnership with school boards, to address the needs of teachers, parents and children;
 - A range of additional targeted initiatives that have been identified in other core public health programs such as the Mental Health Core Program, Prevention of Harms Associated with Substances, etc.
- Surveillance, Monitoring and Program Evaluation
 - Gathering and analyzing information to identify trends, issues, and community protective factors and risk factors for program planning and evaluation;
 - Developing an information system to integrate data on child and youth development;
 - Conducting program evaluation.

2.4 Local Roles and Responsibilities

Local governments exert important influence on policy and bylaws for initiatives that support positive child and youth development in areas such as public and community health, housing, social services, community safety, recreational services, and environmental health. As well, many community organizations and service agencies provide important local support services for children, youth and their families.

2.5 Aboriginal Communities

Also on a community level, it is necessary for Aboriginal groups to have full involvement in the planning and delivery of healthy child and youth development programs on First Nations reserves as well as Aboriginal families in other communities. Capacity building and partnership with Aboriginal communities can strengthen and support the shift toward self governance of the health care system and facilitate the management, planning and delivery of Aboriginal services.

On a provincial level, the signing of the *Transformative Change Accord*, the Leadership Council representing the First Nations of British Columbia, the Province of British Columbia and the federal government have agreed to a shared commitment to action on closing health, social, and economic gaps between First Nations and other British Columbians. Further work has taken place to develop action plans to close health gaps by 2015. The success of these initiatives will require, in part, ongoing collaboration among various levels of government.

2.6 Legislation and Policy Direction

- The following acts and regulations: *The Public Health Act; Health Act; Community Care and Assisted Living Act; the Child, Family and Community Services Act; and the Infants Act.*
- A Framework for Core Functions in Public Health (March 2005).
- ActNow BC policies approved by the Ministry of Healthy Living and Sport.
- The United Nations Convention on the Rights of the Child.
- *Transformative Change Accord: First Nations Health Plan.*
- *Children and Youth with Special Needs Framework for Action.*
- Specific policies/priorities that may be established by the health authority, the Ministry of Healthy Living and Sport or the provincial government.

3.0 GOALS AND OBJECTIVES

The Working Group agreed that the goal of the program for healthy child and youth development is to maximize the healthy physical, emotional, cognitive and social development of children and youth, ages 6 to 19, to enable them to achieve their full potential. The specific objectives are to:

- Enhance the physical, emotional, intellectual, and mental health of children and youth;
- Strengthen connectedness with family, school, peers and community;
- Increase systemic support for promoting and maintaining healthy environments and healthy development at the school and community levels;
- Prevent or reduce vulnerabilities, risks and health disparities that represent a threat to healthy development of children and youth.

4.0 PRINCIPLES/FUNDAMENTAL CONCEPTS

A number of key principles and overarching strategies are necessary to achieve these objectives:

- Multidisciplinary and multi-sectoral collaboration through strong partnerships across sectors, issues and levels;
- Integrated planning and coordinated program delivery with other related and relevant core programs;
- Facilitation of community development and community capacity building;
- A positive, strength-based approach to the determinants of health focusing on protective factors and healthy environments;
- Promotion of health and well-being to enhance positive outcomes through broad-based programs at a population level which empower children, families and communities;
- Support across the continuum / stages of growth with particular emphasis on key transition points, including continuity with early childhood development and transitions to adulthood;
- A child-centred focus within the context of developmental capacity and ability, consistent with the UN Rights of the Child;
- Responsiveness to the needs of vulnerable and at-risk children, families and population groups such as those experiencing social, economic or environmental barriers to health (e.g., people living in poverty, the working poor, Aboriginal children and families, those experiencing inequities based on gender, culture, race, mental and physical disabilities, sexual orientation, etc.);
- Involvement of older children/youth in planning, developing and delivering programs;
- Advocacy for best or promising policies and practices by local and regional partners;
- A culture of evidence-based practice, evaluation and continuous quality improvement.

Some of these principles or fundamental approaches, considered by experts in the field to be essential in achieving progress, are described more fully in the following section.

4.1 Multi-Disciplinary/ Multi-Sectoral Collaboration

It is recognized that health authorities have not traditionally taken a leadership role in healthy child and youth development as the school system and the child welfare systems has tended to be the primary provider of services and programs (MCFD received 45,000 service requests annually and provides many services, such as family support extend beyond one year). To strengthen the health authority role in this area, a proactive approach is necessary to build partnerships with schools, and other community organizations (i.e., social services, recreational/sport programs, family and parent groups, etc.) to build upon, supplement, expand and strengthen initiatives, and

Core Public Health Functions for BC: Model Core Program Paper **Healthy Child and Youth Development**

to ensure consistent, seamless services. The interrelatedness of social and emotional problems and physical illness requires a collaborative approach that targets common determinants, clusters of related problems and populations at risk.³³ It can also support healthy transitions and enable continuity between ages and stages of development.

Coordination and collaboration is required among diverse programs and professionals to support the many components of healthy child and youth development, including:

- ***Public health programs:***
 - Reproductive Health and Prevention of Disabilities.
 - Healthy Infant and Early Childhood Development.
 - Healthy Living.
 - Prevention and Control of Communicable Diseases.
 - Prevention of Harm Associated with Substances.
 - Mental Health Promotion and Mental Disorder Prevention.
 - Prevention of Violence, Abuse and Neglect.
 - Prevention and Control of Chronic Diseases.
 - Prevention of Unintentional Injuries.
 - Dental Public Health.
 - Healthy Communities.
 - Food Security, Food Safety, Air Quality, Water Quality, and Healthy Community Environments.
- ***Community partners*** – local governments, family support services, social services, Aboriginal Friendship Centres, child care agencies, women’s centres, mental health agencies, parks, recreation and sports programs, multicultural and immigrant agencies, Aboriginal groups, and community food committees.
- ***Multidisciplinary health care providers*** – health care partners include: primary care practitioners, acute care practitioners, pediatricians, nurses, dietitians, speech therapists, dental care professionals, and other specialized practitioners.
- ***Other provincial ministries and agencies*** – Ministry of Children and Family Development, Ministry of Education, Ministry of Housing and Social Development, and Ministry of Public Safety and Solicitor General.

4.2 Collaborative Strategies

A collaborative approach is essential to supporting healthy children and youth. Collaboration enables: coordinated planning among agencies with similar or overlapping goals; cost-effectiveness; expanded reach of programs; increased support over the long term through evolving structures and delivery mechanisms; increased partnership opportunities; and an expanded community ability to respond comprehensively to community needs.³⁴ The elements of successful collaboration involve:³⁵

- Recognizing the interdependence of each agency's mission, and respect for each one's autonomy, diversity, and cultural values;
- Focusing on initiatives that are outcome-based and comprehensive, rather than narrowly defined programs;
- Demonstrating measurable positive outcomes with accountability measures and benchmarks to track client well-being;
- Using processes that foster communication, creativity, mutual trust, and respect among all partners and the community, using inclusive participatory techniques.

A collaborative process involves³⁶, as a first step: shared purpose or goals that cannot be achieved on one's own; willing parties; the right people at the table; an open, credible process (i.e., joint ownership, agreed-upon norms or ground-rules, knowledge of each other, transparency, skilful convening); champions with clout (i.e., they are able to inform leaders, assist in joint problem-solving, provide confidence, hope and resilience); and provision of partnering workshops. These elements are summarized as the 5 C's of collaboration, namely: Connection (with purpose and people); Clarity (of purpose); Congruity (of mission, strategy and values); Creation (of value); and Communication (between partners).

The literature also defines different stages or phases in a collaborative process. For example, distinct phases³⁷ necessary for success are identified as:³⁸

1. **Courtship**
Create an open environment including discussion of benefits, risks, concerns; identify boundaries; develop short-term plans; and initiate small projects.
2. **Getting Serious**
Deepen knowledge of group members; develop more detailed plans; publicize results of early projects; identify stakeholder groups and meet with them; design and create governance structure for the group; deal with emerging issues or threats; and set performance measures to determine progress.
3. **Commitment**
Make necessary organizational adjustments including: key human resources policies that support collaboration; integration of information processes or systems among agencies where

possible; measure, track and publicize the initiatives and their results; take steps to expand the external and internal constituency related to collaborative activities.

4. Leaving a Legacy

Integrate internal learning, growth and change at the individual and organizational levels to increase the chances for success and increase benefits to clients.

5. Follow-through

Ensure continuity in leadership, support for each party's strengths, ensure collaborative efforts remain voluntary, acquire flexible resources, measure and post results, and balance the need to plan with requirements for results.

4.3 A Population Health and Determinants of Health Approach

Determinants of health play a major role, not only in child and youth development, but in lifelong health, learning and behaviour. For example, many chronic diseases in adult years have been linked to childhood risk factors.³⁹ Determinants or factors that influence healthy child development include:^{40 41} family income and parent education levels; parenting style; attachment; family structure and social relationships; social and emotional learning; cognitive stimulation; neighbourhood safety, cohesion and socio-economic character; physical characteristics such as genetic make-up; access to quality child care and developmental opportunities; gender, race and ethnicity; environmental conditions; and food security. More specifically protective and risk factors are:⁴²

- Individual protective factors include: spirituality; social skills; average intelligence; late maturation; higher self-image and self-efficacy; and perceived importance of parents;
- In the social environment, protective factors include: school enrolments; educational attainment; religious institutions; role models and pro-social media. Social risk factors include: poverty; exposure to violent media or advertising; access to tobacco, alcohol, drugs and firearms; arrests; and television watching.
- Protective factors are connectedness to school, high GPA, and consistency in schools attended. Conversely, risk factors at school are size of the school, absenteeism, suspension, and poor academic performance.
- Within the family, protective factors are: connectedness; parental presence and values; having two parents and fewer siblings; family cohesion; and authoritative parents. Family risk factors are: low parental education; family mental illness; maternal stress; large family size; overcrowding; poverty; authoritarian or neglectful parents; and exposure to family violence.
- Among peers, protective factors are fair treatment; low-risk friends; and pro-social norms. Risk factors include experiences of: prejudice; perception of threat; social isolation and participation in deviant culture.

Recent evidence indicates that protective factors have an additive effect, that is, when children have more protective factors, they are more likely to report positive outcomes and healthy development.⁴³ As well, the more risk factors that are present in a child's life, the greater the need for more, and stronger, protective factors. At the same time it is important to acknowledge that not all assets or protective factors are equal: family connectedness is the strongest factor while community and school connectedness are also important in predicting healthy child and youth development.⁴⁴

4.4 A Focus on Protective Factors

The emerging evidence shows that positive child and youth development influences health and risk across a variety of domains. Reducing risk exposures and problem behaviours becomes a secondary outcome to building personal skills: as children and youth are supported in developing adaptive coping skills, positive attitudes and values, healthy behaviours and supportive social networks, the risk exposure becomes less influential and health-compromising behaviours are less likely to be taken up, or to become lifelong patterns.⁴⁵

Interventions to promote positive child and youth development can take place in a number of environments. Although interventions can be effective in family and community settings, schools are a common setting to facilitate positive child and youth development, in part because young people spend most of their day in the school setting. Research has established that risk factors are often interrelated, and that interventions may be required in multiple domains to influence a specific behaviour. Protective factors can influence a variety of different risk behaviours, and programs can benefit from interventions at the school, family, and community level.⁴⁶

4.5 Continuum of Growth and Key Developmental Stages

An approach which acknowledges the continuum of child and youth development is necessary to highlight different stages and addresses vulnerable points that may occur at key transition points, for example, transition to middle school, onset of puberty, social transitions such as dating, transition into high school or into employment. Studies note that developmental trajectories can be altered more readily during sensitive periods of rapid change than during other periods. Each transition involves both adverse and beneficial inputs that can have a significant impact on future health: they impose stress and require the developing individual to adapt to new routines and new response patterns.⁴⁷

The key stages addressed in this paper are:

- Younger children, 6 to 8 years;
- Middle childhood, 9 to 12 years;
- Teens, 13 to 16 years;
- Older teens, 17 to 19 years.

4.6 Responsiveness to Vulnerable and At-risk Population Groups

Targeted initiatives are required for specific groups that are considered vulnerable and at-risk. The use of a range of population “lenses” is important to assist in identifying vulnerable groups: a “gender equity” lens can identify specific risks that are unique to the experiences of girls and boys, and a “diversity equity” lens can examine population groups that are at higher risk, or are more vulnerable to problems due to a wider range of biological, social, cultural and other factors. Other physical, emotional and social risk factors can be identified through assessments by partners including teachers, primary care providers, mental health professionals, sports and recreational personnel, family support agencies and community service organizations. For example, BC boards of education use the results of the Early Development Instrument (EDI)⁴⁸ to assess the level of childhood vulnerability with their communities. As well, tailored measures can address the specific barriers, inequities and vulnerabilities that are unique to each population group.

4.6.1 Children and Youth Who Experience Violence, Abuse and Neglect

Child abuse, neglect and exposure to violence often causes trauma and can take a substantial toll on the development of children. Individuals who have experienced childhood trauma are significantly more likely to experience a range of negative mental health outcomes including alcoholism, drug abuse, suicide/suicide attempts, and depression. There are multiple long-term effects on physical health: childhood trauma has been found to be a predictor for many of the leading causes of death in adulthood, including heart disease and cancer.⁴⁹ (In Canada, it was estimated⁵⁰ in 2005 that 22 child maltreatment investigations occurred for every 1000 children in Canada, and abuse was confirmed in 45% of them. In addition, Statistics Canada⁵¹ found in 2006 that children in approximately 500,000 households had either heard or witnessed a parent being assaulted in the previous 5 years.)

4.6.2 Children and Youth Living in Poverty

In 2007, 11.1% of British Columbians and 13% of children and youth under 18 lived in families with income below the Statistics Canada “low-income cut-off after taxes”, or the LICO AT rate.⁵² (In 2007, Statistics Canada “low-income cutoff” or LICO rate, which does not take into account income tax, tax deductions, tax credits or benefits, was 13.4% of British Columbians and 18.4% of BC’s children.⁵³) Studies consistently report that the main sources of support for economically disadvantaged children and youth are their families, friendships, and social networks in neighbourhoods. However, if these protective factors conflict rather than support, they can be a source of psychosocial stress. In such cases, informal sources of support alone are likely to prove inadequate.⁵⁴

4.6.3 Aboriginal Children and Youth

The Working Group recognizes the multiple barriers faced by many aboriginal children and youth, as well as the importance of school achievement in their healthy development. Barriers are the result of colonization, shifts in diet, and the impact of residential schools and reserves which have all contributed to the disruption of Aboriginal cultures, communities and family structures.⁵⁵ Residential schools in particular have resulted in a loss of family connectedness and attachment across generations, and a high incidence of child maltreatment and abuse.

Over the years, statistics have consistently shown troubling suicide rates among Aboriginal youth. In 1999, the suicide rate for Aboriginal males, age 10 to 19 years, was over 8 times higher than for non-Aboriginals. For Aboriginal females, the rate was 20 times higher. While the overall suicide rate has not declined in the past decade, other research shows that:⁵⁶

Suicide rates are lower for First Nations bands that have made progress toward self-government and land claims, have cultural facilities and have control over local services such as health care, education, police and fire services. The more protective factors in a community, the lower its suicide rate. Aboriginal individuals and communities are healthier when they are empowered and have a sense of control over their lives and their destinies.

Results of a 2003 Adolescent Health Survey indicate a need for more effective ways to prevent suicide attempts and physical and sexual abuse among Aboriginal youth, as well as to decrease risky behaviours such as smoking, marijuana and alcohol use, and early sex. However, the survey also shows marked improvement in many of those areas and suggests that Aboriginal youth in school are coping well with the transition to adolescence. Most Aboriginal students report good or excellent health, and are physically active. Fewer Aboriginal students are sexually active, and of those who are, more are waiting longer to have sex. Most Aboriginal students have strong connections to their families and schools, and 2/3 want to complete post secondary education. At the same time, it is recognized that more efforts are necessary to promote health among Aboriginal youth, ensure they feel safe at school and in the community, have optimistic aspirations for the future, and have the skills, resilience and confidence to achieve their goals.⁵⁷

4.6.4 Multicultural, Immigrant, Refugee, and Visible Minority Populations

In multi-cultural Canada, some persons or groups may face additional health risks due to conditions such as marginalization, stigmatization, loss or devaluation of language and culture, experiences with violence and trauma (e.g., trauma from conflict and war can span generations in families of refugees and war victims). Culturally appropriate health care services are necessary to address a variety of differing cultural practices, risk factors and needs that are unique to the many immigrant and refugee populations in the province. For example, a systematic review of 10 studies with more than 15,000 respondents from diverse racial groups in North America found a clear association between experiences of racism and psychological distress.⁵⁸

4.6.5 Children-In-Care

Although many children and youth in care (through the Ministry of Children and Family Development) are healthy and thrive, overall, their health and well-being through the life course tends to be significantly poorer than for the general population. For example, these children are comparatively more likely to suffer from dermatological and respiratory conditions⁵⁹ and anxiety, depression and Post Traumatic Stress Disorder⁶⁰. At the time of admission to care, these children and youth commonly have incomplete immunizations, chronic conditions such as psychiatric disorders, asthma, poor dental health, are overweight or obese and have no regular family physician⁶¹. Removal from the biological family, although necessary for safety, can compound trauma from the maltreatment they have suffered, as can further movement between caregivers⁶².

4.6.6 Children and Youth who are Gay, Lesbian, Bisexual and Transgendered

Gay, lesbian, bisexual and transgendered youth experience discrimination based on gender identity and sexual orientation which can lead to higher rates of mental problems and disorders than in the heterosexual population. In BC, lesbian, gay and bisexual youth are two to three times more likely to have experienced physical and sexual abuse, harassment in school, and discrimination about race/ethnicity, sexual orientation and other issues in the community. Rates of discrimination appear to be rising.⁶³ Stigmatization and acts of psychological and physical abuse can lead to reduced self-esteem, social withdrawal and isolation, all of which are risk factors for mental illness.⁶⁴

4.6.7 Other Vulnerabilities

26% of Canadian children, ages 2 to 17 years, were overweight/obese in 2004, with 8% obese.⁶⁵ Rates for overweight and obesity among children in Canada have nearly tripled in the last 20 years,⁶⁶ and disordered eating is a growing problem. Diet is recognized as an important contributor to normal growth and development and a key factor in reducing many risk factors related to chronic diseases. Experts recognize the important relationship between body image, self-esteem and healthy eating and note that disordered eating is often linked to body dissatisfaction and a lack of self-worth.⁶⁷

The problematic use of substances can also cause harm and create vulnerabilities for young people. While illegal drugs create much public concern, the literature indicates that legal substances such as tobacco and alcohol usually cause the greatest amount of individual and societal harm.⁶⁸

5.0 MAIN COMPONENTS AND SUPPORTING EVIDENCE

The major program components for healthy child and youth development in regional health authorities are:

- Leadership and advocacy;
- Health promotion;
- Prevention initiatives and early identification of risk or vulnerability; and
- Surveillance and monitoring.

Strategies for each of the main program components are described in the following sections. As discussed in the preceding section, child and youth development tends to be outside the direct control of health authorities. As a result, a strong advocacy and collaborative role with the school system and other community partners is necessary to enhance capacity and coordinate support for children and their families.

5.1 Leadership and Advocacy

A proactive role in promoting and facilitating enhanced child and youth development should include:

- Collaborating in the development and implementation of a long-term, comprehensive, multi-sectoral regional strategy, including:
 - Consultation with health partners, the school system, regional offices of appropriate Ministries (e.g., MCFD, MHSD, etc.) and community stakeholders to identify priorities in healthy child and youth development;
 - Needs assessment to identify the influence of the determinants of health, needs of vulnerable populations in the region, and the interplay between existing strengths, protective factors and risk factors;
 - Identification of evidence-based strategies with the greatest potential for positive, cost-effective outcomes through consultation with relevant provincial ministries and agencies, review of emerging research, and information from professional associations and experts in the field.
- Collaborating in the planning of other related core public health programs to integrate and enhance responsiveness to, and support for healthy child and youth development;
- Identifying key policies and processes for effective management of the healthy child and youth development program, including an organizational structure or arrangement to manage and deliver initiatives and to collaborate/partner with other health authority programs and with community based organizations;

- Advocating for healthy public policies and programs, in collaboration with partners and stakeholders, on regional child development priorities such as:
 - A focus on protective factors and positive strategies;
 - Comprehensive school health programs in the region;
 - Community service or service-learning involvement for students in high school;
 - Increased capacity for youth as leaders and partners in planning and delivering health interventions for children and youth;
 - Policies to address inequities in social, economic, cultural and environmental conditions that impact on child and youth development (e.g., safe and stable housing and neighbourhoods, quality child care, anti-poverty measures, prevention of discrimination, etc.);
 - Healthy nutritional practices, tobacco cessation and substance use prevention, mental health promotion, and physical activity / recreational / sport programs for schools;
 - Local food security programs.

5.1.1 Summary of Supporting Evidence

Planning and managing programs, undertaking research, performing policy analysis and developing policies, and working in and with communities to strengthen community capacity are fundamental tasks that are essential for establishing and maintaining the capacity of the public health system.⁶⁹

The advocacy role for public health is well-accepted and a central feature in seminal health promotion frameworks such as the World Health Organization's *Ottawa Charter*. The Public Health Agency of Canada identifies advocacy as a core competency of public health and notes that it is important to "advocate for healthy public policies and services that promote the health and well-being of individuals and communities". The World Health Organization (WHO) also recommends⁷⁰ "building healthy public policy" as a key activity in effective health promotion. Those societies that have reduced health inequities to the greatest degree, have high-quality child development arrangements, universal access to quality child care, and careful attention to neighbourhoods and the socioeconomic niches within neighbourhoods where children grow up.⁷¹

5.2 Health Promotion

General health promotion strategies that apply across all stages of child and youth development include:

- Supporting comprehensive school health models (i.e., policies, curricula, classroom interventions, playground strategies, peer support, family interventions and teacher

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

professional development to improve student cognitive, behavioural and social outcomes, etc.).

- Collaborating in the development and delivery of public education, awareness, and social marketing interventions to influence healthy attitudes and behaviours on developmental priorities (for implementation through a regional strategy noted under “Leadership and Advocacy”);
- Supporting local governments and schools to conduct evidence-based planning processes to enhance healthy built environments, including neighbourhood designs, housing developments, parks, schools, transportations etc. that will support healthy growth and development; [*Healthy Community Environments*]
- Facilitating community development and community capacity building to implement a regional strategy:
 - Collaboration and coordination in planning and delivering multi-strategy initiatives among community stakeholders (e.g., health care providers, community organizations, parent groups, community health champions, health educators, etc.) to address local child and youth issues and strengthen key protective factors;
 - Provision of information, data, research on best and promising practices, technical advice, and other assistance to support communities in developing strategies;
 - Collaboration in multifaceted, longitudinal skills-building program for teachers, parents and students to enhancing social development (e.g., Raising Healthy Children program implemented in Washington State) to enhance social competence, school commitment, and academic performance;
 - Assistance to Aboriginal communities and organizations in planning and implementing health promotion programs for healthy child and youth development programs in their communities.
- Supporting schools in implementing school food guidelines and healthy school food environments, as well as integrating healthy nutrition information into instructional programs.

NOTE: These activities should be implemented in conjunction with local initiatives for core programs for healthy infant and early childhood development, reproductive health, healthy communities, healthy living, dental health, mental health promotion and mental disorder prevention, prevention of harms associated with substances, prevention of violence, abuse and neglect, and food security, so that local initiatives are coordinated and integrated into existing networks among community stakeholders.

5.2.1 Summary of Supporting Evidence

The WHO states that the “focus of health promotion should be on strategies focused on communities, groups and individuals which include: creating physical and social environments supportive of health, strengthening communities’ capacity to address health issues of importance to them, and to mutually support their members in improving their health, helping people to develop the skills they need to make healthy life choices and to care for themselves and their families”.⁷² More specifically, the pillars of the *Ottawa Charter for Health Promotion*, are: healthy public policy, supportive environments, personal skills, strengthened community action, and reoriented health services.

Successful community development and coalition building related to child and youth programs have been shown to: involve diverse sectors of the community; include regular reinforcement of the partnership between communities and groups; have input from both adults and youth; and should be designed for all youth, not just at-risk populations. Strong leadership and active and vocal youth are also key components of successful community partnerships.⁷³

The literature suggests that the weight of evidence confirms that multi-component or comprehensive interventions have a higher effectiveness and cost-effectiveness compared to those programs that focus on a single component⁷⁴ and that interventions at critical transition points in the life span are “protective”.⁷⁵

5.3 Prevention Initiatives and Early Identification of Risk or Vulnerability

General, universal strategies are necessary to enhance protective factors, along with targeted initiatives for at-risk children and youth. (Some of the key initiatives from other public health Core Programs can support an integrated and collaborative approach in order to better address the needs of children and youth.) Collaboration and coordination with school and community partners is a key element in designing and delivering these initiatives.

5.3.1 Universal Programs for Children 6 to 8 Years

Work with school and community partners to implement multiple-strategy health promotion initiatives that support successful completion of key developmental tasks by younger children (i.e., steady physical growth; increased intellectual and social competence in school life; acceptance of moderate responsibility; self-confidence; parental approval; increased independent will; establishment of friendships; and adjustment to growing influence of peers⁷⁶), including:

- Encourage school readiness through provision of parenting skill development and parenting/caregiver support, through multi-modal programs involving a range of strategies such as group sessions, written information/instruction and home visits, as appropriate; [*Healthy Infant and Child Development*]
- Promote parent-child healthy eating practices, physical activity, and healthy social, emotional and cognitive development through multiple settings such as child care programs, early learning programs and family support agencies, e.g., promote and support daily reading/storytelling to young children to support speech and language development; [*Healthy Infant and Child Development*]

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

- Support school-based physical activity and healthy eating programs which include both skill-building and educational components to enhance health benefits as well as self-esteem and well-being;
- Promote a skills-building program with teachers, parents and students to enhance social competence and school connectedness and to influence a wide range of protective factors e.g., evidence-based programs such as Raising Healthy Children program, Child Development Project or others discussed in the Evidence Review for this core program);
- Deliver an immunization program that increases the uptake of vaccines to protect children and youth from vaccine preventable diseases. [*Prevention and Control on Communicable Diseases*]

5.3.2 Universal Programs for Middle Childhood, 9 to 12 years

Work with school and community partners to implement multiple initiatives that support completion of developmental tasks (i.e., accelerated growth; exploration of new values and energies; growing self-identity; exploration of independence/dependence boundaries with parents; strengthened peer affiliations and friendships; increased awareness/exploration of sexuality; and coping with strong emotional swings and moods⁷⁷). Strategies include:

- Physical activity and healthy nutrition programs that include both educational and skill-building components;
- Enhancement of emotional competence, including exploration of the emotional bond between parents and children (e.g., Roots of Empathy Program) to increase empathy, emotional knowledge, social understanding and pro-social peer behaviours;
- Delivery of community-based skill building arts programs to promote positive social development, communications, conflict resolution and team-building skills;
- Healthy sexual development through provision of sex education information as well as the exploration of attitudes and beliefs toward sexuality;
- Positive body image programs for girls and boys to prevent or reduce disordered eating and obesity, through media literacy prevention programs, physical activity, reduced screen time, school food policies, etc, including advocacy with girls to avoid internalization of societal ideals of female appearance [*Mental Health Core Paper*];
- School-based high quality, interactive and evidence-based education to build literacy about alcohol, cannabis and tobacco [*Prevention of Harms Associated with Substances*].
- Deliver an immunization program that increases the uptake of vaccines to protect children and youth from vaccine preventable diseases. [*Prevention and Control on Communicable Diseases*]

5.3.3 Targeted Interventions for At-risk Children, 6-12 Years

Work with school and community partners to implement:

- Early detection of at-risk children and youth (i.e., children and youth with physical, mental, cognitive or emotional difficulties such as those with special needs, FASD, autism, depression, abusive or unsupportive families, pregnant girls, etc.), through linkages and consultation with school systems, primary care providers, family support agencies, and other community contacts;
- Referrals to specialized health professionals and other programs that address developmental and behavioural problems for children and their families.
- Interventions for parents of at-risk children, to build parenting skills, foster positive family relationships and behaviours, and decrease child neglect and abuse, through linkages with partners, including:
 - Regular, intensive interventions for high-risk children and youth including home visits, and small group sessions;
 - Evidence-based parent skill training, including parenting education programs, brief intervention counselling by general practitioners, parent counselling by nurses trained in psychiatry, or parent-child interaction therapy, as appropriate.
- Resilience-focused programs for children at risk for anxiety, depression or behavioural problems, that combine child, family and school-based interventions (i.e., cognitive-behavioural therapy and social competence skill building sessions for children, and child management skills training for parents such as Friends program or Penn Resiliency Program) [*Mental Health Core Program*];
- A multi-component strategy to encourage and support positive school adjustment in partnership with school boards, addressing the needs of teachers, parents and children, (in communities and neighbourhoods with higher rates of vulnerable children and youth) including [*Prevention of Harms Associated with Substances*]:
 - Teacher training in effective classroom management designed to enhance teacher-student relationships and reduce negative school peer interactions (to reduce risk of social marginalization);
 - Classroom practices which support development of social and emotional competence to increase school retention rates;
 - School-based parenting courses to improve skills in healthy child/family relationships and family support networks (utilizing opportunities for contact at school transition points such as entry into grade 1/middle school/high school).

- Group-based programs for children of divorce that include separate groups for parents and for children [*Mental Health Core Program*];
- Ecological approaches that promote school connectedness and social connectedness through school and school/community strategies taking into account systemic barriers based on gender, ethnicity and culture, sexual orientation, and physical and mental disabilities [*Mental Health Core Program*].
- Delivery of expanded one-to-one mentorship programs by community agencies (e.g., Big Brothers Big Sisters) which match at-risk children with caring adults to provide social support, role models and/or tutors for at risk children and youth, for example, adolescent mothers, or children of single parents.
- Targeted initiatives to increase healthy eating among low-income children and families, and among other members of vulnerable groups [*Core Program on Food Security*], including:
 - School feeding programs for disadvantaged elementary and middle school children;
 - Educational resources, communication materials, workshops, and special events for priority populations to improve their personal knowledge and skills on nutrition [*Core Program for Health Living*];
 - School-based strategies for the primary prevention of disordered eating and obesity, and for promoting physical activity and/or nutrition [*Core Program for Healthy Living*];

5.3.4 Universal Programs for Younger Teens, 13-16 Years

Work with school and community partners to implement multi-strategy initiatives focused on key developmental tasks (i.e., the capacity for abstract thinking and intellectual abilities; self-exploration, self-discovery and introspection; increased independence and detachment from parents; affirmation through self-image, body-image and acceptance by peer groups; establishment of sexual identity and tentative romantic relationships; and strengthened competence in dealing with vacillating emotions⁷⁸). Strategies should include:

- Increased intensity of physical activity programs utilizing not only school programs but also community resources;
- Promotion of nutrition through knowledge-building and skills development strategies integrated into the school learning resources and school policies;
- Education and skill building related to healthy relationships to foster healthy peer interactions through improved communication, negotiation of conflict, and healthier approaches to risk behaviours (e.g., the Fourth R, a Canadian health education program), and understanding and valuing diversity;

Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

- Healthy emotional and cognitive development through strategies focused on enhancing self-esteem and positive body image;
- Sexual health education focused on improving knowledge, fostering positive views and attitudes towards sexuality, and skill building related to healthy intimate relationships;
- Access to sexual health clinical services appropriate for this age group;
- Prevent tobacco use, and delay and/or reduce problematic alcohol and drug use through:
 - High quality, interactive and evidence-based education to build literacy about alcohol, cannabis and tobacco in schools [*Prevention of Harms Associated with Substances*];
 - School-based social influence to reduce and prevent early drug use [*Mental Health Core Program*];
 - Engaging broad community participation in influencing social attitudes and responses to tobacco, alcohol, and cannabis; [*Prevention of Harms Associated with Substances*].
- Peer counselling education and support programs to reinforce policies on equal opportunity, anti-bullying, and emotional support.

5.3.5 Universal Programs for Older teens, 17 to 19 years

Work with school and community partners to implement initiatives that support key developmental tasks (i.e., establishment of abstract thought including intellectual and functional identity; secure body image and gender-role definition; completion of emotional and physical separation from parents; stable self-esteem; comfort with physical growth; definition of social roles; strengthened individual friendships and stable relationships; less focus on peer group; capacity for mutuality and reciprocity; increased intimacy involving commitment; and emotional constancy⁷⁹). Strategies include:

- Healthy emotional and cognitive development through strategies focused on enhancing self-esteem and positive body image;
- Education and skill building on relationships to foster healthy peer interactions through enhanced communication, ability to negotiate conflict, healthier attitudes towards risk behaviours (e.g., the Fourth R, a Canadian health education program) and understanding and valuing diversity;
- Support for community service, or service-learning involvement as part of educational requirements for high-school;
- Access to sexual health clinical services appropriate for this age group;

- Prevent tobacco use, and delay and/or reduce problematic alcohol and drug use through:
 - High quality, interactive and evidence-based education to build literacy about alcohol, cannabis and tobacco in schools [*Prevention of Harms Associated with Substances*];
 - School-based social influence to reduce and prevent early drug use [*Mental Health Core Program*];
 - Engaging broad community participation in influencing social attitudes and responses to tobacco, alcohol, and cannabis; [*Prevention of Harms Associated with Substances*].
- Encourage and support, in partnership with school boards and community groups, a smooth transition to independent and adult life and responsibilities: [*Prevention of Harms Associated with Substances*]:
 - Learning resources to assist in preparing for transition to post-secondary education or the workforce;
 - Community support and training programs that target young adults and address financial matters, positive relationships and independent living; and
 - Referrals to community health care centres and other support programs that assist young people in transitioning from high school into career preparation, employment and/or healthy living lifestyles.

5.3.6 Targeted Interventions for At-risk Youth, 13-19 Years

Work with school and community partners to implement:

- Earliest possible detection of at-risk youth (i.e., youth with physical, mental, cognitive or emotional difficulties such as those with special needs, FASD, autism, depression, abusive or unsupportive families, pregnant girls, etc.), through linkages and consultation with school systems, primary care providers, family support agencies, and other community contacts;
- Referrals to specialized health professionals and other programs that address developmental and behavioural problems for children and their families.
- Interventions for parents of at-risk youth, to build parenting skills, foster positive family relationships and behaviours, and decrease neglect and abuse, through linkages with partners, including:
 - Regular, intensive interventions for high-risk youth including home visits, and small group sessions;

- Evidence-based parent skill training, including parenting education programs, brief intervention counselling by general practitioners, parent counselling by nurses trained in psychiatry, or parent-youth interaction therapy, as appropriate.
- Multi-component programs targeted to at-risk youth, in collaboration with MCFD, to supplement cognitive-behavioral programs for those with depressive symptoms, anxiety symptoms, traumatic stress disorders, panic attacks (e.g., those whose parents suffer from mental disorders, young women and young men who have been sexually abused, assaulted, or bullied) [*Mental Health Core Program*];
- Target information and resources to strengthen the skills of vulnerable groups through health literacy principles and tailored information reflecting their respective needs, culture, language ability, etc. (e.g., single teenage mothers, immigrant and refugee populations, etc.) [*Mental Health Core Program*];
- Prevent suicide by controlling the environment to reduce access to the means of suicide (e.g., safety measure on high buildings and bridges, controlled availability of sedatives and pain-killers, etc.), as well as suicide prevention programs for adolescents screened for suicide predictors [*Mental Health Core Program*];
- Efforts to reach and retain in formal educational programs, those at-risk of school-leaving (e.g., utilize classroom practices which support development of social and emotional competence to increase school retention rates); [*Mental Health Core Program*]
- Outreach and brief interventions for youth who have dropped out of school including teenage parents [*Mental Health Core Program*];
- Youth sport and recreational opportunities outside of school settings [*Mental Health Core Program*];
- Youth violence prevention in at-risk communities, including sexual violence prevention strategies and prevention of bullying, to help students develop empathy, social problem-solving, anger management, stress management and communication skills [*Mental Health Core Program*].
- Target initiatives to increase healthy eating among low-income youth and families, and among other members of vulnerable groups [*Core Program on Food Security*], including:
 - Educational resources, communication materials, workshops, and special events for priority populations to improve their personal knowledge and skills on nutrition [*Core Program for Health Living*];
 - School based strategies for the primary prevention of disordered eating and obesity and for promotion of physical activity and/or nutrition [*Core Program for Healthy Living*];

Core Public Health Functions for BC: Model Core Program Paper **Healthy Child and Youth Development**

Targeted Interventions for Pregnant and Parenting Teens:

- Educational and school supports, in collaboration with MCFD, to assist pregnant young women and their partners, and teen parents to enhance emotional competence, strengthen decision-making and build strong parenting skills [*Mental Health Core Program*];
- Support health-promoting choices for pregnant teens, combined with coordinated care by primary care providers, including:
 - Optimal prenatal care to reduce likelihood of low birth weight including education sessions to enhance nutrition and achieve healthy weights, psychosocial health, positive parent-infant attachment, infant care and parenting skills [*Mental Health Promotion Core Program*];
 - Decrease substance use during pregnancy including counselling teens about alcohol use in pregnancy, FASD prevention strategies (with MCFD), community-based pregnancy support programs, and priority treatment services for pregnant women who drink [*Prevention of Harms Associated with Substances*].

NOTE:

- 1) It is recognized that there is a need for programs targeted specifically to Aboriginal children and youth and that Aboriginal people must be full partners in the design and delivery of health initiatives to benefit them and their communities.⁸⁰ It is also recognized that there is limited research on effective programs for aboriginal children, other than Aboriginal Head Start which is targeted to preschool children. Researchers note the importance, in light of the absence of evidence, of applying principles from more generalized research and blending this with the knowledge and life experience of Aboriginal practitioners and leaders.⁸¹ Effective prevention initiatives require culturally sensitive strategies that are situation within an Aboriginal worldview in order to sustain long-term, community-based change.⁸²
- 2) Additional preventive initiatives for healthy child and youth development programs are included in other public health programs such as: healthy living; food security; reproductive health and prevention of disabilities; prevention of violence, abuse and neglect (in progress); healthy communities; prevention of harm associated with substances; and prevention of communicable diseases.

5.3.7 Summary of Supporting Evidence

Universal Initiatives

Multiple strategies show stronger effects and longer-term improvements than individual stand-alone strategies, in every area of healthy child and youth development. A combination of strategies is required: for example, coalition-building, intersectoral collaboration, policy development, school community development, health education and skill building.⁸³

Physical growth and development programs that include actual exercise training and practice in addition to health education have been particularly effective in motivating behaviour change.⁸⁴ Physical exercise is an important universal approach to improving children's self-esteem⁸⁵: studies have found it decreases reported anxiety and depression scores in healthy children.⁸⁶

The Evidence Review for this program discusses research on the effectiveness of a number of specific programs, for example:

- The Fourth R, a Canadian health education and relationship skill building program has documented increases in knowledge and skills in communication, negotiating conflict as well as healthier attitudes towards risk behaviours.⁸⁷
- Raising Healthy Children, a comprehensive, longitudinal program to enhance social development with the goal of promoting positive youth development has been shown to reduce adolescent problem behaviours. Grade 1 and 2 students were tested 18 months after implementation: teachers reported they had significantly higher academic performance, a stronger commitment to school, decreased antisocial behaviours, and increased social competency.
- The Roots of Empathy program implemented in Ontario has shown that academic achievement in Grade 8 is better predicted by early emotional competence than early academic results. The key program activity involved regular classroom visits of an infant and parent and an instructor who explains the baby's development and needs: students learn about the emotional bond with parents and apply lessons to their own relationship. The program found that children and early adolescents demonstrated increased emotional knowledge, empathy, social understanding and pro-social peer behaviours.⁸⁸
- A skill building arts program implemented in a number of low-income Canadian communities found young people aged 9 to 15 years, demonstrated higher levels, in comparison with a control group, of artistic and social development, communication skills, conflict resolution and teamwork skills, as well as a decrease in emotional problems.⁸⁹

Sexual education programs in schools were more likely to be successful when they were theory-based and provided a clear message that was regularly reinforced. It was also found that programs should be culturally relevant, include a variety of teaching methods, be long in duration and include members from the target group in developing them.⁹⁰ Programs that include skill-building components significantly delay sexual debut, increase parent-child communication about sexual behaviours, and increase condom use.⁹¹

A systematic review on eating disorders found evidence for the efficacy of intervention involving media literacy and advocacy resulting in less internalization or acceptance of societal ideals for female appearance.⁹²

Large studies of students with community service experience are significantly more likely, in comparison to those with no service experience, to demonstrate community engagement as young adults, to treat others with respect, to have higher educational aspiration, and more satisfaction with most areas of their lives, including work school, family relationships and friendships.⁹³

The BC Ministry of Education curriculum has Graduation Transitions prescribed learning outcomes which focus on a smooth transition for students to independent and adult life responsibilities.⁹⁴

Targeted Initiatives for At-risk Children and Youth

Mentorship

Systematic reviews of mentorship programs provide strong evidence of their effectiveness in enhancing youth development. For example, an evaluation of Big Brothers Big Sisters found that participants reported: improved attendance and performance in school, improved relationships with their family, improved peer relationships, and fewer had started using drugs or alcohol, in comparison with a control group.⁹⁵

Parent Education

Parent education and support programs are effective in creating positive changes in children's behaviour as well as changes in parents' behaviour and relationships with their children. The evidence also indicates that "intensity matters", that the more issues a family presents, the more a multi-modal program is required.⁹⁶ "Positive" or "authoritative" parent styles have been shown to be the most beneficial to children.⁹⁷ Parenting education for parents of children with significant behavioural problems has been shown to be effective. For example in a randomized control study of the COPE parenting education program for parents of children with 3 - 12 year olds, the symptoms of Oppositional Defiant Disorder decreased significantly and Attention Deficit/Hyperactivity Disorder (ADHD) symptoms decreased, although to a somewhat less extent.⁹⁸ The effect of parent counseling by nurses trained in psychiatry and provided through home visits showed a reduction in the prevalence of aggressive and internalizing mental problems in both higher and lower risk families.⁹⁹ Parent child interaction therapy has been shown to be effective in reducing separation anxiety, depression, self injurious behaviour, post-divorce adjustment, ADHD and child abuse.¹⁰⁰

A number of intervention programs have been evaluated including Positive Parenting Program (Triple P), Healthy Families, Nurse Home Visitation, Parent-Child Interaction Therapy, Multisystemic Therapy and Therapeutic Day Therapy. These had varied results but all had some positive outcomes for at-risk children and their families. There is strong evidence on the effectiveness of the Triple P program in improving parenting skills and reducing child behaviour problems. Parent-Child Interaction Therapy successfully prevented the recurrence of child neglect. A number of the programs were effective for primary prevention, while few were found to be successful in secondary prevention after abuse had already occurred.¹⁰¹

Intervention Techniques

Cognitive behavioural interventions for at-risk school-aged children and youth have been shown to be effective in preventing mood disorders.¹⁰² Programs that use cognitive behavioural techniques were found to be more efficacious than educational programs that provide only information about depressive symptoms and available treatments.¹⁰³ The WHO notes that the most effective universal approach to suicide prevention is reducing access to the means to

commit suicide.¹⁰⁴ Assessment, counseling and social connection interventions with parents and school staff also show promise (i.e., the C-CARE intervention).¹⁰⁵

The most successful violence prevention programs: engage youth throughout the school; have peer-led components; are culturally relevant; use standardized intervention with age-appropriate, interactive methods; provide training for school staff; and engage parents to reinforce newly acquired skills at home.¹⁰⁶

It should be noted that evidence on interventions that are discussed in other Core Program papers are available in the Evidence Reviews associated with those papers.

5.4 Surveillance, Monitoring and Program Evaluation

Surveillance and monitoring assists in identifying regional trends and patterns in child and youth development, and provides a basis for assessing needs, priorities and developing strategic plans. Initiatives include:

- Gathering information on the health and development status of children and youth:
 - Collection of data on key health indicators based on agreed upon performance measures that enable consistent measurement among health authorities;
 - Data gathering as necessary through collaboration with MCFD, MEd and other partners to identify child and youth health vulnerabilities;
 - Collection of existing information on socio-economic determinants of health, child health data as well as specific risk factors from Educational Development Instrument results, provincial surveys, Medical Service Plan records, Pharmacare records, and other accessible sources.
- Analyzing and interpreting data to clarify local and regional trends, major issues, key assets and risk factors, vulnerable groups and populations, to support effective planning and decision-making;
- Collaborating in development of an information sharing system, encouraging a joint approach with health care services and community partners to develop consistent data collection, data-sharing, and data collection processes;
- Collaborating in developing program evaluation frameworks and conducting evaluations of new initiatives.

5.4.1 Summary of Supporting Evidence

Surveillance on child and youth health is challenging as the population is dispersed and health care often comprises a joint effort between multiple providers and health/social programs. Hinman et al¹⁰⁷ propose that stakeholders: promote integration of separate child health information systems within the context of ongoing national initiatives, develop business and

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

policy cases for an integrated system, develop an agreement on standards for collecting and transferring information, and communicate the importance of an integrated system.

It is recognized that although public health, and prevention programs in particular, are difficult to measure, it is nonetheless likely that “we will be able to manage, and improve, core functions in public health if we can measure performance”.¹⁰⁸ A prevention information system capable of measuring success is necessary for this purpose. As well, the public has a right to expect that the public health sector, along with the rest of the health care system, is paying attention to the quality and effectiveness of the interventions it undertakes, and is working to improve that quality.¹⁰⁹

6.0 BEST PRACTICES

Often, there is no one “best practice” that is agreed upon; rather, there are practices that may have been successful in other settings and should be considered by health authorities. The terms “promising practices” or “better practices” are often preferred to reflect the evolving and developmental nature of performance improvement.

The evidence review prepared to support the development of this model core program paper provides a detailed discussion of best practices in the field. It provides detailed information on a comprehensive set of health promotion and disease prevention strategies to support healthy child and youth development, and can provide further guidance and advice on effective practices:

- *Evidence for Healthy Child and Youth Development Interventions for Core Public Health Functions* (2008), by E.M. Saewyc and D. Stewart, for the Ministry of Healthy Living and Sport.

In addition, other sources for relevant evidence on best practices for children and youth can be found in the following documents:

- *Planning for Parenting Education and Support in BC* (2009), prepared by C. Munro for the BC Parenting Vision Working Group.¹¹⁰
- Preventing and Treating Child Maltreatment, *Children's Mental Health Research Quarterly* (2009), by C. Schwartz et al.¹¹¹
- *Evidence Review: Healthy Living (Physical Activity & Healthy Eating)* (2006), Ministry of Health, Population Health and Wellness.¹¹²
- *Evidence Review: Mental Health Promotion* (2007), Ministry of Health, Population Health and Wellness.¹¹³
- *A Mental Disorder Prevention Evidence Review Paper* (2007), prepared by W. O'Brien for the BC Ministry of Health.
- *Evidence Review: Reproductive Health* (2007), Ministry of Health, Population Health and Wellness.¹¹⁴
- *Evidence Review: Prevention of Harms Associated with Substances* (2006), Ministry of Health, Population Health and Wellness.¹¹⁵
- *Evidence Review: Healthy Communities* (2006), Ministry of Health, Population Health and Wellness.¹¹⁶

7.0 INDICATORS, BENCHMARKS AND PERFORMANCE TARGETS

7.1 Introduction

It is important to define what one means by the terms *indicators*, *benchmarks* and *performance targets*. An indicator is a summary measure (usually numerical) that denotes or reflects, directly or indirectly, variations and trends in, this case, child and youth development. Indicators are more than outcome measures, they constitute an important reflection of some aspect of a given program or service, and their value is that they also drive decision and action. Indicators need to be standard so that they can be compared across different organizational entities such as health regions. Benchmarks are reflective of “best” practices. They represent performance that health authorities should strive to achieve. Benchmarks are determined by reviewing the literature; reviewing the best practice experience in other jurisdictions; or by determining “consensus” opinion of leading experts and practitioners in the field. Performance targets, on the other hand, are locally determined targets that represent a realistic and achievable improvement in performance for a local health authority.

This section presents a number of key indicators or performance measures for a program on healthy child and youth development. Suggested benchmarks can apply across the province, while other benchmarks may need to be modified to account for key variables such as geographic size or population density of the health authority.

One can develop indicators related to the inputs, activities, outputs and outcomes (immediate, intermediate or final) of each of the respective components of the program. Thus, it is not necessary to only have outcome-related indicators and benchmarks. Furthermore, indicators need to be understood within a broader context. For example, a low per-capita cost for a specific program could reflect the efficiency and effectiveness of a given program, or reflect a program which is under-resourced. It is recognized that child and youth development programs are multi-faceted and that it may be difficult to link interventions with direct health outcomes, particularly as initiatives involve multiple factors and multiple sectors, which all play a role in determining outcomes. In general, it is best to consider a number of indicators, taken together, before formulating a view on the performance in this area. Indicators and benchmarks work best as flags to indicate a variance from accepted norms and standards. Further investigation is usually required to determine the causes of any given variance from such norms or standards.

A health authority could establish its performance targets by assessing its current (and perhaps historical) level of performance; then, based on consideration of local factors, determine realistic performance targets. This performance target would be consistent with the goal of performance improvement but would be “doable” within a reasonable period of time. Initially, health authorities will set performance targets for a number of indicators. However, over time, and particularly if consistent data collection methods and definitions are applied, it would be realistic for health authorities to share information related to their targets and then develop a consensus approach to determine provincial benchmarks for these indicators. In other words, locally developed performance targets, over time, could lead to the development of provincial benchmarks.

7.2 Indicators for the Program on Healthy Child and Youth Development

Indicators prepared by the Working Group are presented in Appendix. It is understood that some of the indicators may not be under the control or influence of health authorities, but they can nevertheless, provide important information for the health authorities to collect. Those indicators and benchmarks which are under the control and influence of health authorities provide a basis for ongoing performance review and evaluation.

In many cases, baseline data will need to be established to provide a basis for comparative analysis in future years. Benchmarks will be determined over time between the Ministry of Healthy Living and Sport and the health authorities. In addition, health authorities may wish to establish local or regional benchmarks and performance targets.

8.0 EXTERNAL CAPACITY AND SUPPORT REQUIREMENTS

8.1 Key Success Factors/System Strategies

The previous sections outlined the main components and best practices that health authorities could include in enhancing child and youth development. Successful implementation of effective strategies will also depend on having in place key system strategies, including

- Strong support from the Board and management of the health authorities, from the Ministry of Healthy Living and Sport, as well as strong support from the other key players in the region, such as women’s health groups, social service agencies, child care settings and local governments.
- Allocation by the health authorities of sufficient resources to deliver high quality programs.
- Well-trained and competent staff with the necessary policies, information and equipment to carry out their work efficiently.
- An information system that provides staff with appropriate support, and provides management with the information it needs to drive good policy and decisions.
- High-quality and competent management of the child and youth development program, including monitoring of performance measures.
- Clear mechanisms of reporting and accountability to the health authority and external bodies.

8.2 Information Management for the Program on Healthy Child and Youth Development

It will be important for health authorities to review their existing information and monitoring systems with respect to their ability to measure and monitor performance indicators. This should include:

- Where necessary, establishing new policies and procedures to ensure that necessary data is gathered;
- Facilitating the process of recording and monitoring data;
- Assisting in the development of electronic health records to support interdisciplinary and collaborative approaches among health care professions; and
- Establishing baseline levels for new data sets as a foundation to compare and assess trends and differences over time.

Health authorities will also need to consider the impact of program monitoring and evaluation on their staffing resources. Expertise will be needed in the fields of program monitoring, program analysis and program evaluation to ensure effective implementation and assessment of the core functions improvement process.

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Core Public Health Functions for BC: Model Core Program Paper

Healthy Child and Youth Development

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GLOSSARY

Attachment: Denotes a fundamental parent/caregiver-child relationship involving emotional availability, nurturance and warmth, protection and provision of comfort on the part of the parent, resulting in trust, security, and emotional regulation in the infant.¹ Attachment is a lifelong process that begins in infancy – attachment relationships are enduring and biologically based. They can be secure, insecure, or disorganized. Attachment constructs equip a child with the ability to interpret interpersonal experiences. Early attachment experiences are also important for the development of neurochemical and neuroendocrine systems.²

Best Practices: These are activities based on sound scientific evidence, extensive community experience and/or cultural knowledge.³

Childcare: The non-parental care of children in their home, someone else's home or in a centre, where care and education are provided by a person other than an immediate family member.

Children with Special Needs: Children and youth between birth and 19 years of age who require additional educational, medical/health and social/environmental support, beyond that required by children in general, to enhance or improve their health, development, quality of life and community integration.⁴

Culture: The understandings, patterns of behaviour, practices and values shared by a group of people. Children and families may identify as belonging to more than one culture.

Determinants of Health⁵: The range of personal, social, economic and environmental factors which determine the health status of individuals or populations. (WHO, Health Promotion Glossary, 1998) These can include:

- 1) **Income and Social Status:** Health status improves at each step up the income and social hierarchy. In fact, these two factors seem to be the most important determinants of health.
- 2) **Social Support Networks:** Support from families, friends and communities is associated with better health.
- 3) **Education and Literacy:** Health status improves with level of education. Canadians with low literacy skills are more likely to be unemployed and poor, to suffer poorer health and to die earlier.
- 4) **Employment/Working Conditions:** Unemployment, underemployment and stressful work are associated with poorer health.
- 5) **Social Environments:** The importance of social support also extends to the broader community. Civic vitality is reflected in the institutions, organizations and informal giving practices that people create to share resources and build attachments with others.
- 6) **Physical Environments:** Physical factors in the natural environment (air, water quality) are key influences in health. At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of adverse health effects, including cancer, birth defects, respiratory illness and gastrointestinal ailments.

- 7) **Personal Health Practices and Coping Skills:** Those actions by which individuals can prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health.
- 8) **Healthy Child Development:** New evidence on the effects of early experiences on brain development, school readiness and health in later life confirms early child development as a powerful determinant of health.
- 9) **Biology and Genetic Endowment:** The basic biology and organic make-up of the human body. In some circumstances genetic endowment appears to predispose certain individuals to particular diseases or health problems.
- 10) **Health Services:** Health services, particularly those designed to maintain and promote health, to prevent disease, and restore health and function contribute to population health.
- 11) **Gender:** Gender refers to the array of socially-determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes.
- 12) **Culture:** Some persons or groups face additional health risks due to their socio-economic environment: marginalization, stigmatization, loss of language and culture, lack of access to culturally appropriate health care and services.

Development: Description of the relatively stable and predictable sequences of growth and change toward greater complexity, organization and internalization that occur at varying and unique rates, patterns and timing, as a result of interactions between biological maturation and environmental influences, including relationships, experiences, social and cultural backgrounds (NAEYC, 1987).

Developmental Delay: When a child is not achieving normally accepted milestones consistent with his/her cohort.

Developmental Disabilities: childhood conditions that require additional educational, medical/health and social/environmental support, beyond that required by children in general, to enhance or improve their health, development, quality of life, and community integration (MHLS definition).

Diversity: Differences and unique attributes within each child based on values and beliefs, culture and ethnicity, language, ability, education, life experiences, socio-economic status, spirituality, gender, age and sexual orientation.

Early Development Instrument (EDI): The EDI is a community-based, population-level outcome measure of the quality of children's early years experiences leading up to kindergarten entry. The EDI was developed at McMaster University and has been used internationally to gauge developmental appropriateness in five-year-old children.

Fetal Alcohol Spectrum Disorders (FASD): term used to describe the range of effects resulting from alcohol use during pregnancy. These can include brain damage, vision and hearing problems, slow growth, and birth defects such as heart problems or bones that are not properly formed. Brain damage associated with FASD can involve lifelong problems with attention,

memory, reasoning and judgment. People with FASD are also at high risk of secondary disabilities such as mental health concerns, disrupted schooling, and addictions.⁶

Health Promotion: Any planned combination of educational, political, regulatory and organizational supports for actions and conditions of living conducive to the health of individuals, groups or communities (L. Green). Health promotion is also the process of enabling people to increase their control over, and to improve their health. In health promotion, therefore, health is seen as a resource for everyday living, not the objective of living. Health is a positive concept, emphasizing social and personal resources, as well as physical capacities. (Ottawa Charter for health Promotion, 1986).⁷

High Risk: term used in early identification and intervention programs to describe a situation where, based on the results of a complete assessment and professional judgment, there is a serious risk that a child may not reach his/her potential and that the family may benefit from more intensive supports.

Integration: Service integration and collaboration are related but distinct methods of services delivery. Integration is characterized by features such as common intake and ‘seamless’ service delivery, where the client receives a range of services from different programs without repeated registration procedures, waiting periods, or other administrative barriers. In contrast, coordinated systems generally involve multiple agencies providing services, but in different locations and with separate program registration processes.⁸

Population Health: focuses on the underlying and interrelated conditions that influence the health of populations over the life course. These include factors such as education, income, early childhood experiences and the social and physical environments that surround individuals and groups. By addressing these factors, a population health approach aims to reach beyond the limited effectiveness of lifestyle-based interventions and reduce disparities in health outcomes⁹.

Prevention: approaches and activities to reduce the likelihood of a disease or disorder affecting an individual, to interrupt or slow the progress of the disorder, or to reduce disability.¹⁰

- **Primordial:** prevention of risk factors, beginning with a change in social or environment conditions.
- **Primary prevention** reduces the likelihood of a disease or disorder developing in an individual.
- **Secondary prevention** interrupts, prevents or minimizes the progress of a disease or disorder at an early stage.
- **Tertiary prevention** focuses on preventing the damage that has already occurred from becoming worse.

Resilience: an ability to recover from or adjust easily to misfortune or change e.g., recovering from traumatic events, overcoming disadvantages to succeed in life, and withstanding stress to function well in the tasks of life.

Risk Factors: Social, economic or biological status, behaviours or environments which are association with or cause increased susceptibility to a specific disease, ill health or injury.¹¹

Targeted Interventions: The predominant characteristic of these interventions are that children and their families do not seek help, and certain children or families are singled out for the intervention, not necessarily because they already have a disorder but because they are at greater risk for developing one. Children can be targeted in two ways: the identifying characteristic can lie outside the child (e.g., family in poverty), or the children themselves can have the distinguishing characteristics (e.g., behaviour issue).¹²

Universal Interventions: Characteristics of this type of intervention are that individual families (and their children) do not seek help and children are not singled out for the intervention. All children in a geographical areas or setting (e.g., school) receive the intervention. Two types of universal programs can be: those that focus on particular communities or settings (e.g., a public housing complex) or those that are province-wide or countrywide, for example.¹³

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³ <http://www.phac-aspc.gc.ca/hl-vs-strat/hl-vs/glossary-eng.php>

⁴ www.mcf.gov.bc.ca/spec_needs/inex.htm

⁵ Public Health Agency of Canada <http://www.phac-aspc.gc.ca/ph-sp/phdd/determinants/determinants.html#social>

⁶ www.healthlinksbc.ca/healthfiles/pdf/files38d.pdf

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APPENDIX 1: THE EVIDENCE BASE FOR A MODEL CORE PROGRAM FOR HEALTHY CHILD AND YOUTH DEVELOPMENT

Taken from: *Evidence for Healthy Child and Youth Development Interventions for Core Public Health Functions* (2008), prepared by E.M. Saewyc and D. Stewart, for the Ministry of Healthy Living and Sport.

For children and youth in British Columbia, the school years are important periods of physical, cognitive, social and moral development. Choices made during this time influence health and behaviours throughout their lives, but these choices are influenced by social environments and broader determinants of health. There is a large body of research focused on effective interventions to prevent and reduce risk, but evidence about public health interventions to promote healthy development is much less common. Public health can promote the healthy development of school-aged children and youth through a variety of population-focused interventions and programs.

Aspects of this health child and youth development approach include:

- A shift towards interventions that enhance and facilitate adaptive qualities in youth, not just a focus on interventions that reduce risk factors and negative behaviours.
- Identifying protective factors and assets that buffer risky environments and lead to positive child and youth development.
- Focuses on the key developmental tasks of school-age children and youth:
- Healthy physical growth and pubertal development
- Healthy emotional and cognitive development
- Healthy sexual development
- Healthy social development and community engagement
- Healthy peer relationships and supportive peer networks
- Healthy moral development.

Young people who effectively accomplish their developmental tasks will not only be less likely to become a strain on the public health infrastructure, but will also be more likely to live a long and enjoyable life.

The Interventions and Evidence of Effectiveness

There are a number of different public health intervention strategies for healthy child and youth development, including mentorship programs, skill-building interventions, health education interventions to alter knowledge or social norms and attitudes, social marketing interventions to alter social norms and attitudes, as well as community development, coalition-building, and

policy interventions. This review explored the research evidence for public health interventions that promote positive child and youth development. Studies focused on these sorts of interventions are much less common than studies focused on risk reduction or risk prevention, but the literature yielded evidence about interventions that are or could be implemented in British Columbia.

Health Education Programs

- Most commonly conducted and evaluated single-strategy programs
- Relatively inexpensive, can be implemented broadly through schools or community groups
- Unfortunately, as a sole strategy, health education has limited effectiveness in fostering healthy child and youth development.

Skill building

- Seldom used alone, but even as a single strategy, it has been shown to be an effective approach
- Effective with health education strategies and with supportive groups
- Most often used to promote sexual health, emotional regulation, and physical activity

Mentoring Programs

- Unlike other strategies, commonly stand-alone programs
- Focused on positive child and youth development through matching young people with caring adults to help foster social support and connectedness
- Evidence of effectiveness, especially if longer term programs
- Financial constraints of supporting each match can limit program

Policy Development

- Public health core functions are seldom in the position of enacting policy, but may be involved in advocating for or developing health-related policies, or in analyzing the health effects of various policies enacted in other sectors
- Most policies focused on preventing or reducing risks, very limited research evidence on policies to promote healthy development
- However, one policy with evidence for effectiveness has been mandating community service or service-learning involvement as part of educational requirements (to graduate from high school)

Community Development and Coalition Building

- Seldom stand-alone strategies, but are often incorporated with health education, skill building, or policy development
- Community development has good evidence of effectiveness for several different areas of healthy development, including healthy growth and development, social development and community engagement, and creating positive school environments

Multiple Strategy Approaches

- Many population-level interventions to foster healthy child and youth development use a combination of strategies
- Combinations vary widely, even in similar areas of youth development, and so it is quite difficult to compare the relative effectiveness of different combinations
- In general, multiple strategy approaches show stronger effects and longer-term improvements than individual strategies, especially when compared to health education as a stand-alone strategy
- Multi-strategy approaches are more expensive, and size of effect should be weighed; must be strong enough to justify the increased complexity and expense.
- Programs that include a community development or policy/ environment change, or skill building as part of multiple strategies, have stronger, more lasting effects --Action Schools! BC is a clear example.

Gaps in Evidence

While there is a growing body of evidence for public health interventions to promote protective factors and assets for healthy child and youth development, some areas have almost no evidence, and few if any interventions. Families are key supportive environments for fostering healthy development among school-age children and adolescents, yet we were unable to find evidence of effective public health interventions designed to foster family connectedness or supportive parenting for this age group. Further work in developing and testing such interventions may be an important first step.

Similarly, there are very few examples of policies designed to promote healthy development for this age group, and even less research evaluating the effectiveness of policy changes. Strategies to link policy change to population indicators of healthy development at the local or regional level may help document effects of policy change.

Indicators and Surveillance

As health promotion efforts incorporate a healthy child and youth development perspective, existing surveillance techniques that focus on risks and problems are inadequate. Indicators must be able to measure changes in positive outcomes and protective factors or assets, both in individuals and across populations. It is important to actually measure the outcomes that healthy child and youth development interventions are designed to promote, rather than only measuring reductions in morbidity and mortality.

Some measures of protective factors and positive child and youth development are being used in British Columbia and other places. Some of these measures may be useful as indicators for monitoring the effectiveness of interventions at the local level. At the same time, comprehensive population-level data collection tools that have these measures, such as the BC Adolescent Health Survey, when conducted at regular intervals, can help track trends in the development of school-aged children and youth, document the potential effects of population-level interventions, and identify needs for future interventions. By incorporating both protective factors and risk factors in the same surveillance tools, the effects of positive youth development approaches on both promoting healthy development and reducing risky behaviours are possible.

APPENDIX 2: PROGRAM SCHEMATIC - MODEL CORE PROGRAM FOR HEALTHY CHILD AND YOUTH DEVELOPMENT

Goal: To maximize the healthy physical, emotional, cognitive and social development of children and youth, ages 6 to 19, to enable them to achieve their full potential.

Components	Activities	Outputs	Short & Intermediate Outcomes	Long-term Outcomes	Ultimate Outcomes
Leadership and Advocacy	<ul style="list-style-type: none"> • Collaborate in a comprehensive, multi-sectoral regional plan • Identify key policies and programs for healthy child and youth development • Advocate for healthy public policies and programs on child development priorities 	<ul style="list-style-type: none"> • Environmental scan and needs assessment of children and youth including relevant policies • Multi-sectoral strategic plan • Integrated plans • Policies and processes for child and youth development • Advocacy activities included in strategic plans and/or policies 	<ul style="list-style-type: none"> • Identification of priorities for action and interventions • Integration and consistency across health programs and sectors • Development of healthy public policies that support healthy development of children and youth 	<ul style="list-style-type: none"> • Increased systemic support for healthy environments for children and youth and for healthy development at the school and community levels 	<p>Improved health and wellness for British Columbia</p> <p>Reduced premature mortality and morbidity</p> <p>Reduced Burden on the health care system</p>
Health Promotion	<ul style="list-style-type: none"> • Health promotion: <ul style="list-style-type: none"> ○ Collaborate in comprehensive school health models; ○ Collaborate with partners in delivery of public education, awareness and social marketing interventions to address key priorities in child/youth development; ○ Support local governments and schools in enhancing healthy built environments; ○ Facilitate community development/capacity building to strengthen protective factors ○ Support schools in implementing school food guidelines 	<ul style="list-style-type: none"> • Messaging and educational materials and resources • Background information materials for stakeholders including data, research findings on best practices • Community partnerships established 	<ul style="list-style-type: none"> • Positive public attitudinal shifts on priority issues • Increased community capacity and coordination to take local action and enhance support 	<ul style="list-style-type: none"> • Comprehensive support among community partners for healthy child and youth development 	

Core Public Health Functions for BC: Model Core Program Paper
Healthy Child and Youth Development

Components	Activities	Outputs	Short & Intermediate Outcomes	Long-term Outcomes	Ultimate Outcomes
Prevention Initiatives and Early Identification of Risk /	<ul style="list-style-type: none"> • Universal Programs: • Work with schools/communities on best practices that support completion of development tasks (physical, emotional, intellectual, mental and social health) for each stage of development: <ul style="list-style-type: none"> ○ Young children, 6 to 8 years ○ Middle years children, 9 to 12 years ○ Teens (youth), 13-16 years ○ Older teens, 17-19 • Targeted Initiatives for At-risk Children, 6-12 <ul style="list-style-type: none"> ○ Early detection of at-risk children and youth; ○ Positive school adjustment through a multi-component strategy ○ Interventions for parents to build parenting skills, foster positive family relationships ○ Resilience-focused programs for children and youth that combine child, family and school-based interventions ○ Interventions to increase healthy eating among ○ Positive school adjustment through support for teachers, parents and children. ○ Expanded one-to-one mentorship programs 	<ul style="list-style-type: none"> • Best practices implemented to enhance protective factors for children and youth at each stage of development • Teacher training on supportive positive school experiences • Appropriate referrals to specialist health professionals • Targeted programs for at-risk child and youth through appropriate evidence-based school, community and public health programs • Parenting skills programs 	<ul style="list-style-type: none"> • Enhanced physical exercise, nutritional practices, social and emotional competence, school commitment, positive body image, and healthy sexual development/attitudes, at each stage of development for children and youth • Smooth transitions between stages and into adulthood • Strengthened social networks and supports • Reduced negative school peer interactions • Improved skills in healthy child/family relationships 	<ul style="list-style-type: none"> • Enhanced protective factors including <ul style="list-style-type: none"> ○ Enhanced physical, emotional, intellectual and mental health ○ Strengthened connectedness to family, school, peers and community ○ Increased school retention • Increased resilience and reduced barriers for at-risk children and youth • Reduced school drop-out rate 	
Surveillance, Monitoring and Program Evaluation	<ul style="list-style-type: none"> • Collaborate with partners on data gathering/information sharing, e.g., socio-economic determinants of health • Analyze/interpret data to clarify trends/issues and risk factors • Collaborate in program evaluation of initiatives 	<ul style="list-style-type: none"> • Statistical reports and trends analysis • Baseline data • Evaluation frameworks • Program evaluation reports 	<ul style="list-style-type: none"> • Improved decision-making to enhance effectiveness of programs 		