Ontario

Child Health

Guidance Document

Standards, Programs & Community Development Branch
Ministry of Health Promotion
May 2010

Working Group Co-Chairs
Sue Makin
Lorna Larsen

Working Group Members
Diane Bewick
Anne Biscaro
Lorraine Repo
Anna Zuccato

Mental Health Consultant
Cindy Rose

Working Group Writer
Elizabeth Berry

Editor
Diane Finkle Perazzo

ISBN: 978-1-4435-2906-8
© Queen's Printer for Ontario, 2010

Published for the Ministry of Health Promotion

Table of Contents

List of Tables

Acknowledgements

The Child Health Guidance Document Working Group would like to thank the following individuals for their contribution to the development of this Guidance Document:

- Adrienne Einarson (Motherisk)
- Daniela Seskar-Hencic (Region of Waterloo Public Health)
- Barbara Willet (Best Start Resource Centre)
- Family Health staff from health units across the Province

Guidance and editorial support from the project Steering Committee members, Cancer Care Ontario and Ontario Ministry of Health Promotion staff was also greatly appreciated.

Sue Makin

Lorna Larsen

Co-Chairs

Section 1. Introduction

Under Section 7 of the *Health Protection and Promotion Act* (HPPA), the Minister of Health and Long-Term Care published the *Ontario Public Health Standards* (OPHS) as guidelines for the provision of mandatory health programs and services by the Minister of Health and Long-Term Care. Ontario's 36 boards of health are responsible for implementing the program standards, including any protocols that are incorporated within a standard. The Ministry of Health Promotion (MHP) has been assigned responsibility by an Order in Council (OIC) for four of these standards: (a) Reproductive Health, (b) Child Health, (c) Prevention of Injury and Substance Misuse and (d) Chronic Disease Prevention. The Ministry of Children and Youth Services has an OIC pertaining to responsibility for the administration of the *Healthy Babies Healthy Children* components of the Family Health standards.

The OPHS (1) are based on four principles: need; impact; capacity and partnership; and collaboration. One Foundational Standard focuses on four specific areas: (a) population health assessment, (b) surveillance, (c) research and knowledge exchange and (d) program evaluation.

a) Development of MHP's Guidance Documents

The MHP has worked collaboratively with local public health experts to draft a series of Guidance Documents. These Guidance Documents will assist boards of health to identify issues and approaches for local consideration and implementation of the standards. While the OPHS and associated protocols published by the Minister under Section 7 of the HPPA are legally binding, Guidance Documents that are not incorporated by reference to the OPHS are not enforceable by statute. These Guidance Documents are intended to be resources to assist professional staff employed by local boards of health as they plan and execute their responsibilities under the HPPA and the OPHS. Both the social determinants of health and the importance of mental health are also addressed.

In developing the Guidance Documents, consultation took place with staff of the Ministries of Health and Long-Term Care, Children and Youth Services, Transportation and Education. The MHP has created a number of Guidance Documents to support the implementation of the program standards for which it is responsible, e.g.:

- Child Health
- Child Health Program Oral Health
- Comprehensive Tobacco Control
- Healthy Eating/Physical Activity/Healthy Weights
- Nutritious Food Basket
- Prevention of Injury
- Prevention of Substance Misuse
- Reproductive Health
- School Health

This particular Guidance Document provides specific advice about the *OPHS Requirements* related to CHILD HEALTH.

b) Content Overview

Section 2 of this Guidance Document provides background information relevant to child health, including the significance and burden of this specific public health issue. It includes a brief overview about provincial policy direction, strategies to reduce the burden and the evidence and rationale supporting the direction. The background section also addresses mental well-being and social determinants of health considerations.

Section 3 provides a statement of each program requirement in the OPHS (1), and discusses evidence-based practices, innovations and priorities within the context of situational assessment, policy, program and social marketing, and evaluation and monitoring. Examples of how this has been done in Ontario or other jurisdictions have been provided.

Section 4 identifies and examines areas of integration with other program standard requirements. This includes identification of opportunities for multi-level partnerships, including suggested roles at each level (e.g., provincial, municipal/boards of health, community agencies and others) and identification of collaborative opportunities with other strategies and programs such as *Smoke-Free Ontario Strategy* and *Healthy Babies Healthy Children*.

Finally, **Section 5** identifies key tools and resources that may assist staff of local boards of health to implement the respective program standard and to evaluate their interventions. **Section 6** is the conclusion.

c) Intended Audience and Purpose

This Guidance Document is intended to be a tool that identifies key concepts and practical resources that public health staff may use in health promotion planning. It provides advice and guidance to both managers and front-line staff in supporting a comprehensive health promotion approach to fulfill the OPHS 2008 requirements for the Child Health, Chronic Disease Prevention, Prevention of Injury and Substance Misuse and Reproductive Health program standards.

d) Goal of the Child Health Program

The goal of the Child Health program is "to enable all children to attain and sustain optimal health and developmental potential." (1) Achievement of this goal involves a complex interplay of internal and external factors for families and their children. Accordingly, the Child Health Program Standard is structured around six key areas: positive parenting; breastfeeding; healthy family dynamics; healthy eating, healthy weights and physical activity; growth and development; and oral health.

In order to achieve the board of health and societal outcomes and overall goal for the Child Health program, all OPHS Foundational Standard and Child Health Program Standard requirements must be met. The Child Health program requirements include those addressed in this Guidance Document as well as the *Oral Health Guidance Document*, 2009 and the *Healthy Babies Healthy Children Protocol*, 2008.

In this document, the word *child* is defined as including infants, children and youth 0–18 years of age.
In the event of any conflict between this Guidance Document and the 2008 *Ontario Public Health Standards*, the *Ontario Public Health Standards* will prevail.

Section 2. Background

a) Why is Child Health and Development a Significant Public Health Issue?

Investing in child health is an investment upstream. Quite simply, health in infancy and the early years contributes to healthy children and youth, and healthy children and youth contribute to health throughout the lifespan.

Indeed, "the early development of cognitive skills, emotional well-being, social competence and sound physical and mental health builds a strong foundation for success well into the adult years…these abilities are critical prerequisites for economic productivity and responsible citizenship throughout life." (2)

Unhealthy outcomes for children contribute to a negative health trajectory over time. Poor child health and developmental outcomes contribute to poorer short- and long-term growth and development outcomes for children, some of which have lifelong impacts. Poor child health and developmental outcomes result in increased cost and strain to families and to the larger society. These costs can include costs associated with health care, education, justice system, non-profit organizations and all levels of government. (3)

It is a moral responsibility for us to help children live healthy, happy, confident, secure and productive lives. By becoming a signatory to the *United Nations Convention on the Rights of the Child*, (4) Canada has enshrined this moral responsibility as a legal obligation of our government, for which we agree to be held accountable before the international community.

The health and well-being of our children is an investment in our Province for generations to come.

Table 1. Child Health Information on the following pages provides some data and findings from the literature that highlights the significance of many child health issues and concerns relevant to public health. OPHS Child Health Program requirement topic areas, further child health sub-topic issues, poverty and mental health are included in the table.

Table 1: Child Health Information

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
A. Positive Parenting	▪ One-third of Canadian parents use optimal parenting approaches (2/3 do not). (5) ▪ The quality of parenting a child receives is considered the strongest potentially modifiable risk factor that contributes to developmental and behavioural problems in children. (5) ▪ Three-quarters of parents with teenagers believe the hardest years as a parent are between 13 and 18 and the support received from society during this time is significantly decreased. (6) ▪ Seventy-four per cent of parents think society is more supportive of parents with young children than parents of teenagers. (6) ▪ The well-being of parents leads to positive outcomes for children. (6) ▪ Early childhood indicators from three Canadian Provinces suggest one in four children are not ready to learn when they arrive at school. (63)	
B. Breast-feeding	▪ Eighty-five per cent of new mothers across Canada initiate breastfeeding with their infants (up from 25% in the 1960s). (7) ▪ Fifty-three per cent of Ontario mothers are breastfeeding for six months or more (not exclusively). (7) ▪ Health impacts for infants include better visual acuity, protection against gastrointestinal and ear infections, SIDs, allergies, obesity and enhanced cognitive and social development. (8) ▪ Health impacts for breastfeeding mothers include decreased risk of breast and ovarian cancer, postpartum bleeding, late life hip fractures. (9) ▪ Breast milk provides the ideal nutritional elements for proper digestion, brain development and growth. (10)	

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
C. Healthy Family Dynamics		
Abuse Of Women	▪ In 2006, 38,000 incidents of spousal abuse were reported to police across Canada – charges were laid in 75% of these cases. (11) ▪ Less than 1/3 of incidents that involve the abuse of women are reported to police. (11) ▪ Girls are at greatest risk of sexual assault by a family member while between 12 and 15 years of age. (11) ▪ Sixty-eight per cent of those seeking emergency shelter are women. (11) ▪ On any given day, 5,300 victims of sexual assault request assistance from victims services across Canada (9 out of 10 of whom are females). (11) ▪ Six per cent of new mothers report experiencing abuse in the last two years, 50% of these on more than one occasion. (11)	
Post Partum Mood Disorder	▪ Up to 75% of new mothers experience "baby blues."(12) ▪ Ten to fifteen per cent of new mothers experience postpartum depression. (12) ▪ Impact of PPMD includes negative mother/baby interactions that may result in poor infant development outcomes that last a lifetime. (12) ▪ A woman who has experienced PPD with a baby has a 40% risk of developing PPD with a future baby. (13) ▪ The greatest risk for admission to a psychiatric hospital admission is in the first three months postpartum. (14) ▪ Up to 12% of all psychiatric hospital admissions for women occur during the first postpartum year. (14)	
Substance Misuse	▪ Almost two-thirds (61%) of students (grades 7–12) drink alcohol. Binge drinking (consuming at least five drinks on the same occasion) is high, with approximately 26% of students engaging in this behaviour. (16) ▪ Twenty-one per cent of Ontario students in grades 7–12 report using prescription opium pain relievers such as TYLENOL®No. 3 and Percocet® for non-medical purposes; almost 72% report obtaining the drugs from home. (16) ▪ About 15% of students report getting drunk or high at school at least once during the past year and one in five (21%) were sold, given or offered a drug at school. (16) ▪ Eighty-one per cent of youth abstain from tobacco throughout their lives. (16)	

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
Child Abuse	▪ In 2006, the rate of police reported physical and sexual assaults against children and youth (1–18) was 792 per 100,000. The majority know their abuser. Parents are the most commonly identified abusers. (11) ▪ Teenagers between 12 and 17 were particularly vulnerable with double the number of reports for physical and sexual abuse. (11) ▪ Nearly 4 in 10 child victims of family violence suffer injuries. (11) ▪ In 2006, 60 homicides were committed against children and youth, 25% of whom were infants. (11) ▪ Sixty-five per cent of child abuse cases involve inappropriate punishment. (17) ▪ Physical child abuse is committed largely by biological parents (89%). (17) ▪ A 1998 Canadian Incidence study reported 1 in 100 children were physically abused. (17) ▪ The highest number of substantiated physical child abuse cases was in the adolescent age group. (17)	
Teen Pregnancy	▪ The Ontario teen pregnancy rate for women ages 15–19 is 25.7/1,000 young women ages 15–19 (18) ▪ Pregnant teens are at greater risk for health problems such as anemia, hypertension, eclampsia and depressive disorders. (18) ▪ Children of teen moms are more likely to have low birth weights and preterm births that lead to numerous developmental challenges. (18) ▪ Teen pregnancy is more common among vulnerable teens. (18) ▪ Pregnancy in teen years is a significant predictor of other social, educational and employment barriers in later life. (18)	
Shaken Baby Syndrome (SBS)	▪ SBS is the leading cause of traumatic infant death in North America. ▪ Thirty per cent of SBS (abused) infants die. (19) ▪ Fifty per cent of survivors experience blindness and various other neurological impairments including seizures, spasticity, paralysis and developmental delays. (19) ▪ Eighty-five per cent of those who survive require long-term care. (19)	

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
D. Healthy Eating/ Healthy Weights	▪ Childhood obesity and overweight is considered a global public health crisis. (78–80) ▪ Obesity continues to be a key risk factor for many conditions such as heart disease, osteoarthritis, hypertension and Type 2 Diabetes. (22) ▪ Fifty-seven per cent of men in Ontario and 47% of women in Ontario are either obese or overweight. (22) ▪ In 2004, 26% of Canadian children and adolescents aged 2–17 were overweight or obese. (23) ▪ For adolescents aged 12–17, increases in overweight and obesity rates (in Canada) over the past 25 years have been notable; the overweight/obesity rate of this age group more than doubled and the obesity rate tripled. (23–26) ▪ If nothing changes, children will live three to four years less than today's adults due to obesity. (22) ▪ Canada ranks 19th out of 22 OECD Countries in its percentage of obese adolescents (19.3%). (22) ▪ In Canada, 70% of children aged four to eight eat less than five servings of fruit and vegetables each day. At ages 9–13, the figures are 62% for girls and 68% for boys. (23)	Direct costs (hospital/ drugs/physicians) $1.6 billion/year Indirect costs $2.7 billion/year Total annual health care costs **$4.3 billion/year** (22)

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
E. Physical Activity	▪ A sedentary lifestyle not only contributes to the risk of obesity, it enhances the downward health trajectory. (22) ▪ Ninety per cent of children 6–12 years old do not meet minimal physical activity requirements. (22, 28–29) ▪ The *2007–2008 CANPLAY* data show that the proportion of children meeting the Canadian Guidelines for Physical Activity decreases in older age groups, with almost twice as many 5- to 10-year-olds meeting the guidelines, compared to 15- to 19-year-olds. This age-related trend is apparent in both boys and girls. (30) ▪ Thirty point six per cent of adults say they spend 15 hours or more in front of the television and 19.1% use the computer (outside of work time), 11 or more hours each week. (22) ▪ Active children are less likely to commit crimes and more likely to stay in school. (22) ▪ Physical activity and fitness are positively associated with academic performance and being sedentary is associated with low academic performance in children. (30) ▪ In Ontario, youth in grades 9–12 with low social support for physical activity were less likely to be active than their peers with more social support, and the number of friends and family members engaging in physical activity were both associated with physical activity in urban and rural schools in the Province. (31) ▪ Physical inactivity is associated with emotional and behavioural problems in adolescents. (32) ▪ Young people involved in recreation are less likely to turn to smoking, drug or alcohol abuse and crime. (33) ▪ The time children spend being physically active begins to decrease by the age of three. (64) ▪ At age 12 years, Canadian boys and girls are now taller and leaner than in 1981. (103) ▪ The body composition of Canadian children and youth is less healthy than in 1981. (103) ▪ The strength and flexibility of boys and girls has declined significantly since 1981. (103)	Direct costs (hospital/ drugs/ physicians) $2.1 billion/year Indirect costs $3.1 billion/year Total annual costs to the health care system **$5.2 billion/year** (22)

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
F. Growth & Development		
Injury Prevention	▪ Each year, 20–25% of children are injured seriously enough to require primary health care and result in missing school. (21) ▪ One out of 230 Canadian children is hospitalized each year with serious preventable trauma, 20% of which result in major head trauma. (21) ▪ Six thousand Canadian children sustain a major head injury each year, resulting in lifelong disability. (21) ▪ Unintentional injuries remain the leading cause of death in children age 1–14, 70% of which are related to motor vehicle crashes, followed by drowning. (21)	**Costs in Canada:** Annual direct costs $4.2 billion Annual indirect costs $4.2 billion **$8.4 billion/year** (22) **Costs in Ontario:** Injuries from falls among children 0–14 years of age cost nearly $311 million (1999). (137)
Fetal Alcohol Spectrum Disorder (FASD)	▪ FASD is a lifelong disability and there is no known treatment. Early identification improves outcomes reducing secondary disabilities. (34) ▪ The incidence of FASD in Canada is 1 in 100 live births. (35) ▪ Two point five per cent of newborns whose first stools are analyzed, indicate prenatal alcohol exposure. (36, 37) ▪ FASD is described by researchers as the leading cause of developmental and cognitive disabilities in Canada. (35) ▪ Six communities in Ontario have diagnostic services. (38) ▪ Sixty per cent of Canadian family physicians and obstetricians obtain a detailed history of alcohol use in preconception/ prenatal care of women. (39)	**Costs in Canada:** Annual costs of FASD in Canada $5.3 billion/year (35) – reflects medical, education, social service costs and costs to families
Vision	▪ More than 80% of learning is done through the eyes. (40) ▪ One in six children has a vision problem significant enough to impair their ability to learn. (40) ▪ Forty-three per cent of children with vision problems may be able to pass a basic vision screen. (40) ▪ One in 1,000 people meet the definition of blindness or low vision. (40)	

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
Speech and Language	▪ Five point nine five per cent of children (0–16 years of age) have primary speech or language delays. (41) ▪ The prevalence of specific language impairment in children entering school is 7%. (41) ▪ Between 28% and 60% of children with speech and language challenges have a sibling and/or parent also affected. (41) ▪ The residual effects of early speech disorders may be lifelong. Adults with this history require more remedial services and complete fewer years of formal education. (42) ▪ Language impairment is associated with poor academic performance, behaviour problems, psychiatric disorders and lower overall functioning. (44)	
Immunization	▪ At the end of the 2007–2008 school year, 84.9% of Ontario school children aged seven years had up-to-date vaccination against measles, mumps and rubella. (18)	
Hearing	▪ Over two-thousand (2,233) babies are born each year in Canada with a hearing loss; 41% of babies are screened for hearing loss. (59) ▪ Early detection is critical to minimize the impact of hearing loss including speech, cognitive and social development. (43, 59) ▪ Ontario is one of five provinces with universal programs in place. (59) ▪ Transient conductive impairment due to otitis media may be present in up to 33% of all preschool children at any given time. (138)	

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
Education	▪ In the last four years, secondary school graduation rates have decreased such that up to one-quarter of students may not graduate. (45) ▪ Students who leave school prematurely are more likely to be unemployed and to earn less over their working lives. In addition, leavers tend to experience higher levels of early pregnancy and substance abuse and are likely to require various social services. (45) ▪ Grade three EQAO results from 2008–2009 indicated 39%, 32% and 30% of students are below level three (the provincial standard) in reading, writing and mathematics, respectively. (46) ▪ Grades four to seven EQAO results from 2008–2009 indicate 31%, 33% and 37% of students are below level three in reading, writing and math, respectively. (46) ▪ Grade nine EQAO results from 2008–2009 indicate 23% and 62% of students are below level three in academic math and applied math, respectively. (46) ▪ Students who do not meet provincial standards in earlier grades have difficulty catching up as they progress through their schooling. (46) ▪ There has been a general improvement in EQAO results over the last five years. (46)	
G. Oral Health	▪ Dental caries is the single most common chronic childhood disease. It is five times more common than asthma and seven times more common than hay fever. (47) ▪ Early Childhood Decay (ECD) affects significant numbers of young children – between 5% and 60% of the young child population, depending on segment of population surveyed – and is linked to conditions such as failure to thrive, problem eating, poor sleep and poor behaviour. (48) ▪ A child's growth and development may be delayed as a result of iron deficiency associated with severe early childhood caries. (49) ▪ Seventy-five point nine per cent of Ontarians receive fluoridated water. (50) ▪ Most mothers do not go for dental care during pregnancy. Women with the highest household incomes or with education beyond high school were more likely to go to the dentist during their pregnancies. (51) ▪ Families with the lowest SES have the poorest oral health, and those with the highest SES have the best oral health. (52)	▪ ECD often needs to be treated under general anaesthesia. The average cost of treating one Canadian child with this condition ranges from $700–$3,000 (46) ▪ Ontario financed $112,730,000 on dental care expenditures in 2007–08.(49)

HEALTH COMPONENT	SELECTED INFORMATION	ECONOMIC IMPACT
H. Poverty	▪ In 2005, it was estimated that 11% of Canadian families live in poverty. This includes 788,000 children under 18. (55) ▪ Over 478,480 children, one in every six, lives in poverty in Ontario. (53) ▪ Forty-two per cent of food bank users across Ontario are children under the age of 18. (54) ▪ Low wages and poor working conditions are key factors behind Ontario's high rate of child and family poverty. (53) ▪ Forty-seven per cent of children in new immigrant families and 32% of children in visible minority families in Ontario are poor. (55) ▪ Fifteen point two per cent of children live in lone-parent families in Ontario. (56)	
I. Mental Health	▪ Fifteen per cent or 1.2 million Canadian children or youth are affected by mental health issues. (57) ▪ Eighteen per cent of adolescents 15–24 report a mental illness. (20) ▪ Suicide and self-injury were the leading causes of death for youth and adults up to age 24 years in First Nations. (57) ▪ Young people aged 15–24 are more likely to report mental illness and/or substance use disorders than other age groups. (20) ▪ Seventy per cent of adult mental health problems and illnesses have their onset during childhood or adolescence. (57) ▪ Only one in five Canadian children and youth who need mental health services currently receive them. (57) ▪ Forty-four per cent of youth prostitutes become prostitutes to earn money for drugs. (57) ▪ Eating disorders occur in 3.3 % of youth between 15 and 19 years. (57) ▪ Canada is the only G8 nation that does not have a mental health strategy. (57) ▪ Regular physical activity can contribute to improved mental health. (58)	

b) What is the Public Health Burden Associated with Poor Child Health and Developmental Outcomes?

The public health burden associated with poor child health and developmental outcomes is felt across society. Canada ranked 13th of 21 Organisation for Economic Co-operation and Development (OECD) countries in terms of the health and safety of our children and youth, showing there is room for improvement. (59) The *Reaching for the Top* report highlighted that "Canadian children and youth from all socio-economic backgrounds are vulnerable… vulnerability in childhood and youth is not a permanent state…but to be successful, investments need to be made in the right programs and policies." (59)

For public health, this means focusing on child health and development outcomes that can be modified by comprehensive population-based health promotion interventions. Accordingly, the Child Health program is organized around six key topic areas related to child health: positive parenting; breastfeeding; healthy family dynamics; healthy eating, healthy weights and physical activity; growth and development; and oral health. Each of these areas is outlined below.

i) Positive Parenting

Healthy, secure infant attachment is vital to ensuring optimal neurological development and stress response patterns in a child's brain. (60–61) Early infant attachment is not only crucial to infant well-being, it is also associated with a number of lifelong effects, including specific psycho-social and physical developmental outcomes, and the building of future relationships. (61–62)

Beyond developing a healthy attachment to their primary caregiver, The *Encyclopedia on Early Child Development*'s Synthesis on Parenting Skills asserts that "the quality of parenting a child receives is considered the strongest potentially modifiable risk factor that contributes to the development of behavioural and emotional problems in children." (5)

The National Longitudinal Survey of Children and Youth (65) and the Invest in Kids National Survey of Parents of Young Children (66) both looked at various parenting practices including positive/warm interaction, consistent parenting, hostile or ineffective parenting and aversive parenting. Based on these dimensions, positive parenting is defined as positive/warm and consistent parenting interactions with the child (e.g., parents frequently talk, play, praise, laugh and do special things together with their children, have clear and consistent expectations and use non-punitive consequences with regard to child behaviour).

Results from the Invest in Kids survey (66) showed that many parents used sub-optimal parenting strategies when raising their children and their knowledge about child development (particularly social and emotional development), and their confidence in their parenting skills was low.

Positive parenting characteristics are also identified as factors that nurture positive youth outcomes such as helping youth stay connected to parents, school, community as well as friends, develop life skills, make healthy choices and reduce risks to their health and well-being. (67)

ii) Breastfeeding

There is a wealth of epidemiological evidence to recommend breastfeeding as the healthiest choice for mothers and infants, in particular, exclusive breastfeeding for six months and continued breastfeeding for up to two years and beyond with the introduction of nutritionally adequate and safe complementary foods at six months. (68–69) "Human breast milk contains optimal nutrients for infant growth, physical, cognitive and social development and protection against infection (gastrointestinal infections, pneumonia, otitis media, bacteraemia, meningitis and urinary tract infections), sudden infant death syndrome (SIDS) and chronic health conditions such as diabetes, allergies, asthma and obesity." (8–10, 67, 70) More recent studies suggest that the benefits of breastfeeding are not limited to infancy, but also protect against a range of chronic diseases and immune system disorders in late childhood and adulthood, including elevated blood pressure and cholesterol, obesity, Type 1 and 2 Diabetes, cancers and poorer developmental outcomes particularly in preterm infants. (8, 70)

Beyond the health benefits inherent in human breast milk, the act of breastfeeding "stimulates sensory pathways… [and] provides frequent opportunities for skin-to-skin touch and smell stimulation." (60) Breastfeeding best practices, including skin-to-skin contact, keeping the baby near to the mother and cue-based breastfeeding support healthy infant attachment and provide the type of stimulation necessary for newborn and early infant development. (71)

iii) Healthy Family Dynamics

Healthy family dynamics include how family members function together as a unit (how they get along, communicate, share feelings, accept and support one another, work together, make decisions and solve problems) and the quality of the relationship between parents or partners. Poor family functioning and partner relationships are associated with poor child health and development outcomes (e.g., increased risk of injury, emotional and behavioural problems including physical and indirect aggression), poor parenting practices, (66, 72–73) and can compound the impact of low income on children's development. (72, 74–76)

At the farthest end of the spectrum, poor parenting practices and unhealthy family dynamics can result in a parent or guardian abusing a child, either through physical, emotional or sexual abuse, neglect or exposure to domestic violence (itself a form of child abuse). The numerous short- and long-term negative consequences of abuse to the child's health, development and well-being demand upstream strategies to prevent child abuse, in addition to programs and services to assist children, youth and their families when abuse has occurred.

In terms of mental well-being, many parents of young children report substantial depressive symptoms, spousal conflict and time stresses, which are associated with suboptimal parenting behaviours and child health and development outcomes (66).

For new mothers, the postpartum period (immediately following the birth of a baby to 52 weeks) poses an increased risk to mental well-being. The impact of postpartum depression on the mother, child and family has been well researched and is significant. In their Best Practice Guidelines for *Woman Abuse: Screening, Identification and Initial Response* (77), the Registered Nurses' Association of Ontario notes:

> "While women who have suffered from postpartum depression are twice as likely to experience future episodes of depression over a five-year period, infants and children are particularly vulnerable. Untreated postpartum depression can cause impaired maternal-infant interactions and negative perceptions of infant behaviour that have been linked to attachment insecurity and emotional developmental delay. Marital stress, resulting in separation or divorce is also a reported outcome." (77)

iv) Healthy Eating, Healthy Weights and Physical Activity

Childhood obesity and overweight are considered a global public health crisis (78–80) and are risk factors for a number of negative health outcomes during adolescence and adulthood. During adolescence, obese children and youth have a greater likelihood of having risk factors associated with cardiovascular disease (e.g., high blood pressure and cholesterol), as well as increased rates of Type 2 Diabetes, psychosocial stress associated with weight discrimination and asthma. (81–84) Obese children and adolescents are more likely to be obese as adults and be at greater risk for heart disease, stroke, osteoarthritis, hypertension, Type 2 Diabetes, some cancers, asthma and depression. (78, 85–86)

While eating habits and levels of physical activity are behaviours that are learned in childhood, they are major contributors to health in childhood and in later life. (78) Physical activity levels and good nutrition are critical to a child's physical and emotional growth, health and ability to learn. (78) Furthermore, "the importance of a nutritious breakfast is supported by several studies that link improved dietary status and enhanced school performance." (78)

v) Growth and Development

Child growth and development outcomes are age-appropriate and include motor, language, social, emotional and cognitive skills and abilities. Children build on the achievement of developmental milestones, so that they are able to engage in life at a more complex level across each domain. A range of modifiable protective risk factors contributes to young children's development. These include individual characteristics of the children, the families and the neighbourhoods where they live.

The Early Development Instrument (EDI) is one way to measure children's developmental readiness as they begin school (one of the Child Health program's societal outcomes). The EDI checklist assesses five developmental domains: physical health and well-being, language and cognitive development, social competence, emotional maturity, and communication and general knowledge. Children scoring low in one or more EDI domains are considered vulnerable and not ready to learn at school. They are less able to meet the task demands of school and to take advantage of school-based learning opportunities, and are at greater risk of scoring below provincially prescribed standards in later grades. (63)

Poor educational attainment leads to poorer outcomes in all aspects of well-being throughout the life course. This association is only partially explained by the link between educational attainment and effects on adult income, employment and living conditions. (88–90) Furthermore, there are strong intergenerational effects, such that maternal education is a determinant of infant/child mortality, health and educational attainment. (91–92)

vi) Oral Health

Dental caries is the single most common chronic childhood disease. It is five times more common than asthma and seven times more common than hay fever. (47) Early Childhood Decay (ECD) affects significant numbers of young children, depending on the segment of population surveyed, and is linked to conditions such as failure to thrive, problem eating, poor sleep and poor behaviour. (48)

Poor oral hygiene behaviours and poor eating behaviours are learned in childhood and are major contributors to the development of dental caries. Most dental caries can be prevented through a combination of good oral hygiene behaviours and good eating behaviours.

vii) Social Determinants of Health

Research on health status at the individual, as well as community and population level, recognizes socio-economic status as a primary determinant of health. This association begins before birth and continues throughout the life cycle with significant and enduring effects. (93) Poverty impacts access to basic necessities such as quality housing, food and other resources (e.g., quality child care, recreational opportunities) that contribute to positive child health and development outcomes. Poor children are compromised in almost all aspects of their lives and the health effects often impact their lifetime.

Aboriginal children and recent immigrants are more likely than other Canadian children to grow up poor. (67) Furthermore, the effects of the socio-economic gradient on health status remain throughout the life cycle, such that "children who grow up in low socio-economic circumstances but move up the socio-economic ladder during adulthood, are likely to experience physical and mental health problems that remain influenced by their childhood socio-economic status." (61)

Low neighbourhood income is also negatively associated with young children's physical health, in terms of risk of injury and asthma. (75, 95–96) Children living in low-income neighbourhoods have, on average, poorer health outcomes than children living in affluent neighbourhoods in terms of cognitive abilities, motor and social development, behaviour, readiness to learn at school entry and youth literacy. (61, 97–101) Behaviour and physical outcomes of children and youth also appear to be linked to the level of unemployment in neighbourhoods. "The relationship between health measures, behaviour or academic achievement and all levels of socio-economic status is not just a simple difference between the poor and those who are not poor. The gradient is continuous. There is no cut-off point." (61)

In addition to neighbourhood income, the quality of one's community or neighbourhood environment can also affect the health and development potential of its children and youth. Neighbourhood cohesion, the presence of accessible family and child-friendly resources, as well as a safe and clean environment, all contribute to the context in which families live and raise their children.

viii) Child and Youth Mental Well-Being

Mental well-being is seen as the foundation for well-being and effective functioning for an individual and a community. Promoting mental health can also lead to better educational performance, greater productivity, improved relationships within families and safer communities. (109) Therefore, it is important that an underlying principle of mental health promotion be incorporated in the implementation of all Child Health requirements. Strategies to build resilience and social support, strengthen coping skills, address social injustices and other stressors, and foster mentally healthy parenting practices will enhance protective factors and increase conditions (e.g., social cohesion) that promote child, youth and family mental health.

c) What Strategies can Help Reduce the Burden of Poor Health and Developmental Outcomes for Ontario's Children?

Consistent with the Public Health Agency of Canada's (PHAC) definition of a population health approach (110), integrated strategies including health care, prevention, protection, health promotion and action on the broader determinants of health are required across multiple settings.

A comprehensive approach to child health begins with the Reproductive Health program's efforts to improve preconception and prenatal health and prepare future parents for parenthood and breastfeeding. Building on these goals, the Child Health program is organized around six key topics: positive parenting; breastfeeding; healthy family dynamics; healthy eating, healthy weights and physical activity; growth and development; and oral health.

For each of these topic areas, Child Health program Requirements emphasize population-based strategies that build the capacities of and reduce the risks facing parents and families (e.g., parenting practices, decisions and skill around breastfeeding, parental awareness of growth and development milestones and activities to support their achievement, nutrition and physical activity, maternal depression, family functioning). Strategies include health communication and social marketing activities, and behaviour change activities such as the provision of health education resources, group skill-building programs and one-to-one interventions/services.

While these factors can exert a powerful influence on the health and development of children, public health practitioners recognize that health outcomes, as well as health behaviours, parenting and breastfeeding practices and family dynamics are influenced by external socio-economic and psychosocial environment in which an individual lives.

External risk factors include poverty, neighbourhood characteristics, environmental exposures and psychosocial responses to impoverished conditions (e.g., social isolation, violence and depression). Accordingly, the OPHS, along with a number of local, provincial, federal and international reports, reaffirm that strategies to reduce (child) poverty, address the determinants of health and reduce health inequities are fundamental to the work of public health. (104–107) Public health needs to be one of a range of multi-sector partners working and advocating together for poverty reduction and income redistribution strategies. Strategies such as influencing the development and implementation of healthy public policies, community development and/or action, empowerment and capacity-building approaches and creating or enhancing safe and supportive environments for children and their families will all help to address, rather than just treat, the impact of the social determinants of health.

The population health approach achieves its goal of improving the health status of the entire population by considering health determinants and strategies to reduce inequalities in health status between groups. (110) As a result, the Child Health program requires public health practitioners to work with others to address the broader determinants of health and reduce resulting health inequities. (1)

Practical guidance for this work is addressed in *Steps to Equity: Ideas and Strategies for Health Equity in Ontario, 2008–2010*. (111) Activities contribute to the development and implementation of healthy policies, the creation or enhancement of supportive environments that support children and their families, and outreach to priority populations.

Community-based strategies that ensure early identification of and appropriate interventions to address poor child health and development outcomes are another important requirement in the Child Health program.

Successful implementation of the Child Health program requires a blend of universal and targeted public health strategies. In *The Early Years Study: Reversing the Real Brain Drain* (60), McCain and Mustard acknowledge that "targeting measures to support children and families who are at risk or having difficulties is necessary, but it works within a system available to everyone." They also emphasized that "since all families and children in all socio-economic circumstances can benefit from early child development and parenting programs, it is important that programs evolve to be available and accessible to all families in all socio-economic groups." (60) More recently, Charles Pascal, in his report *Our Best Future* (112), reaffirmed that programs and policies "targeted solely to disadvantaged communities actually miss the majority of vulnerable children. A universal approach to program provision, in which dedicated poverty reduction initiatives are embedded, has been found to magnify the social, economic and academic benefits." (112)

The focus on priority populations (1) within a population health approach challenges public health practitioners to make the intervention more accessible, engage in outreach activities and/or to develop specific strategies for priority populations. Priority populations exist where evidence points to health inequities or inequalities in the social determinants of health. For example, HBHC program interactions and referral activities include both universal and targeted high-risk family interventions.

Strategies to build resilience, social support and cohesion, strengthen coping skills, address social injustices and other stressors, and foster mentally healthy parenting practices – need to be embedded in all of these areas to strengthen child, youth and family mental well-being.

d) What are the Provincial Policy Directions, Strategies and Mandates for Enabling all Children to Attain and Sustain Optimal Health and Developmental Potential?

Attaining and sustaining optimal health and developmental potential for children is a shared mandate across provincial ministries. For example, the Ministry of Health Promotion (MHP) *Healthy Ontarians, Healthy Ontario Strategic Framework* document states, "*Our first priority will be our children and youth. Behaviours and attitudes developed in childhood last the rest of our lives. Healthy, active children become healthy, active adults. We will build a generation of healthier Ontarians*," and the Ministry of Children and Youth Services (MCYS) Strategic Framework 2008–2012 *Realizing Potential: Our Children, Our Youth, Our Future* (113) envisions an Ontario where all children and youth have the best opportunity to succeed and reach their full potential.

Government efforts to meet the *Ontario Public Health Standards* (OPHS) Child Health program societal outcomes will have long-term benefits for Ontarians and the province. Provincial government strategies, e.g., the Poverty Reduction Strategy (including the Children in Need of Treatment [CINOT] expansion) assist in achieving the OPHS Child Health program goal. Ministry strategies including the MHP After School Strategy, Injury Prevention Strategy, Smoke Free Ontario Strategy, MCYS Best Start Strategy, 18 Month Strategy and MOHLTC Maternal, Child and Youth Strategy support the work of local health units to address the Reproductive and Child Health program requirements.

Public health units are responsible for the implementation of the *Ontario Public Health Standards* including the requirements for the Child Health program https://www.publichealthontario.ca/portal/server.pt?open=512&objID=1191&PageID=0&cached=true&mode=2. These requirements, along with those mandated through the Reproductive Health program, comprise the Family Health Program Standards. All board of health outcomes are designed to achieve the overall Child Health goal to enable children to attain and sustain optimal health and developmental potential.

Interministerial partnerships and healthy public policies also support local Child Health programs and services. The *Healthy Babies Healthy Children* (HBHC) program is a Reproductive and Child Health requirement designed to give children the best start in life. The Ministry of Children and Youth Services (MCYS) administers the program and local public health units deliver the program components. The Family Health programs are supported by the Ministry of Health Promotion and outcomes achieved through the implementation of all the Child Health program requirements. For information about government strategies targeted to reach students, see the School Health Guidance Document.

Effectively implementing the Child Health program requires collaboration across multiple public health programs e.g., Child Health (including HBHC and Oral Health), Chronic Disease Prevention (including school and workplace site activities), Sexual Health, Environmental Health, Infectious Diseases Prevention and Control and Vaccine Preventable programs (see Section 4 for further discussion on integration).

e) What is the Evidence and Rationale Supporting the Direction?

Scientific breakthroughs in the field of early brain development have shown that vital brain cell connections (synapses) are made in the first five years of life in the parts of the brain that control how a child listens, sees, talks, discovers, reasons and feels. As the child continues to grow, some of these original neural pathways will be strengthened while others will be discarded. This brain-wiring process happens most rapidly during infancy and early childhood, when "the brain is particularly open to biological embedding and to creating the neural pathways that will help to ensure lifelong good health and well-being." (61) While brain development continues after the early years, it builds on these first pathways and biological embedding. (60–61)

This is why early experiences have such a disproportionately large effect on children's futures, despite the fact that there is "considerable developmental flexibility and resiliency, even for children who grow up in adverse conditions." (61)

In Ontario's *Reversing the Real Brain Drain: Early Years Study Final Report*, (60) research from multiple disciplines showed that early investment in children is the best approach to overall health and economic success for our province. This led to the development of a framework for universal early child development and parenting programs in the province. Return on investment research for this framework is showing returns of 5.3–9.0%, netting out the cost of inflation and capital. (114)

It is important to keep in mind that

> "early brain and child development sets a foundation for health, well-being, behaviour and learning, but later development plays a significant role in building on this base. Child and adolescent development can be compared to building a house. The early development phase is zero to about six years and compares to the basement or foundation. Middle childhood (from 6 to 12 years) can be seen as the walls and adolescence as the roof. A good foundation is important to the structure of the whole house, but it still needs the walls and roof." (61)

In fact, the brain continues to undergo significant structural and functional changes during adolescence, when youth must also cope with significant emotional, hormonal and behavioural adjustments. (115)

> "This period of brain reorganization may be particularly vulnerable to disruption by drugs or alcohol and evidence from human and animal research suggests that adolescence is a period of particular vulnerability to adverse effects of alcohol and other drugs on the brain." (115)

Therefore, it is important for child health strategies to extend beyond the early years to promote optimal health and development throughout adolescence.

Section 3. OPHS Child Health Requirements

Introduction

This section provides detailed information about each of the requirements in the Child Health Standard. However, it is important to acknowledge that there are several limitations to this discussion. Firstly, due to the multiple dimensions of this area of health promotion, it is impossible to provide a comprehensive analysis of each requirement. Secondly, relatively few Child Health programs have been formally evaluated and, while there is a considerable amount of "grey literature" in the area of child and family health promotion, there is limited empirical evidence regarding best practice in this area. In particular, we also recognize the best practice related to middle years and youth need to be better developed. Finally, because health units throughout the province are engaged in providing a wide range of programs and services that address these requirements, it was possible to include only a small sample of these programs as examples of "best practice" for each requirement. Consequently, this section represents a first step in a complete explanation of Child Health requirements.

The evergreen nature of this Guidance Document will ensure that new examples of best practices can be added as the literature evolves and health units develop and evaluate new programs.

NOTE: Requirements 2, 3 and 10 (*Oral Health Assessment and Surveillance Protocol*); 12 (*Children in Need of Treatment [CINOT] Program*); 13 (*Preventive Oral Health Services Protocol*); and 14 (*Monitoring of Community Water Fluoride Levels*) are not covered in this Guidance Document because they are covered in the Oral Health Guidance Document. Requirement 9 (*Healthy Babies Healthy Children Program*) is also not covered in this Guidance Document in the same way as other requirements. The links to the Oral Health Guidance Document and the *Healthy Babies Healthy Children Protocol* are provided in this section under each requirement.

a) Assessment and Surveillance

Requirement 1

The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) in the areas of:

- *Positive parenting;*
- *Breastfeeding;*
- *Healthy family dynamics;*
- *Healthy eating, healthy weights and physical activity;*
- *Growth and development; and*
- *Oral health.*

1. National

National data and information sources assist boards of health in monitoring surveillance data for the Child Health program areas. For example:

- *National Longitudinal Survey of Children and Youth [NLSCY] Cycle 7* (or as current) (65) http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=4450&lang=en&db=imdb&adm=8&dis=2

- *Canadian Community Health Survey [CCHS], 2008* (or as current) (7) http://www.statcan.gc.ca/concepts/health-sante/index-eng.htm[1]
- *Canadian Health Measures Survey* (103) http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=5071&lang=en&db=imdb&adm=8&dis=2

Recent *Early Development Instrument* (EDI) reporting and mapping efforts will help develop a national EDI profile. (100) http://www.earlylearning.ubc.ca/resources_reportspubs.htm#EDI

One-time reports also provide Child Health program indicator results e.g., *National Survey of Parents of Young Children* (66) http://www.investinkids.ca/parents/about-us/ourresearch/articletype/articleview/articleid/1258/national-survey-of-parents-of-young-children.aspx and *Ontario Incidence Study of Reported Child Abuse and Neglect [OIS]*, 2003 (117) http://www.phac.arpc.gc.ca/publicat/cissr-ecirc/pdf/cmic_e.pdf

Statistics Canada provides vital statistics (based on annual birth and death certificates issued by Ontario's legislated registry) for child health indicators related to live births, stillbirths and mortality and census data regarding Canadian's demographic, social and economic characteristics, that can then be obtained for smaller geographic areas (e.g., cities and areas within cities) and family data (e.g., demographic and income characteristics of families, including same-sex couples and non-family individuals).

2. Provincial

Core Indicators for Public Health in Ontario http://www.apheo.ca/index.php?pid=55 identifies data sources that also assist boards of health in monitoring child health data over time. The website provides comprehensive information on definitions and characteristics of indicators. Actual data is not provided. Possible core indicators relevant for child health currently include breastfeeding initiation and duration, oral health and hospitalization data.

3. Local

The current *Rapid Risk Factor Surveillance System* (RRFSS) http://www.rrfss.ca/ includes data collection, analysis, reporting and dissemination processes for a limited number of health unit jurisdictions across Ontario. RRFSS provides the opportunity to monitor local child health modules (e.g., breastfeeding, positive parenting).

Local health unit Child Health data is collected through provincial software databases (e.g., *Healthy Babies Healthy Children* [HBHC] Integrated Services for Children Information System [ISCIS], Oral Health Information Support System [OHISS], Immunization Record Information System [IRIS] and Integrated Public Health Information System [iPHIS]). iPHIS captures reportable diseases specified under Requirement 559 of the *Health Protection and Promotion Act* [HPPA].

[1] Public health units receive the "share" file of record-level CCHS data on Ontario respondents who have agreed their data can be shared with provincial health ministries. This is distributed to public health units by the Ministry of Health and Long-Term Care (MOHLTC), Health Analytics Branch. Public health units also receive the Public Use Microdata File (PUMF) of record-level CCHS data, where some of the responses are grouped into categories to ensure anonymity. This arrangement is through Statistics Canada, on the advice of MOHLTC, Health Analytics Branch. CCHS can be used to investigate the health status and health behaviours of men and women of reproductive age.

Ministry of Children and Youth Services (MCYS) community program databases (e.g., Preschool Speech and Language, Infant Hearing, Blind Low Vision and Early Years programs); community hospital data and information (e.g., Ontario Trauma Registry [OTR], emergency room and hospitalization data); and other community Child Health partner data (e.g., Children's Aid Society, Ontario Works, Early Development Instrument [EDI], etc.) also support health unit monitoring activities. EDI results, designed to measure children's developmental readiness as they begin school, provides further local surveillance data. Emergency room and hospitalization data are available through *intelliHEALTH Ontario*. Public health unit staff (e.g., epidemiologists and analysts) may be trained in and have access to *intelliHEALTH Ontario*. This is a web-based application that permits the user to query the Ontario clinical administrative datasets held by the Ministry of Health and Long-Term Care in the Provincial Health Planning DataBase (PHPDB).

Other examples of local level surveillance or surveys to support this requirement include the following:

- *Baby Friendly™ Initiative* (BFI) breastfeeding surveillance (e.g., Peterborough County City Health Unit, Thunder Bay District Health Unit, Algoma Public Health)
- Durham Region Health Department's *Infant Feeding Surveillance System*
- Thunder Bay District Health Unit's *NutriSTEP Implementation and Results of Preschooler Eating and Activity Habits in Thunder Bay District*, 2010 available at www.tbdhu.com (27)
- Toronto's *Perinatal and Child Health Survey* (PCHS), 2003
- Halton's and Waterloo's *Kindergarten Parent Survey* (KPS)
- Halton's *Youth Survey*, 2006

Local child health status reports help boards of health monitor local-level data and indicators over time. Recent examples include *The Health of Toronto's Young Children* series (118) http://www.toronto.ca/health, *A Community Fit for Children: A Focus on Young Children in Waterloo Region, 2nd Edition* (119) http://www.earlyyearsinfo.ca/cms/SearchableDatabase/SearchableDatabase.aspx, and *A Vision for Children in Halton Report Card* (87) http://www.ourkidsnetwork.ca/pdf/Our%20Kids%20Report%20Card.pdf. The reports include a comprehensive approach to reporting Child Health indicators including results from the surveys identified above.

Community partnerships such as those established in Waterloo Region's Community Fit for Children and Halton Our Kids Network (120) can help strengthen the collection and linkages of data, to provide a more comprehensive report on child health that can be shared and used by a broad range of stakeholders in the community.

The OPHS, through the Foundational Standard, (1) directs public health units to identify "priority populations" by surveillance data, epidemiological analysis or other research, including community and other stakeholder consultations. Steps to identifying and describing the evidence of health status and health inequities are described in the document *Why We Need to Work with Priority Populations* and *How this Relates to Population Health* (121) available at http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument

Requirement 2

The board of health shall conduct surveillance of children in schools and refer individuals who may be at risk of poor oral health outcomes in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current) and the Population Health Assessment and Surveillance Protocol, 2008 (or as current).

See Oral Health Guidance Document
http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

Requirement 3

The board of health shall report oral health data elements in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current).

See Oral Health Guidance Document
http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

b) Health Promotion and Policy Development

Requirement 4

The board of health shall work with community partners, using a comprehensive health promotion approach, to influence the development and implementation of healthy policies and the creation or enhancement of supportive environments to address:

- *Positive parenting;*
- *Breastfeeding;*
- *Healthy family dynamics;*
- *Healthy eating, healthy weights and physical activity;*
- *Growth and development; and*
- *Oral health.*

These efforts shall include:

a. Conducting a situational assessment in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current); and

b. Reviewing, adapting and/or providing behaviour change support resources and programs. Footnote 17: This could include, but is not limited to, curriculum support resources (in preschools, schools, etc.), workplace support resources and education and skill-building opportunities.

The first step in developing and implementing healthy polices and creating or enhancing supportive environments to address positive parenting, breastfeeding, healthy family dynamics, healthy eating, healthy weights and physical activity, and growth and development is to conduct a situational assessment. Given the extensive scope of child health, it may be necessary to begin by defining a specific child health issue, setting and/or target populations.

The Health Communication Unit (THCU) provides a comprehensive definition of a situational assessment for the public health context and can be found at www.thcu.ca. Conducting a situational assessment requires the collection of information from a variety of sources, such as reviewing child health status reports and surveillance data, conducting a literature review, performing an environmental scan and consulting with community stakeholders.

Two resources that may be helpful in organizing a situational assessment are Waterloo Region Public Health's Planning Framework and Toronto Public Health's Practice Framework.

A review of existing child health status reports and surveillance data sources outlined in Requirement #1 of this Guidance Document will help to inform the situational assessment. This can include collecting local demographic information about children and families in the community. More challenging, but also important, is the collection of information on child health, family dynamics and parenting practices. This type of information could include breastfeeding initiation, duration and exclusivity rates, diet and physical activity, parenting practices, family functioning, use of community resources, etc. Many health units in Ontario, for example, Halton, Hamilton and Toronto, often collaborate with community partners to produce child health status reports. Middlesex London Health Unit has used *Rapid Risk Factor Surveillance System* data on parents' wants and needs to inform their situational assessment. This data may also help to establish baselines for relevant indicators that can be incorporated into evaluating health promotion efforts.

A literature review of child health in general or a specific child health issue can provide a clearer understanding of the issue itself, appropriate priority populations and/or best-practice strategies and approaches. The Best Start Resource Centre (through Health Nexus) at http://www.beststart.org may be a helpful place to start this review.

An environmental scan or audit can be directed towards assessing the current status of a number of different factors that relate to this requirement. The scan might include the following:

- Community services and programs, their availability, access, barriers, gaps, etc.
- Existing policies, how well they are being implemented and/or received, barriers to and necessary support for full implementation, the level of readiness of the organization to adopt new ways of thinking and working, etc.
- Potential community partners, their mandates, programs and resources. Community partners may include health, social and education partners who provide and/or support child health promotion activities, e.g., primary, secondary and postsecondary institutions, child care providers, Ontario Early Years Centres, family resources and literacy centres, *Community Action Program for Children* (CAPC) programs.

Consultation directly with the target population is another important strategy in assessing needs, interests and priorities in terms of programs, services, supports and resources that will create and/or enhance supportive environments for children, youth and families. Involving the target population up front will also help identify both obstacles and solutions to behaviour change. Consultations can be conducted through telephone and online surveys, focus groups, interviews, etc.

One of the outcomes of a situational assessment will likely be the identification of priority populations. Priority populations may include the following:

- Children in families with risk conditions (e.g., low family income, new to Canada and/or ESL. Low family functioning, poor parenting practices, violence or smoking in the home).
- Children of mothers with low maternal education or maternal depression; families with children living in "at risk" neighbourhoods (e.g., low neighbourhood income and/or social cohesion, safety concerns and limited community resources).
- Children or youth with poor health or development outcomes (e.g., overweight or obese, poor nutrition, low levels of physical activity, smoking, substance use, school dropout, failure to achieve developmental milestones).

Why We Need to Work With Priority Populations and How This Relates to Population Health (121), *Process to Determine Priority Populations* (122) and *Process to Determine Priority Neighbourhoods* (123) may be helpful resources (see http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument)

Once the situational assessment has been completed, the next step is to develop and implement healthy policies that contribute to the creation and/or enhancement of supportive environments. Reviewing, adapting or providing behaviour change support resources and programs and the development of health communication strategies are next steps. The THCU *Health Planner* tool found at http://www.thcu.ca can assist with this planning, including goal and objective setting and strategy decisions.

Given the significant number of partner agencies that share a common mandate related to children, youth and families, it is critical that public health work with community partners to influence the development of policies and the creation of supportive environments. Best practice supports a healthy communities approach that involves a broad-based, multi-sector partnership strategy where local networks of community organizations, institutions and businesses work together to identify and respond to local needs or problems. This includes community outreach, community development, empowerment and capacity-building approaches. A number of resources are available to assist health units to work with community partners:

- The Best Start Resource Centre *How to Work With Coalitions Guide* (http://www.beststart.org) can help health units involve community partners in developing safe and supportive environments for children and their families.
- Health Nexus (http://www.healthnexus.ca/) provides resources to support community capacity building through community engagement, community action, building effective coalitions and other helpful health promotion strategies.
- The *CAPC/CPNP National Projects Fund Directory* (http://www.phac-aspc.gc.ca/dca-dea/programs-mes/npf_projects-eng.php) provides an online listing of National Projects Fund projects, many of which address action on social determinants of health issues including family violence, food security and special mental health needs of children.

These collaborative health promotion activities can aim to effect change at several different levels: local, provincial or federal. They can address broad issues that impact the health of children, youth and families (such as the broader social and/or environmental determinants of health), or focus on specific areas (such as the program's six key topics and related supports and services). Examples of healthy public policy and supportive environment activities at each of these levels are provided below.

a) High-Level Activities

- Participating in local, provincial and/or federal advocacy strategies related to child and family poverty, food security, housing, etc.
- Promoting and advocating for legislative changes on issues such as banning corporal punishment, increasing maternity and parental leave benefits, or limited marketing to children, etc.
- Address accessibility issues, such as access to child care, physical activity opportunities, settlement and immigration services, employment support, child health and mental health services, primary care, etc.

- Promoting the importance of children in the community through local efforts that support the United Nations *Convention on the Rights of the Child*. This can include the following:
  - Supporting the identification of a local child advocate
  - Participating in a local children's network
  - Development of a City Plan that includes the identification of child health priorities (e.g., City of London)
  - Establishment of a local Children's Charter (e.g., *Niagara Children's Charter of Rights*)
  - Promotion of the Child Friendly Cities Initiative, a framework developed by UNICEF as a means of working with regional and municipal governments on child health policy initiatives (http://www.childfriendlycities.org)

b) Local-Level Activities

- Participate in local community development strategies that build neighbourhood cohesion. Information gathered through the National Longitudinal Survey of Children and Youth's Neighbourhood Scale shows that neighbourhood cohesion can support how well children are socialized. It also demonstrates that children living in safe, cohesive communities have a lower risk of emotional, behavioural, motor, social and verbal programs, as well as a lower risk of injury than children living in neighbourhoods with safety and low levels of cohesion. (73–75, 100–101)
- Support strategies and policies that enhance safe and clean physical environments for children and families (e.g., building safe playgrounds, organizing regular park cleanup days, reducing the risk of exposure to environmental toxins).
- Advocate for community resources that support children, youth and families, such as family violence prevention programs, settlement services, mental health services, access to physical activity facilities and programs. Neighbourhood Resources Data shows that children in communities with higher levels of resources, particularly early childhood development resources, do better in terms of their developmental progress at school entry. (61)

(i) Positive Parenting

- Offer Invest in Kids high-risk home visiting training. (116)
- Develop a policy similar to Toronto Public Health's Physical Punishment Policy, which they also advocate for and work to support external partner agencies in adopting these policies through training, lessons learned, etc.
- Build an internal and external community of practice with community partners to decide jointly what policies and guidelines they will promote related to positive parenting. For example, Niagara, Halton and Thunder Bay Health Units the *Triple P – Positive Parenting Program*® http://www1.triplep.net is consistently promoted by Niagara, Halton and Thunder Bay public health units through parenting classes and the Ontario Early Years Centres in their communities.
- Promote family friendly workplaces that allow parents some flexibility when they need it. Options include flexible work arrangements, unconditional paid leave days, use of employee payroll benefits and workplace early child development and parenting centres. For example, Thunder Bay District Health Unit (2006) has a corporate policy and procedure in place to promote flexible work schedules for employees. The purpose is to accommodate family needs, leisure activities and other obligations, and at the same time provide services based on community needs.
- Explore the establishment of local workplaces as a base for early child development and parenting centres. See some helpful resources for workplace strategies under breastfeeding-friendly workplaces below.

(ii) Breastfeeding

- Implement the Registered Nurses' Association of Ontario's (RNAO) (http://www.rnao.org) *Breastfeeding Best Practice Guidelines for Nurses* (e.g., implemented by Niagara). (125)
- The *Baby Friendly™ Initiative in Community Health Services: A Canadian Implementation Guide* (9) http://www.breastfeedingcanada.ca/html/bfi.html is an example of a comprehensive set of gold standard policies, services and best practices developed to create a supportive environment for breastfeeding in community health services. Child and Reproductive Health programs may work together to implement all of The Seven Point Plan outlined in the Guide in order for the health unit to be assessed and receive a Baby Friendly™ designation. Health Units and/or community partners who work with breastfeeding mothers and their families may also choose to work on specific components within the Guide. This work will be beneficial in and of itself and may be a start on the road towards designation. Information and guidance on implementing the guide is available from Thunder Bay District Health Unit, Peterborough County-City Health Unit, Peel Public Health and Algoma Public Health. All have achieved their Baby Friendly™ designation.
- Promote the Ontario Public Health Association (OPHA) Breastfeeding Promotion Workgroup's breastfeeding information and activity kit for secondary school teachers. (126) (link to Reproductive Health)
- Use the Best Start Resource Centre's http://www.beststart.org resources to support the work of physicians regarding alcohol use while breastfeeding.
- Establish and promote breastfeeding-friendly workplaces. Strategies directed towards creating healthy, supportive workplace environments contribute to the goals of the Child Health program, as well as other OPHS requirements (e.g., Chronic Disease Prevention, Prevention of Injury and Substance Misuse, Reproductive Health). Therefore, an integrated approach across program areas is recommended for workplace health strategies. Health units are encouraged to refer to the Health Communication Unit planner for workplace interventions http://www.thcu.ca/workplace/sat/index.cfm. Another helpful resource regarding workplaces may be the Best Start Resource Centre's http://www.beststart.org *How-To Build Partnerships with Workplaces* guide. Although examples in this Guide focus on reproductive health issues, the best practices and strategies are applicable to the Child Health program. Best Start resources are also available for employers/workplaces to support family friendly policies.
- Thunder Bay District Health Unit developed a corporate policy and procedures to support employees' continuation of breastfeeding upon their return to work following maternity leave. The policy encourages and supports management to work with employees to find suitable work hours, breaks and assignments that support the continuation of breastfeeding. Thunder Bay District Health Unit also has a corporate policy recognizing that breast milk is the optimal food for healthy growth and development of infants. Their policy supports the implementation of the *Baby Friendly™ Initiative in Community Health Services* and their successful attempt to receive the Baby Friendly™ designation, and applies to all employees, volunteers and students.
- Toronto Public Health's restaurant program assesses whether a site will be considered breastfeeding friendly.

(iii) Healthy Family Dynamics

- Implement the Registered Nurses' Association of Ontario's (RNAO) (http://www.rnao.org) *Woman Abuse: Screening, Identification and Initial Response* guideline (implemented by Thunder Bay, Toronto) and *Interventions for Postpartum Depression* guideline (implemented by Toronto) and *Client Centred Care* guideline(Niagara). (125)
- Make use of the Best Start Resource Centre's (http://www.beststart.org) *How-To Build Partnerships with Physicians* guide. Although examples in this guide focus on reproductive health issues, the best practices and strategies are applicable to the Child Health program. Best Start also has resources to support the work of physicians regarding perinatal mood disorders.

- Implement the *Routine Universal Comprehensive Screening* (RUCS) Protocol, developed through the Middlesex-London Health Unit's Task Force on the Health Effects of Woman Abuse. The protocol is designed to provide early identification of woman abuse, assessment and documentation of the woman's health status and referral to appropriate community services. Many health units are implementing this protocol, including, for example, Middlesex-London and Waterloo.
- Develop and implement policies and protocols for postpartum depression screening. Algoma Public Health and Oxford County Public Health can provide examples.

(iv) Healthy Eating, Healthy Weights and Physical Activity

- Implement the Registered Nurses' Association of Ontario's (RNAO) http://www.rnao.org *Primary Prevention of Childhood Obesity* guideline (implemented by Toronto and Niagara).
- Make use of the Best Start Resource Centre's http://www.beststart.org resources for providers working with young children related to physical activity and healthy eating). (128)
- Promote and refer clients to EatRight Ontario, http://www.ontario.ca/eatright or call 1-877-510-5102, which offers healthy eating resources and advice by Registered Dietitians.
- Promote resources from the Nutrition Resource Centre (NRC) at http://www.nutritionrc.ca or order online at ServiceOntario Publications https://www.publications.serviceontario.ca. The NRC site provides healthy eating resources and advice for caregivers of children aged three to five and six to eight.
- Promote Parks and Recreation Ontario *Every One Plays*, which offers affordable access to recreation. (94)
- Participate in the development of Healthy School policies, including the provision of nutritious snacks and meals in daycares and schools, banning unhealthy food in vending machines, walk-to-school policies.
- Engage in activities to enhance local school's physical environment, such as playground design that promotes physically active play and provide resources on games to play.

(v) Growth and Development

- Implement the Registered Nurses' Association of Ontario's (RNAO) http://www.rnao.org *Enhancing Healthy Adolescent Development* guideline (implemented by Thunder Bay, Toronto and Niagara).
- Develop policies linking HBHC early ID strategies with the work of the Child Health program requirements.
- Promote and disseminate Best Start Resource Centre's (http://www.beststart.org) resources for early learning in child care settings.
- Provide or participate in the development of school curriculum resources that can promote healthy growth and development, positive parenting, breastfeeding and healthy family dynamics. An example is Niagara Health Unit's secondary school curriculum package for the Child and Reproductive Health programs.
- Engage in activities to enhance the school's social environment and promote healthy emotional and social development; include anti-bullying initiatives and the *Roots of Empathy* program http://www.rootsofempathy.org/
- Make use of the Best Start Resource Centre's http://www.beststart.org resources to support the work of physicians regarding healthy child development with a focus on the early years, neuroscience and implications for clinical practice, which may be helpful. Please also note their resource *How-To Build Partnerships with Physicians*, mentioned under Healthy Family Dynamics, above.
- Participate in the development of a middle childhood strategy, as Toronto Public Health has with the creation of the *City of Toronto Middle Childhood Strategy Framework*. This strategy/framework will guide policy development, service planning and management, investment priorities, program design and delivery and regulatory frameworks for children 6 to 12 years of age.

(vi) Other

Further areas for policy consideration include, e.g., environmental risks for children. Developing children can experience harmful environmental exposures from infancy well into their childhood and adolescent years. The following sites support environmental risk data and evidence-informed practices: Canadian Partnership for Children's Health & Environment (102) http://healthyenvironmentforkids.ca and Best Start Resource Centre (108) http://beststart.org/resources/env_action/pdf/envirostrategies.pdf

Broader policies that have an impact on children, youth and families:

- Put in place policies and staff training that support the principles of access, equity, diversity and reducing health inequalities (e.g., Toronto Public Health Practice Framework and Assuring Access and Equity through Diversity Competence education).
- Implement the Registered Nurses' Association of Ontario's (www.rnao.org) *Client Centered Care* best-practice guidelines. (125)
- Promote a comprehensive school health framework such as the *Ontario Foundations for a Healthy School*. This framework identified a range of health issues relevant for child health and suggests activities that would support a comprehensive approach. For more information, consult the School Health Guidance Document.
- Strengthen integration with reproductive health promotion activities, which share many of the same goals as the child health activities, particularly in the area of breastfeeding promotion and preparation for parenthood.

Evaluation of health unit and/or community partner policies and supportive environment activities directed to promote child health should include both process indicators and outcome indicators.

Examples of process indicators:

- Number of policies, staff practices related to implementation of the policies
- Level of awareness of community partners and/or parents
- Degree of community involvement
- Degree of youth or parent engagement
- Nature and amount of media coverage
- Parent, youth or child participation
- Parent, youth or child satisfaction

Examples of outcome indicators:

- Changes in baseline indicators for health outcomes, behaviours, knowledge and/or attitudes
- Impact on priority populations such as access to services and health inequality indicators

Potential Child Health program partners for policy development and the creation of supportive environments:

1. National

Breastfeeding Committee for Canada, Canadian Mental Health Association, National Clearinghouse on Family Violence http://www.phac-aspc.gc.ca/ncfv-cnivf/familyviolence/resources_e.html, government services, etc.

2. Provincial

Best Start Resource Centre, The Health Communications Unit, government services, Ministry of Children and Youth Services, Ministry of Education, etc.

3. Local

CAPC community sites, Ontario Early Years Centres, daycares, hospitals, workplaces, private corporations, primary care providers, peer support programs, Family Health Teams, La Leche League, CAS, (Regional) MCYS bodies, social services, health services, police services, recreation services, libraries, family resource centres, daycares, schools and school boards, municipal government services, food banks and soup kitchens, settlement services, emergency shelters, workplaces/private corporations.

Potential public health Child Health program linkages:

Reproductive Health, Chronic Disease Prevention (including school and workplace site activities), Sexual Health and Vaccine Preventable Diseases.

Requirement 5

The board of health shall increase public awareness of:

- *Positive parenting;*
- *Breastfeeding;*
- *Healthy family dynamics;*
- *Healthy eating, healthy weights and physical activity;*
- *Growth and development; and*
- *Oral health.*

These efforts shall include:

a. Adapting and/or supplementing national and provincial health communications strategies; and/or

b. Developing and implementing regional/local communications strategies.

A social marketing approach is key to the development of any communication strategy to support public health initiatives focused on child health. French and Blair-Stevens have defined health-related social marketing as "the systematic application of marketing concepts and techniques to achieve specific behavioural goals, to improve health and reduce health inequalities." (129) The National Social Marketing Centre in the United Kingdom provides valuable tools and models to support social marketing practice http://www.nsmcentre.org.uk/component/remository/NSMC-Publications/Its-Our-Health-(Full-report)/ (129)

The situational assessment can also help determine the most appropriate communication channel(s) to use. Clanz, Rimer and Viswanath (130) define communication channels as the means by which messages are spread, including mass media, interpersonal channels and electronic communication. Some examples are as follows:

- Paid and earned media channels (e.g., radio, television, print media, public service announcements)
- Interpersonal channels (e.g., health fairs, presentations, storytelling, community champions, theatre)
- Electronic communication channels (e.g., websites, online messaging, compact discs)

The situational assessment will also assist in identifying relevant communication strategies that exist at the federal, provincial and local level, including their target audiences and priority populations, key messages, medium(s) and timing, the agency responsible and whether or not the campaign has been evaluated. To best achieve resource efficiencies, adapt and/or supplement relevant provincial and federal communication strategies whenever possible, capitalize on related promotional events occurring nationally, provincially or in your community (e.g., Family Day, Day of the Child, Child Abuse Awareness Month), take full advantage of available provincial resources such as those produced by the Best Start Resource Centre http://www.beststart.org and work collaboratively with community partners and/or other health units or regional partners.

As with other interventions, a targeted situational assessment (see Requirement 4a) is a good first step for planning communications strategies. Extra attention during the planning process must be given to identify specific target audiences and priority populations. The tools *Process to Determine Priority Populations* (122) http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument and *Process to Determine Priority Neighbourhoods* (123) http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument can help. Once identified, further segment the audience(s) to allow for the development of a more customer-centred and specific approach.

Remember that communications strategies are just one part of a comprehensive health promotion approach. Therefore, activities within this requirement must be integrated with related policy and program interventions in order to increase effectiveness. Policies between health units and community partners may be developed in areas such as service agreements, operational policies and programming policies to implement community-wide communications strategies.

An example of nesting communications strategies within related policy and programs is evident in the *Baby Friendly™ Initiative*. It includes promotional and awareness-raising materials (e.g., floor and window decals, posters), educational materials and skill-building programs to support the mechanics of breastfeeding for nursing mothers, advocacy for healthy public policy (e.g., action around marketing of baby formula) and the creation of supportive environments (e.g., promoting breastfeeding friendly communities, agencies, institutions and workplaces agencies).

Another example would be to build on Health Canada's communication materials related to Sudden Infant Death Syndrome *Sudden Infant Death Syndrome (SIDS) – Healthy Babies*. While the incidence of SIDS in Ontario is low, it remains a significant public health concern due to its devastating outcome. Although the specific causes of SIDS remain unknown, public health can augment efforts to educate parents about ways to protect their babies from certain risk factors linked to SIDS. A local policy or procedure to support Health Canada's communication materials may be helpful. Key messages for parents (e.g., putting babies on their backs to sleep, no smoking around babies, avoid putting too many clothes or covers on babies, choose to breastfeed) can be incorporated into communications activities and parenting group sessions. These can also be supported through skill-building and policy efforts that promote breastfeeding and smoking prevention and cessation strategies.

Provincially, The Health Communication Unit http://www.thcu.ca/ has a number of resources, guides, case studies, resource inventories, toolkits, checklists, workshops, events and consultation services to help with health communication and other health promotion strategies.

Helpful resources from the Best Start Resource Centre include *A Checklist for the Development of Resources on Preconception, Prenatal and Child Health* (131) *Health Fairs and Preconception, Prenatal and Child Health* (132) and *Keys to a Successful Alcohol and Pregnancy Communication Campaign* (2003).

Consistency of key messages, a continuum of similar messages across age groups (e.g., anti-bullying for early and middle years and youth) and branding or the development of a consistent look across related messages can increase credibility, clarity and public awareness. Linking with other health unit programs is essential to communicate a consistent message and make the best use of resources. For example, the Child Health and Chronic Disease Prevention programs address healthy eating, healthy weights and physical activity across various age groups, while the Sexual Health and Family Health Programs promote mutually respectful relationships and "love is not hurtful" messaging. Potential areas for further integration across OPHS requirements are identified in Section 4.

The following are examples of communications strategies intended for various target audiences, using a number of approaches and addressing a variety of topics related to the six key areas within the Child Health program.

1. International

- United Kingdom's *Change4Life* (147) http://www.change4life.co.uk society-wide campaign aims to improve children's diets and levels of activity. In addition to television ads and promotional print materials, there are materials to engage local supporters (e.g., regular email newsletters including launch dates and toolkits related to seven official themes: Breakfast4Life, Swim4Life, Walk4Life, Bike4Life, Play4Life, Cook4Life and Dance4Life). The next phase of the campaign, We're In, works with regional and local media partners to showcase families who are joining in, making changes and having fun with activities going on across the country.
- United Kingdom's *5 A DAY http://www.nhs.uk/livewell/5aday/pages/5adayhome.aspx/* highlights the health benefits of getting five 80-gram portions of fruit and vegetables every day. The campaign includes promotional materials and media ads, an interactive website, fun and games for kids, recipes and trivia tips, community stories and a school strategy that includes support materials and the delivery of a free piece of fruit or vegetable daily to four- to six-year-old children in schools.

- United Kingdom's *Baby LifeCheck* (133) http://www.babylifecheck.co.uk is a free online service designed to provide information and advice to first-time parents and caregivers of babies aged five to eight months. An interactive website guides parents through a set of simple multiple-choice questions, then offers advice and reassurance on making the best decisions for their child. It covers a range of topics including development, talking, playing, feeding, healthy teeth, safety, sleep routine, immunizations and being a parent. The site was created in consultation with and tested on parents.
- United State's *Caring for Every Child's Mental Health* (134) http://mentalhealth.samhsa.gov/ is a national public information and education campaign intended to help families, educators, health care providers and youth recognize mental health problems and to seek or recommend appropriate services, as well as to reduce the stigma associated with mental health problems. Since its inception in 1994, the campaign has evolved into a full-scale social marketing effort that includes a national communications coalition, print materials, communications training to support local communications strategies, onsite media support and media outreach.
- *Period of PURPLE Crying*® (156) program is an evidence-based prevention program by the National Center on Shaken Baby Syndrome (NCSBS) (2007). The program educates parents and caregivers about characteristics of crying in normal infants that can sometimes lead to overwhelming frustration, shaking or abuse. A booklet and DVD for parents of newborns has been developed based on over two decades of research into normal infant crying. The program has also been evaluated through over three years of randomized controlled trials in Seattle, Washington and Vancouver, B.C., involving over 4,400 parents and spanning pediatric practices, maternity departments, pre-natal classes and nurse home visitor programs. The program is available in nine languages and includes closed captioning. An online training centre to support program implementation is also available. All resources are available from http://www.dontshake.org/sbs.php?topNavID=4&subNavID=32

2. National

Many health units adapt national campaigns to their respective communities. Listed below are some campaign examples:

- Health Canada's *Back to Sleep* SIDS. Available at http://www.phac-aspc.gc.ca/dca-dea/publications/pdf/sids_poster_e.pdf posters
- Society of Obstetricians and Gynaecologists of Canada (SOGC) Sexuality and U e-health project, providing credible, up-to-date sexual health information to teens, adults, parents, teachers and health care professionals. Available at http://www.sexualityandu.ca
- Public Health Agency of Canada *Breastfeeding Friendly Anytime Anywhere* resources. Available at http://www.phac-aspc.gc.ca/dca-dea/prenatal/pdf/ENG%20Colour%2010%20Valuable%20Tips.pdf
- Infant Feeding Action Coalition (INFACT) of Canada (135) has a number of breastfeeding promotional materials, including an annual campaign kit to promote World Breastfeeding Week in your community or health facility. Available at http://www.infactcanada.ca/
- The Psychology Foundation of Canada (127) *Parenting for Life* parenting resources at http://www.psychologyfoundation.org/order_pfl.php

3. Provincial

- Best Start Resource Centre http://www.beststart.org provincial materials can be modified for local use and include resources on abuse and pregnancy; breastfeeding; healthy eating and physical activity during the early years; postpartum mood disorders; early child development; shaken baby syndrome; and family friendly resources for workplaces.
- Invest in Kids (116) http://www.investinkids.ca offers a variety of resources for professionals and parents that can be used by Health Units to develop communication strategies.
- EatRight Ontario http://www.ontario.ca/eatright offers healthy eating resources and advice provided by Registered Dietitians.
- Ministry of Children and Youth Services program resources for Preschool Speech and Language, Infant Hearing, Blind Low Vision and Ontario Early Years Centres.

4. Local

(i) Positive Parenting

- Algoma Public Health's youth website (UrLife.ca) that attempts to reach youth with relevant health information that is important to them. The website covers topics such as relationships, sexually transmitted infections including HIV, where to go for services, drug and substance use, tattooing and piercing.
- Toronto Public Health's *Comfort, Play, Teach* is a social marketing campaign developed with ECD funding. It promotes the positive parenting practices of comforting, playing and teaching your child. There is a specific poster for each practice. Posters depict a range of mothers, fathers and grandparents and are available in a number of different languages.
- Toronto Public Health's *Spanking Hurts More Than You Think* campaign promotes positive discipline practices for parents of young children. The campaign includes posters and radio and television ads.
- Fathering Groups Pilot Project Evaluation from public health services in the City of Hamilton describes a pilot project directed specifically towards fathers as parents. The long-term goal of the program was to reduce child abuse and enhance child development by supporting positive parenting strategies.
- Niagara Region Public Health Department's *Be a Great Parent* is a positive parenting communication campaign that focuses primarily on parenting styles and aims to increase awareness about the importance of establishing effective communication patterns, providing guidance and developing supportive relationships with children. The campaign is targeted to parents, grandparents and caregivers of children – birth to 18 years of age. It supports parents by increasing awareness about parenting resources available through the health unit and within Niagara, increasing knowledge about child development and effective parenting by communicating positive parenting messages. Campaign products include a website portal (beagreatparent.ca), posters, magnets and brochures. http://www.beagreatparent.ca
- Niagara Region Public Health Department's Parenting Resource Guides are designed to support parents to make the best choices for themselves and their families. Research shows that the most effective approach to raising healthy, competent children is to concentrate on building developmental assets. These assets form the foundation children need to make healthy choices and to succeed in life. The more assets children have, the stronger their foundation will be. Focusing on children's strengths will help guide them from infancy into adulthood. Birth–12 Months, 18 Months–3 Years and 14–19 Age Years guides are available on the health unit website at http://www.niagararegion.ca/living/health_wellness/parenting/Parenting-Resource-Guide.aspx

(ii) Breastfeeding

- Best Start Resource Centre has a website with a chart of posters and displays promoting breastfeeding that have been developed by various health departments, as well as links to international and national breastfeeding resources. (128) The site is available at http://www.beststart.org/resources/breastfeeding/pdf/Breastfeeding-PostersandDisplays.pdf.

  An additional local evaluated campaign not included on the Best Start website is the Region of Waterloo Public Health's *Put Breastfeeding on the Menu*. (136) This evaluated campaign was initiated to increase awareness of the rights and needs of breastfeeding mothers and to encourage restaurant owners and managers to take steps to become more welcoming to breastfeeding mothers and their families.

(iii) Healthy Family Dynamics

- *Neighbours, Friends and Families* (NFF) http://www.neighboursfriendsandfamilies.ca is an example of a provincial campaign to raise awareness of the signs of woman abuse, so people who are close to an at-risk woman or an abusive man can help. Algoma Public Health is a partner with The Algoma Council on Domestic Violence to implement this program across the Algoma district.

(iv) Healthy Eating, Healthy Weights and Physical Activity

- Toronto Public Health and Peel Public Health ran healthy eating campaigns with the key message: "Kids are picky eaters so let them choose."
- Toronto Public Health's *Your Kids Are Listening* campaign encourages parents to be positive role models for their young children. A series of three posters helps parents to understand that what they say and do in front of their children can affect their attitudes about exercise, healthy eating and body image.

For information on campaigns related to healthy eating, healthy weights or physical activity, see the Healthy Eating, Physical Activity and Healthy Weights Guidance Document, e.g., Best Start Resource Centre, *Have a Ball Together* media campaign focusing on parents and caregivers of children two to five years of age. (64)

(v) Growth and Development

- Middlesex-London Health Unit, Elgin-St. Thomas Public Health and Oxford County Public Health have formed a tri-county partnership to conduct the *Let's Grow* program. *Let's Grow* is a mail-out package designed to provide parenting support information to all families with children from birth to five years of age. The package consists of a series of 12 user-friendly newsletters, each accompanied by supplemental inserts on various topics, which correspond to the child's developmental stages. A three-phase evaluation of the program has been conducted and includes recommendations for the enrolment process, further improvements to *Let's Grow* and ways to enhance its utility among the general and priority populations.
- Toronto Public Health, in partnership with Toronto Preschool Speech and Language Services, developed the *Don't Play Wait and See* campaign to promote early identification, particularly for two- to three-year-olds.
- Niagara Region Public Health Department has produced *Building Your Child's Emotional Health* web and print materials.
- Region of Waterloo Public Health runs evaluated child health fairs that are targeted to specific audiences such as multicultural and rural communities.

(vi) Oral Health

To coincide with the CINOT expansion, the Ministry of Health Promotion (MHP) produced and delivered posters and information cards in 20 different languages to the 36 public health units. To date, more than 100,000 posters and just over one million information cards have been printed and continue to be ordered through ServiceOntario.

Public health units were encouraged to contact the Ministry's Communications Branch so they could work together to adapt these CINOT materials for increased exposure within their communities. The Ministry materials have been redesigned locally into interior bus shelter ads; shopping mall advertising posters; display banners (Niagara); leisure guidebook ads; tear-away pads; business cards (Halton Region); newspaper ads (Northwestern); newsletters (Haldimand-Norfolk); transit and billboard (Brant County) and websites (including MHP's website). EatRight Ontario also includes information on oral health materials available through ServiceOntario.

Evaluation of communications strategies needs to go beyond process outcomes e.g., numbers of posters, television commercial air time, etc. to include assessment of short- and longer-term outcomes. Health units should ensure their goals and outcomes are clear so that their effectiveness can be assessed. For example, is the goal of a breastfeeding communications strategy to change behaviours of breastfeeding women such as feeding on demand and skin-to-skin contact, to promote breastfeeding initiation and duration rates for new mothers, to simply create public awareness and/or shift norms about the benefits of breastfeeding?

Evaluations should also assess whether or not the message is reaching the identified priority populations, which communication channels worked most effectively and how they can be better improved and tailored to meet the needs and capacities of these populations. Broad-based communication strategies may not be suitable for all audiences and alternative methods of communicating key messages may need to be developed. Situational assessment data can assist to determine the best ways of reaching these populations.

Potential Child Health program communications strategy partners:

1. National

Breastfeeding Committee of Canada, Canadian Pediatric Society, Health Canada, Canadian Mental Health Association, SIDS Canada, National Centre on Shaken Baby Syndrome, Infant Feeding Action Coalition (INFACT) and World Alliance for Breastfeeding Action (WABA)

2. Provincial

Best Start Resource Centre, Invest in Kids, The Health Communication Unit, media and marketing partners, Ontario Physical Health and Education Association [OPHEA].

3. Local

Family Health Teams, workplaces, primary care providers, media/marketing partners, Ontario Early Years Centres, local and regional 0–6 and 0–18 partners, target and priority populations (e.g., youth, parents, children, low-income teen mothers, parents new to Canada), local heroes/peer leaders etc.

Potential public health program linkages for Child Health communications strategies:

Reproductive Health, Injury Prevention, Chronic Disease Prevention (including school and workplace site activities), Sexual Health, Vaccine Preventable Diseases.

Requirement 6

The board of health shall provide, in collaboration with community partners, parenting programs, services and supports, which include:
a. Consultation, assessment and referral; and
b. Group sessions.

Opportunities for consultation, assessment and referral are relevant when health unit staff and/or community partners interact with parents of children and youth.

A situational assessment will inform the development of programs and services to meet community needs. For example, the objective of an environmental scan may be to examine the internal organization and external community environment for available resources, political and legal trends and potential threats, opportunities and changes that will impact services.

An environmental scan may also reveal that the capacity of internal staff and external partners should be reviewed (e.g., budget, staff, training, physical space, promotional materials, etc.) to ensure their ability to provide the individual consultation, assessments and referrals.

Collaboratively developing a community of practice with external partners and with parents, including those from priority populations, will ensure parenting programs have shared values and principles. (139). The *Triple P – Positive Parenting Program*® http://www1.triplep.net is an example of a community of practice.

Protocols between health units and community partners may be developed regarding the delivery of individual consultations, assessments, referrals and parenting programs. This may include service agreements, operational policies, programming policies and protocols for the sharing of information.

Health units should also consider the eligibility criteria for their programs, services and supports and have a policy and process in place for ensuring access and equity.

Promotional information regarding programs, services and supports targeting parents and community partners needs to be made available. Priority populations should also have access to appropriate promotional information.

Evaluation of consultation, assessment and referral strategies needs to take into account the primary goals and objectives. Some examples of goals or objectives might include coordinated, effective, integrated breastfeeding services and supports; increased access to appropriate parenting supports and services; and increased use of needs-based services for women at risk for postpartum depression.

Parenting group session evaluations will include process indicators as well as relevant outcome indicators such as change in attitudes, knowledge and skill, and behaviour related to parenting practices. This includes knowledge of healthy growth and development, health promoting practices for parents and/or their children (e.g., healthy eating, promotion of physical activity); breastfeeding; strengthening of family relationships; and the development of social supports. Evaluation activities should also assess who is accessing and benefiting from the intervention and who is not, particularly in relation to the identified priority population(s). Evaluation outcomes should result in recommendations to improve outreach and tailor interventions to improve effectiveness, particularly for priority populations, as this will result in improved overall health outcomes. A summary of modifying public health interventions to meet the unique needs and capacities of priority populations is included in *Why We Need to Work with Priority Populations and How this Relates to Population Health*. (121) http://www.chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument

The following are examples of health unit consultation, assessment and referral activities:

a) Well-baby &/or Early ID Clinics & Warm Telephone Lines

Many health units have well-baby clinics, breastfeeding clinics and early identification clinics as well as telephone lines that provide consultation and referrals to clients and community agencies.

- Middlesex-London Health Unit has had well-baby clinics that were evaluated by PHRED and are considered a best practice. Clinics include individual consultations, access to group sessions and peer-to-peer support. Topics covered include growth and development, positive parenting, breastfeeding and general health promotion including healthy eating.

b) One-to-One Interventions

- Niagara Region Public Health Department's *Seeing is Believing* program is based on the STEEP© (Steps Toward Effective, Enjoyable Parenting) program developed by Drs. Byron Egeland and Martha Farrell Erickson, University of Minnesota. The program supports and promotes the development of secure attachment between parents and their infants/children through the use of videotaping strategies, active parent engagement with the infant/child, reading and responding to infant/child cues and other skill-building strategies to increase parental confidence and competence.

c) Assessment Tools

Tools to assess parents' mental well-being and parenting competence may assist health unit staff in their work. Examples of tools to assess adult and adolescent mental well-being are below:

- Toronto Public Health's use of the *Mental Wellness Assessment for Adult/Adolescent* and *User Guidelines* (141) incorporated into programming at Toronto Public Health and the *Warwick-Edinburgh Mental Well-being Scale* and *User Guide-Version 1*, (142–143) along with supporting research (144) and Abidin's *Parenting Stress Index*. (145)

Research on the assessment of parenting capacity from the Centre for Parenting and Research of Australia (146) may be helpful in assessing parenting competence.

Providing families with advice and support to enhance parenting skills strengthens the most powerful teaching relationship there is between parent and child. Strategies are needed to help all families attain the knowledge, confidence, skills and emotional well-being necessary for healthy infant attachment and positive parenting. Parenting programs, services and supports for this requirement include group sessions. Initiatives should begin as early as possible (e.g., the Reproductive Health program strategies to support preparation for parenthood) and continue throughout early childhood, through the middle years and into adolescence. (60)

McCain and Mustard and many others make a strong case regarding the need and effectiveness of parenting group sessions:

> "The evidence is clear that good early child development programs that involve parents or other primary caregivers of young children can influence how they relate to and care for children in the home and can vastly improve outcomes for children's behaviour, learning and health in later life…Therefore, it seems logical that early child development programs should provide activities to stimulate early brain development in all young children and at the same time, provide support (including child care) and training for parents to learn more about how to help their children learn, engage in their children's activities and set limits on their behaviour. Support for low-income families (and other identified priority populations) should be designed to ensure their involvement in early child development and parenting centres." (60)

According to research synthesized in the *Encyclopedia on Early Childhood Development*, (5) successful parenting programs address specific types of child behaviour (e.g., developmental disabilities or child conduct problems) or target-specific developmental transitions. They cover multiple factors, such as consistent care giving in other contexts (preschool or daycare) and maternal well-being. They devote enormous efforts to the initial training of the staff who implement the program with parents and to maintaining the quality of the intervention over time.

Finally, they maximize parents' investment by emphasizing the importance of young children's development and linking development to parenting skills and healthful decisions. These successful programs give parents opportunities to meet together and provide peer support. The data are particularly strong for programs that combine a parent support intervention with direct educational services for children, with both components contributing to improved outcomes for children (Synthesis on Parenting Skills).

Universally accessible, quality parenting programs and child development programs are critical to decrease the steepness of the socio-economic gradient and mediate the impact of low family income on child health and development outcomes. (60) Programs must also be tailored to the specific needs and capacities of priority populations as a way that addresses the determinants of health and reduces health status inequities between population groups. (110)

Although not explicitly stated in this Requirement, the promotion of breastfeeding, including education and peer-support programs, plays a critical role in enhancing child health and development outcomes. Therefore, group programs that promote breastfeeding may also be considered. A review of evidence to improve breastfeeding initiation and duration rates, commissioned by the British Medical Association (148), found that "[I]nterventions based on one-to-one health education and support are effective at increasing initiation rates…[and] peer support may be effective in improving breastfeeding initiation rates in women from disadvantaged backgrounds."

Group sessions may be delivered in health units, parenting centres, Ontario Early Years Centres, schools and other sites that are accessible to parents, particularly those from priority populations. Potential community partners include local breastfeeding committees, Community Action Programs for Children (CAPC), Children's Aid Societies (CAS), Children's Mental Health agencies, homeless shelters, Community Health Centres (CHC), hospitals and primary care providers, Preschool Speech and Language Services, school boards, target and priority populations (e.g., youth, parents, children, low-income teen parents, families new to Canada), etc.

Health units are encouraged to use existing evidence-based parenting curriculums before creating their own. Some best practices that can be included are the use of role-play, short video vignettes for parents to watch together and then discuss, and very practical parenting strategies that demonstrate the fun and playful side of parenting children without being artificial. (139) Information on attachment, breastfeeding, father involvement and literacy (for preschoolers and their parents) can be accessed through the CAPC/CPNP National Projects Fund Directory http://www.phac-aspc.gc.ca/dca-dea/programs-mes/npf_projects-eng.php. A wide range of synthesized evidence and best practices on relevant topics (e.g., childhood aggression, attachment, which parenting strategies work better for children with certain temperaments, etc.) can be accessed through the *Encyclopedia on Early Child Development*. (5)

The following are examples of parenting group sessions:

- Health units, e.g., Halton Region Health Department, Niagara Region Public Health Department, and Sudbury and District Health Unit are participating in Australia's internationally recognized *Triple P – Positive Parenting Program*® initiative http://www1.triplep.net. The evidence-based, evaluated program builds parenting skills and reduces behavioural issues from early childhood through the middle years to youth.
- *Incredible Years Parent, Teacher and Children Training Program* is an evidence-based education program delivered in countries throughout the world. Toronto Public Health delivers the parent training component in a series of programs focused on strengthening parenting competencies and fostering parents' involvement in children's school experiences in order to promote children's academic, social and emotional competencies. Information about the full range of Incredible Years programs is available at http://www.incredibleyears.com
- *Nobody's Perfect* parenting education program is for parents of children from birth through age five years. It is designed to meet the needs of parents who are young, single, isolated and have low income or little formal education. The program aims to help parents recognize their strengths and to find positive ways to raise healthy, happy children. There are a number of health units throughout Ontario who deliver this program in partnership with community agencies. Information about the program is available at http://www.ontarios-northforthechildren.com
- Niagara Region Public Health Department's *Baby Talk*, Reach and Teach kit contains resources for parents in the early postpartum (five- to six-week group). It was developed using literature reviews and parent focus groups. A kit "menu" of session options is distributed to community partners who work with new parents. Session topics include attachment, infant behaviour, healthy infant feeding, etc.
- *Make the Connection* is a nine-week series for parents with children from zero to one year of age developed by First Three Years – Parenting and Resource Training Centre and delivered by Toronto Public Health. The goal of the program is to improve participant's capabilities in establishing and maintaining secure infant attachment, two-way communication and learning. This program is based on current principles of attachment and responsive parenting and on previously researched learning formats. Information about the program is available at http://www.firstthreeyears.org

Potential Child Health partnerships for consultation, assessment, referral and parenting program partnerships:

1) National

- Breastfeeding Committee for Canada http://www.breastfeedingcanada.ca/

2) Provincial

- Invest in Kids http://www.investinkids.ca
- Best Start Resource Centre http://www.beststart.org

3) Local

Ontario Early Years Centres, CAPC, local breastfeeding committees, Children's Aid Services, children's mental health, school boards and local schools, daycares, 0–18 partners, target population (e.g., youth, parents, children), emergency shelters, hospitals, midwives, private agencies offering classes, etc.

Potential public health Child Health program linkages:

Reproductive Health, Sexual Health, School Health.

Requirement 7

The board of health shall provide advice and information to link people to community programs and services on the following topics:

- *Positive parenting;*
- *Breastfeeding;*
- *Healthy family dynamics;*
- *Healthy eating, healthy weights and physical activity;*
- *Growth and development; and*
- *Oral health.*

The presence of accessible, family and child-centred neighbourhood resources can contribute to positive child health and development outcomes. Children in communities with higher levels of resources, particularly early childhood development resources, seem to do better in terms of their developmental progress at school entry than children in communities with the same levels of family income but fewer resources. (61)

Similar to Requirement 6, a situational assessment should include a scan of all existing community programs and services relevant to the six key Child Health program areas. This will include the types of activities and issues covered, the principles on which they are based, the target and priority populations (e.g., families with young children, youth who have dropped out of school, Aboriginal families, families with young children who are new to Canada) that are eligible/being served and data on accessibility (e.g., wait times, language/ literacy barriers, physical accessibility barriers, child care provisions, transit routes, hours of operation, etc). By responding to specific barriers and other accessibility issues, interventions will be better able to impact both priority population and overall population-level outcomes.

In collaboration with local or regional planning tables, health units can develop a directory or inventory of community programs and services, as well as processes and policies for keeping it up to date and widely accessible. If the community has an information system such as 211, e.g., Toronto, an inventory can be generated quickly depending on the search.

Process or policy may also be needed to facilitate appropriate two-way referrals of clients between health units and community programs and services. Referral pathways should be developed both internally and with external partners. External examples might include letters of agreement and community service coordination protocols.

Again, the accessibility and appropriateness of any program and/or service needs to be considered. By evaluating which priority populations are being missed, health units will be better able to advocate for services that meet the needs of these populations. Communications and promotional materials and processes, like those outlined in Requirement 6, will be needed to promote health unit programs, services and supports to community partners if they are also to link their clients to the health unit.

If clients are being linked to websites and/or written materials rather than programs or services, a process will also be needed to determine whether these sources have a compatible/consistent message with the health unit. Given how much information is available, the health unit may want to limit what information resources it supports, so that staff can monitor and evaluate links to clients in an ongoing way.

Communications and promotional materials and processes, such as those outlined in Requirement 6, will also be needed to promote health unit programs, services and supports to community partners if clients are to be linked to the health unit.

Examples of how public health staff can provide advice and/or inform and link people to community programs and services include the following:

- Family Health intake lines
- Telephone help lines
- Posting links and information on the health unit website
- Mailing resources to families (e.g., including a listing of health unit and community programs in a *Let's Grow* package)
- Referrals to internal health unit and external programs
- Distribution through community places where the target and priority populations are found (e.g., Ontario Early Years Centres, parent and family resource centres, libraries, community centres, schools, etc.)

Evaluation of this requirement might include reviewing statistics for a telephone line to see the proportion of calls on particular topics. This may help plan in-servicing for health unit staff. By keeping track of what gaps exist in services or information, the health unit can identify areas for future programming, resource development and/or advocacy. Client and community partner recommendations and suggestions may also feed in to evaluation. While health units will be able to try to track how clients were linked with their own resources or programs, it is very difficult to evaluate tracking whether or not a client who was given advice or information was linked to an appropriate resource to their satisfaction.

Potential Child Health partnerships for linking people to community programs and services:
Breastfeeding committees, CAPC, CAS, health services including children's mental health services, homeless shelters, Community Health Centres (CHC), Preschool Speech and Language Services, Infant Hearing Program, Ontario Early Years Centres, food banks and community kitchens, school boards and local schools, child care services, local or regional 0–18 planning tables with all children's services, social services, municipal government services, target population (e.g., youth, parents, children), emergency shelters, police, regional MCYS bodies, recreation services, family resource centres and settlement services.

It would benefit all programs to consider non-traditional partners regularly such as firefighters, police, city officials, conservation authorities, bus drivers, small business owners and corporations.

For information on providing advice and information related to healthy eating, healthy weights and physical activity, see the Healthy Eating, Physical Activity and Healthy Weights Guidance Document.

Potential public health Child Health program linkages:
Reproductive Health, Sexual Health, Preschool Speech and Language.

Requirement 8

The board of health shall provide, in collaboration with community partners, outreach to priority populations to link them with information, programs and services.

Within the Child Health Standard's population-based, universal approach to "enable all children to attain and sustain optimal health and developmental potential," (1) outreach to priority populations and targeted programs are needed to support those living in at-risk conditions. Activities to identify priority populations, modify public health interventions to meet their unique needs and capacities, and work with the community to address and/or advocate for policy that addresses the socio-economic determinants of health must be embedded in all Child Health requirements and not just in Requirement 8.

For this requirement, as for the others, data collected in the situational assessment and Requirement 1 will help define the priority populations for the area. A process and/or criteria will be needed to help health units (and their community partners) make decisions regarding how to define or choose the priority population(s) to be reached at the local level (see *Process to Determine Priority Populations* (122) and *Process to Determine Priority Neighbourhoods*. (123) http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument).

Priority populations can be identified from within the target population. In keeping with the *Ontario Public Health Standards*' definition of priority populations, this Guidance Document defines priority populations as "those populations at risk [of poor child development/outcomes] and for which public health interventions may be reasonably considered to have a substantial impact at the population level." (1) It is important to note that within the target population, the health unit will also have groups of people that may have different communication, programming, cultural or accessibility requirements (e.g., same-sex marriage partners, Franco-Ontarians and/or Francophones, Aboriginal people, those living in remote rural communities), but who are not necessarily at risk of poor child development/health outcomes. There may also be children at risk for poor outcomes but for whom effective public health interventions do not currently exist.

Some examples of priority populations for Child Health that are common throughout Ontario include the following:

- Children in families with risk conditions (e.g., low family income, new to Canada and/or ESL, low family functioning, poor parenting practices, violence or smoking in the home, history of mental illness or history with Children's Aid)
- Children of mothers with low maternal education or maternal depression
- Families with children living in neighbourhoods with risk conditions (e.g., low neighbourhood income, social cohesion, "inner city" or priority schools, safety concerns and limited community resources)
- Children or youth with poor health or development outcomes (e.g., preterm babies, overweight or obese, poor nutrition, low levels of physical activity, smoking, substance use, dropped out of school, have not achieved age-appropriate developmental milestones and/or are not ready for school)
- Aboriginal people

Often, multiple risk factors may exist within the same priority populations (e.g., as identified in the HBHC *In Depth Assessment Tool*, low-income pregnant teens who smoke and have a low pre-pregnancy weight). Best Start Resource Centre resources that provide research, insight and effective strategies for planning interventions and/or outreach to all of the above priority populations include *Populations at Higher Risk: When Mainstream Approaches Don't Work*, (149) and *Reducing the Impact: Working with pregnant women who live in difficult life situations*. (150) While this second resource is focused on prenatal women, the best practices it highlights for working with priority populations are still relevant for Child Health populations. Other Best Start Resource Centre resources that may be useful are *A Sense of Belonging: Supporting Healthy Child Development in Aboriginal Families* and *Through the Eyes of a Child – First Nation Children's Environmental Health*; *How to Reach Francophones – Maternal and Early Years Programs* (151); *Self-Help/Peer Support Strategies in Maternal, Newborn and Child Health: Examples for the Provincial Landscape* (152); *How-to Build Partnerships with Youth*; and *Perinatal Mood Disorders – An Interdisciplinary Training Video with a Facilitator's Guide*.

The *CAPC/CPNP National Projects Fund Directory* (153) also lists resources that may be helpful in this regard. Topics include attachment and father involvement strategies for new immigrant and multicultural families; family violence; FAS/ARBD that includes supporting children affected by prenatal substance use; food security; rural populations; special mental health needs; teen pregnancy; reaching and maintaining the focus population; and partnerships and intervention in dealing with child abuse.

Participant focus groups or other strategies that involve the priority population the health unit is going to work with will be crucial to a situational assessment as the health unit plans its service and/or outreach strategies. Input from the priority populations will help to identify the practical supports and information needed. Their input will also help service providers understand the context of their lives and the attitudes and approaches that will help empower and support these individuals/groups to cope with their life circumstances and to achieve better health outcomes for themselves and their future children. Involvement of priority populations beyond the planning stage to include delivery and evaluation is also critical. Client involvement and participation is a form of empowerment that can help people help themselves, increase self-esteem and social support, and increase comfort for other participants.

Outreach to priority populations is key, as at-risk families and children face a number of personal and structural barriers to accessing community supports or services such as prenatal care. Therefore, strategies should consider ways to overcome personal and system accessibility issues (e.g., transportation, affordability, language, welcoming environment and non-judgmental attitudes, childcare, time stress/exhaustion, knowledge of what is available, etc.). Outreach and promotion strategies should also focus on where and how to best reach the priority population identified.

Policies and processes should be in place to address eligibility criteria for health units (or community partners) providing direct services to priority populations. Support strategies should also be developed for priority population clients who are waiting for services. Issues of sustainability should be considered early on in the planning stages, so that priority populations who manage to overcome numerous challenges to seek/accept supports are not abandoned.

While necessary, outreach strategies and direct services are insufficient to improve child health and development outcomes for priority populations. Efforts must be connected to high-level advocacy, community action and social change strategies identified in Requirement 4b. Public health and community partners should not simply treat the burden of health inequities but also participate in broad-based societal efforts to address the conditions that contribute to them.

Health Unit staff will need current, adequate information as they reach out to advise and refer priority populations to appropriate community resources and practical supports. Examples of policies to support these activities are discussed under Requirement 6 and Requirement 7. Referrals or linkages can be through direct client interaction (e.g., telephone helplines, family health intake line, one-to-one or group programs, liaisons with other service providers and settings including Family Health and Sexual Health clinics, shelters, Community Health Centres, etc.), or indirectly (posters, pamphlets, website listings).

Evaluating initiatives for priority populations poses a number of challenges. Health units will often be dealing with small numbers of participants while costs for things such as one-to-one staffing, transportation, food vouchers, child care, vitamin supplements, etc., may be high. When evaluating sensitive issues, e.g., substance use or violence, staff will need to be aware of factors such as under-reporting and client confidentiality. Evaluations should also consider indicators that go beyond changes to health outcomes and health behaviours such as building social support, self-esteem, community collaboration and qualitative participant feedback. Process evaluations (that include participant feedback) will also be important to help refine and inform the work of others who work with a similar priority population.

Examples from health units working with priority populations include the following:

- The *Young Parents Connection* at Algoma Public Health was developed based on the needs expressed by teen parents. Held at the YMCA every Thursday night, it is one of Algoma's most successful teen-parenting interventions and involves approximately 20 agencies, including LEAP. Beyond developing parenting skills, teens develop relationships, social networks and self-esteem.
- The *Peer Nutrition Program* is a Toronto Public Health nutrition education program offered to parents and caregivers from ethnically and culturally diverse communities. It is led by trained Community Nutrition Educators with support from Registered Dietitians and is offered to families with children between the ages of zero and six years in more than 30 different languages. Information about this evidenced-based and evaluated program is available at http://www.toronto.ca/health/peernutrition.

- Toronto's *Invest In Families* is a partnership program between Public Health, Employment and Social Services, and Parks, Forestry and Recreation. The program provides support to families who are receiving social assistance, live in one of the city's high-risk neighbourhoods and have a child between 5 and 18 years of age. Public health nurses provide counselling and linkage with community services for these families, with an emphasis on increasing parenting capacity.
- Peel Public Health offers parenting programs developed for new immigrant families.
- Thunder Bay District Health Unit and Middlesex-London Health Unit have protocols in place for an infant response plan directed by Children's Aid. It involves health unit/community response for children at risk.
- Region of Waterloo Public Health has held new immigrant prenatal and child health fairs and has hired home visitors for the HBHC program that speak over 20 languages, essentially providing peer-based support to various cultural groups.
- Region of Waterloo Public Health (154) uses a health equity-based planning framework to identify mandated services and supports that would be conducive to program delivery in multi-use community sites, with the goal of increased accessibility and benefit to priority populations.
- Provincially, the Ministry of Health Promotion has expanded the Children In Need Of Treatment (CINOT) program to extend access to dental care to low-income teens with no dental insurance or other coverage. All public health units promote the program through their partner agencies, high schools and local media.

Potential Child Health program community partners:
CAPC programs, priority populations, LHINS, municipal/regional governments and agencies, parks and recreation, social services (e.g., Children's Aid Society [CAS], Ontario Works), health services (e.g., Community Health Centres [CHCs], Family Health Teams [FHT], primary care providers), schools and school boards, shelters, food banks and community kitchens, settlement services, cultural associations.

Potential public health Child Health program linkages:
Reproductive Health, Sexual Health, *Healthy Babies Healthy Children*, Preschool Speech and Language.

c) Disease Prevention

Requirement 9

The board of health shall provide all the components of the Healthy Babies Healthy Children Program in accordance with the Healthy Babies Healthy Children Protocol, 2008 (or as current) (Ministry of Children and Youth Services).

OPHS Footnote 18: "While the Healthy Babies Healthy Children Program does contain Health Promotion and Policy Development components, it has been included in the Disease Prevention Section due to its focus on screening, assessment, referrals and support services."

See *Healthy Babies Healthy Children Protocol, 2008*
http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/progstds/protocols/hbhc.pdf

Requirement 10

The board of health shall conduct oral screening in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current).

See Oral Health Guidance Document
http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

Requirement 11

The board of health shall facilitate access and support for families to complete screening tools to monitor their child's health and development and provide a contact for families to discuss results and arrange follow-up.

Footnote 19: "Screening tools will include those that are part of the Healthy Babies Healthy Children program (e.g., Nipissing District Developmental Screen™), as well as other reliable, valid screening tools that may be identified, such as NutriSTEP™ and the Pediatric Dental Screening Instrument."

Results from a national survey of parents of young children showed that their knowledge about child development (particularly social and emotional development) was low. (66) Parents need information and tools to assist them in monitoring their child's health and development, identifying early on when a potential problem exists and accessing support or follow-up. Early identification is key for early intervention and for helping all children achieve optimal health and development outcomes.

In his report *With Our Best Future in Mind: Implementing Early Learning in Ontario*, Charles Pascal (112) identified the importance of monitoring the developmental progress of all children and for professionals to "work with parents to develop an intervention strategy, becoming the child's advocate, either offering direct service or brokering timely access to community agencies that provide more intensive treatment." This report calls for the establishment of a consistent early identification protocol in each community.

A situational assessment may help to identify the need for a universal and/or targeted approach to early identification screening. Pascal's report (112) is consistent with McCain and Mustard (60) asserting that "a universal approach to program provision, in which dedicated poverty reduction initiatives are embedded, has been found to magnify the social, economic and academic benefits." (112) However, a targeted approach may be necessary when resources are limited and/or unique approaches are required to serve a hard-to-reach population or community. The situational assessment will also help to identify screening and/or assessment tools that are appropriate to children, parents and the community. Tools should be selected based on information needs and priority populations identified in the community assessment. Tools should also be assessed for their appropriateness in terms of language, literacy, level of information required, cultural appropriateness, how it is being used, etc.

The use of reliable and valid screening tools is essential to implementing this requirement. The *Nipissing District Developmental Screen*™ (NDDS™), a parent-completed developmental checklist, has been selected by the Ministry of Children and Youth Services (MCYS) as the provincial child development screening tool for the early years. This tool is also used within the *Healthy Babies Healthy Children* program. In addition to the NDDS™, public health units may also choose to implement other screening tools, e.g., nutrition, dental, vision and hearing in their communities. The *NutriSTEP*® and the *Pediatric Dental Screening Instrument* (see Oral Health Guidance Document) are examples of tools that respectively screen for nutrition and dental child development factors.

NutriSTEP® (Nutrition Screening Tool for Every Preschooler) is a provincially recognized nutrition risk-screening index for preschoolers three to five years of age supported by the Ministry of Health Promotion (MHP). The OPHA Nutrition Resource Centre (NRC) provides implementation support including resources for planning, implementing and evaluating. The NRC *NutriSTEP*® *Implementation Toolkit* includes parent education and service provider materials to increase nutrition awareness and knowledge. (15) Information and downloadable materials are available at http://www.nutristep.ca/

Recognizing the important role that parents play in their child's development, some public health units also promote screening tools that screen parenting capacity, e.g., the *Edinburgh Postnatal Depression Scale* (EPDS) (155) or *Routine Universal Comprehensive Screening* (RUCS). A number of such tools are also being considered and implemented within the HBHC home visiting program and consideration may be given to applying these tools in other community settings.

Health units should consider employing a variety of strategies for promoting the selected screening tools to the parent groups that they have targeted (e.g., universal, priority populations). For example:

- Community screening events (e.g., public health fairs, early years screening "clinics")
- Distribution through other public health programs that service parents of young children (e.g., a number of public health units distribute the NDDS™ to primary care providers during their outreach related to vaccine storage)
- Mailing tools to families (e.g., Oxford County Public Health includes the NDDS™ in their *Let's Grow* package)
- Posting screening tools and parenting information on the health unit website
- Distribution through school kindergarten registration initiatives
- Locating tools in community places where the parent audience is found (e.g., Ontario Early Years Centres, parent and family resource centres, libraries, community centres)

The above list clearly illustrates that community partners play a critical role in implementing early identification strategies. Many communities are planning comprehensive early identification strategies through their Best Start Networks. Partnership activities can include the following:

- Agreement on the use of specific screening tools by all community partners.
- Shared development of resources (e.g., Toronto's *Learning Through Play Calendar*, developed in partnership with the health unit and a number of children's mental health agencies. It is a low-literacy parent tool that uses pictures to educate parents on developmental milestones and how to support child development through play.
- Common resources and training for children's service providers (e.g., several communities have developed "Red Flags" guides and the Best Start Network is currently working on a provincial guide).
- Collaboration at early identification community events.
- Establishment of referral pathways (e.g., single-door access or multiple-door access).
- Plans and policies to address wait-lists and interim supports/strategies.
- Integration of early identification screening into broader early identification strategies, such as social marketing campaigns (e.g., Toronto Public Health's *Don't Play Wait and See* campaign).

Health units should also consider community partnerships that will support outreach to priority populations (e.g., community settings that can be accessed by public transit, specific cultural agencies, settlement services that reach new immigrants, etc.). External protocols and letters of agreement with community partners (as discussed under Requirements 6 and 7) may help to achieve community integration and the development of a community of practice.

A specific example of health units working with community partners to promote early identification is the role that health units may play in the provincial *18-Month Well Baby Visit* strategy. The Ministry of Children and Youth Services strategy recognizes the 18-month well-baby visit as a critical role that primary care providers can play in assessing child development and supporting parents in early identification and intervention. Primary care providers will be provided with training, tools (e.g., a revised *Rourke Baby Record*, NDDS™) and resources to implement this initiative. Public health units may initiate primary care provider outreach strategies in their community to promote and support this initiative. They may also participate in the development of community service referral pathways that support primary care providers to make timely and appropriate referrals for early intervention.

When promoting screening tools to parents, health units should ensure that resources are in place for families to support their interpretation of the results and to seek appropriate and accessible follow-up, if necessary. This will depend on the delivery mode of the screening tool. In some cases (e.g., community screening events/clinics, kindergarten registration) health unit staff may be present to directly educate parents about child development, consult on their child's development and the screening results, and refer as necessary. In other settings (e.g., Ontario Early Years Centres, child care centre), parents may have access to other children's service providers. Health units may chose to provide education and training to community partners to support them in educating and referring parents. For other distribution approaches, parents may need a means of accessing education, consultation and referral through a telephone contact (see Requirement 7). Once again, specific strategies may be necessary to support diverse or hard-to-reach families, particularly those from priority populations (e.g., a dedicated public health nurse to interpret results, language interpretation services).

A plan for the evaluation of screening, early identification strategies and appropriate follow-up should be developed during the planning phase of the strategy. The means to evaluate this requirement will depend on the screening tool dissemination strategies that the health unit chooses to use. Process indicators such as the number of screening tools distributed to parents and children, number of consultations and/or referrals provided to parents and children, number of community partnerships, number of early identification events and attendance can be counted. Local EDI data may inform outcome indicators.

Potential Child Health program partnerships for early identification activities:
Preschool Speech and Language, Infant Hearing and Blind-Low Vision Early Intervention Programs; public health community dental program; public health school services (e.g., many health units promote screening tools through kindergarten registration activities); boards of education; Ontario Early Years Centres; Best Start Hubs; Parent and Family Literacy Centres; child care centres; Infant Development Agencies; Children's Mental Health Agencies; Child Welfare Services; cultural agencies, settlement services and municipal services (e.g., libraries, community centres).

Potential public health Child Health program linkages:
Sexual Health, Vaccine Preventable Diseases.

Requirement 12

The board of health shall provide the Children in Need of Treatment (CINOT) Program in accordance with the Children in Need of Treatment (CINOT) Program Protocol, 2008 (or as current). For CINOT-eligible children, the board of health shall provide referrals to oral health care providers and monitor the action taken.

See Oral Health Guidance Document

http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

Requirement 13

The board of health shall provide or ensure the provision of the essential clinical preventive oral health services at least annually in accordance with the Preventive Oral Health Services Protocol, 2008 (or as current).

See Oral Health Guidance Document

http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

d) Health Protection

Requirement 14

The board of health shall review drinking water reports for its municipal drinking water supply(ies) where fluoride is added. These reports shall be reviewed at least monthly and, where necessary, action shall be taken in accordance with the Protocol for the Monitoring of Community Water Fluoride Levels, 2008 (or as current).

See Oral Health Guidance Document

http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/guidance.html

Section 4. Integration with other Requirements under OPHS and other Strategies and Programs

The six key topic areas of the Child Health program (positive parenting, breastfeeding, healthy family dynamics, healthy eating, healthy weights and physical activity, growth and development and oral health) and all the factors associated with these areas, requires integration across other requirements under the OPHS and other strategies and programs.

Some of these areas of integration are immediately obvious and will increase the effectiveness and efficiency of program planning and implementation. For example, the best place for children to learn about healthy habits is in a healthy, supportive home environment. Parents are a child's best role models. Parents' eating habits, portion control and role modelling influence children's eating habits. Research also suggests that "parents' role modelling, encouragement and praise act as positive influences in promoting physical activity among children," (124). Therefore, the Child Health and Chronic Disease Prevention programs have a shared responsibility for strategies to address healthy eating, healthy weights and physical activity amongst children and their parents, along with other healthy behaviours (e.g., tobacco avoidance and cessation).

The Child Health and Prevention of Injury and Substance Misuse Programs should also integrate strategies to reduce the risk of injury and create safe and supportive environments for children and youth. Likewise, Reproductive and Child Health programs should work together to promote breastfeeding, positive parenting and healthy family dynamics as a way to improve child health outcomes.

For other areas, opportunities for integration may be less obvious (e.g., Child Health and Safe Water programs working together to raise awareness about unsafe lead levels in water and the risk to Child Health). Appendix A identifies the linkages between each Child Health requirement and all other OPHS requirements.

Health units may also find it helpful to determine the level of integration required for effective and efficient planning, programming and evaluation. The Relationship Intensity Continuum (157) provides common definitions and assigns a number (1–6) for different levels of integration. The continuum has been used to fill in the following tables as a sample integration exercise: **Table 2: Sample Level of Integration between Reproductive Health and Child Health Programs and Other OPHS Programs** and **Table 3: Sample Level of Integration within Family Health Programs and Comprehensive School Health**. These tools may assist health units initiate a dialogue across programs to see if managers and staff agree on the degree of integration that is desirable to plan and implement their requirements and what needs to be in place internally to best make that happen.

The Relationship Intensity Continuum

1. **Communication:** Clear, consistent and nonjudgmental discussion; giving or exchanging information in order to maintain meaningful relationships. Individual programs or causes are totally separate.
2. **Cooperation:** Assisting each other with respective activities giving general support, information and/or endorsement for each other's programs, services, or objectives.
3. **Coordination:** Joint activities and communications are more intensive and far-reaching. Agencies or individuals engage in joint planning and synchronization of schedules, activities, goals, objectives and events.
4. **Collaboration:** Agencies, individuals, or groups willingly relinquish some of their autonomy in the interest of mutual gains or outcomes. True collaboration involves actual changes in agency, group or individual behaviour to support collective goals or ideals.
5. **Convergence:** Relationships evolve from collaboration to actual restructuring of services, programs, memberships, budgets, missions, objectives and staff.
6. **Consolidation:** Agency, group, or individual behaviour, operations, policies, budgets, staff and power are united and harmonized. Individual autonomy or gains have been fully relinquished, common outcomes and identity are adopted.

Table 2: Sample Level of Integration between Reproductive Health and Child Health Programs and Other OPHS Programs

OPHS	FAMILY HEALTH	REPRODUCTIVE HEALTH	CHILD HEALTH
Chronic Disease and Injuries	Chronic Disease Prevention	4 minimal and 5 best practices	4 minimal and 5 best practices
	Prevention of Injury and Substance Misuse	4 minimal and 5 best practices	4 minimal and 5 best practices
Infectious Diseases	Sexual Health, Sexually Transmitted Infections, and Blood-Borne Infections	4	4
	Infectious Diseases Prevention and Control	2	2
	Tuberculosis Prevention and Control	1	2
	Rabies Prevention and Control	1	1
	Vaccine Preventable Diseases	2	3
Environmental Health	Food Safety	2	2
	Safe Water	3	3
	Health Hazard Prevention and Management	4	4
Emergency Preparedness	Public Health Emergency Preparedness Note: levels could go to 6 in emergency situation.	1	1

Table 3: Sample Level of Integration within Family Health Programs and Comprehensive School Health

FAMILY HEALTH	REPRO HEALTH	CHILD HEALTH	ORAL PROTOCOLS	HBHC	COMPREHENSIVE SCHOOL HEALTH
Reproductive Health	x	4*	1	4	2
Child Health	4	x	2	4	2–3*
Oral Protocols	1	2	x	2	1
HBHC	4	4	2	x	2
Comprehensive School Health	2	2–3*	1	2	x

* Represents a minimum level of integration; higher levels may exist at the local health unit level.

The need for integration extends beyond the OPHS to include partners from multiple sectors and at various levels (provincial, municipal/boards of health, community agencies and others). In order to function well, all partners should feel engaged, roles and responsibilities must be clearly defined, including identification of the leader(s), and joint priorities should be agreed upon.

Similar integration across provincial level partners (e.g., Ministry of Health Promotion Family Health Programs, Ministry of Children and Youth Services, including but not limited to, the HBHC Program, Ministry of Health and Long-Term Care and the Ministry of Education) is also vital to support shared goals, outcomes and strategic directions. Likewise, improved integration between federal ministries and programs, provincial ministries and programs and local health unit programs is needed to improve the effectiveness and efficiency of achieving improved child health outcomes.

Section 5. Resources to Support Implementation

a) Principal Tools and Resources Required

There are overarching resources that are needed to implement the *Ontario Public Health Standards* (OPHS), including Child Health. An understanding of health promotion, health promotion theory and strategies is critical in addressing the standard requirements. The *Ottawa Charter for Health Promotion* defines health promotion as the "the process of enabling people to increase control over and to improve, their health…a commitment to dealing with challenges of reducing inequities, extending the scope of prevention and helping people to cope with their circumstances…(and to) create environments conducive to health, in which people are better able to take care of themselves." (130)

A sound knowledge of health promotion theories will provide the background to address the strategies required to implement Child Health requirements and models (e.g., social marketing and healthy public policy). Nutbeam and Harris' *Theory in a Nutshell* (158) provides a practical guide to health promotion theories, e.g., theories on health behaviour and change. Excellent resources for social marketing can also be accessed through the National Social Marketing Centre, United Kingdom. (129)

An awareness of relevant legislation is also vital, including, but not limited to, the *Health Protection and Promotion Act, Child and Family Services Act* and other legislation that impacts on mothers, children and families (e.g., maternity and parental leave, child care, smoke-free and infant/child/youth safety legislation).

An understanding of the Core Competencies for Public Health in Canada (PHAC) http://www.phac-aspc.gc.ca/core_competencies, population health and individual health strategies are all essential to Child Health program implementation. Knowing best practices in the community development process also assists in meeting community partnership requirements. Community Health Nurses of Canada http://www.chnac.ca/ provides guidance on the community development process.

Resources to assist with the promotion of mental health through competent clinical and consultative practice and education are included in the *Narrative & Solution Focused Approaches Training Evaluation Summary Report of the NSFA Evaluation Work Group*. (159) Resources to help address considerations of social determinants of health are available at http://www.chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument.

b) Resources for Planning, Implementing and Evaluating

Activity planning and evaluation tools assist local health units in developing activity frameworks. For example:

- The Ontario Public Health Association (OPHA), Towards Evidence Informed Practice (TEIP) http://www.opha.on.ca/programs/teip.shtml, and Nutrition Resource Centre resources http://www.nutristep.ca/
- Public Health Research, Education & Development (PHRED) resources (e.g., Evaluation Tool Kit) http://www.phred-redsp.on.ca/
- The Health Communications Unit (THCU) resources http://www.thcu.ca/
- The Best Start Resource Centre child health resources (e.g., postpartum depression)

Another logic model tool source is the Canadian Evaluation Society's *Evaluation Methods Sourcebook II*. (160) Planning and evaluation outcome tools through Results-Based Accountability (161) http://www.resultsaccountability.com are also helpful resources. The Halton Region Health Department has had practice success in the use of the latter.

Systematic reviews, literature reviews, published reports and health-evidence.ca can all assist in evidence-informed implementation of the requirements. For example, systematic reviews produced by PHRED, federal reports (e.g., *Nutrition for Healthy Term Infants, Measuring Up A Health Surveillance Update on Canadian Children and Youth, The Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth*) and provincial publications (e.g., *Initial Report on Public Health*) http://www.health.gov.on.ca/english/public/pub/pubhealth/init_report/index.html.

Best practices, Child Health content experts and informed colleagues also help the information-gathering process and have been listed throughout this document. Resource centres (e.g., OPHA Nutrition Resource Centre) and links to Motherisk services and McMaster Child Health Research Institute (MCHRI) including the Offord Centre for Child Studies (http://www.wholechildresearch.com) are invaluable resources for Child Health.

Federal government (e.g., Public Health Agency of Canada [PHAC], Breastfeeding Committee for Canada), non-government organizations (e.g., INFACT Canada [135] http://www.infactcanada.ca/, Canadian Partnership for Children's Health & Environment [102] http://healthyenvironmentforkids.ca, Psychology Foundation of Canada [127] http://www.psychologyfoundation.org/) and professional bodies (e.g., the Canadian Paediatric Society [CPS] http://www.cps.ca/, Community Health Nurses of Canada [CHNC] http://www.chnc.ca/, Ontario Public Health Association [OPHA] http://www.opha.on.ca/index.shtml) are also valuable resources for public health Child Health programming.

The *Encyclopedia on Early Childhood Development*, (5) produced online by the Centre of Excellence for Early Childhood Development, presents the most up-to-date scientific knowledge on 37 topics related to the psychosocial development of the child, from conception to the age of five. Intended for policy-makers, service planners and parents, the encyclopedia is available at http://www.child-encyclopedia.com/.

The *CAPC/CPNP National Projects Fund Directory* (153) lists all National Projects Fund projects, including a brief description, resources available and contact information, e.g., Father Involvement Initiative. The directory is available at http://www.phac-aspc.gc.ca/dca-dea/programs-mes/npf_projects-eng.php

Implementation of best-practice guidelines developed by the Registered Nurses' Association of Ontario (RNAO) support Child Health nursing practices. Current RNAO http://www.rnao.org guidelines that assist in implementing Child Health requirements include *Breastfeeding, Enhancing Healthy Adolescent Development, Integrating Smoking Cessation into Daily Nursing Practice, Intervention for Postpartum Depression, Primary Prevention of Childhood Obesity and Woman Abuse: Screening, Identification and Initial Response*.

Access to reliable databases (e.g., Canadian Community Health Survey, Core Indicators and Rapid Risk Factor Surveillance System [RRFSS]) is also vital to Child Health program activity planning. A consensus for a Family Health model for RRFSS would support provincial Reproductive and Child Health monitoring. OPHEA and the Ontario Agency for Health Promotion and Protection (OAHPP) will be invaluable in their provincial support of health unit program indicator and data-collection activities.

Published reports (e.g., *CPS Are We Doing Enough? A status report on Canadian Public policy and child and youth health, 2007*), assist in informing Child Health programming.

Many health units have developed child health resources beyond those used in this document. Developed service agreements, protocols, flow charts, decision trees and program policies assist the OPHS implementation process. Public health units have excellent local examples of these resources.

c) Networks

The Ontario Family Health Management in Public Health Network (OFHMPHN) is a critical communication link between provincial public health units and the Ministry of Health Promotion (MHP). The aim of the network is to foster collaboration both within public health and across sectors to promote reproductive and child health through leadership and collective action. The goals of the OFHMPHN are consistent with the OPHS Family Health Program and Foundational Standards. Alignment and integration of MHP and network Child Health program efforts assists in achieving the societal outcomes for the Child Health Program Standard.

The provincial HBHC management network facilitated by MCYS provides opportunities for further Family Health program communication.

Regional networks for Child Health program management and staff also afford the opportunity for advocacy, project partnerships, resource sharing and further collaboration on Child Health program issues and activities.

Section 6: Conclusion

This Guidance Document is one of a series that have been prepared by the Ontario Ministry of Health Promotion to provide guidance to boards of health as they implement health promotion programs and services that fall under the 2008 *Ontario Public Health Standards* (OPHS). This Guidance Document has provided background information specific to child health including its significance and burden.

In addition, this Guidance Document has provided information about situational assessments for each OPHS Requirement relevant to child health and included related information about policies, program/social marketing, evaluation and monitoring issues and the social determinants of health. It has also suggested policy direction and strategies for consideration, and examined evidence and rationale.

Achieving overall health goals and societal outcomes will depend on the efforts of boards of health working together with many other community partners such as non-governmental organizations, local and municipal governments, government-funded agencies and the private sector. By working in partnership towards a common set of requirements, Ontario can better accomplish its health goals by reaching for higher standards and adequately measuring the processes involved.

The health of individuals and communities in Ontario is significantly influenced by complex interactions between social and economic factors, the physical environment and individual behaviours and conditions. Addressing the determinants of health and reducing health inequities will also ensure that boards of health are successful in their efforts.

Appendix A: Linkages between Child Health Requirements and Others (Appah, 2009)

List of Acronyms

CH = Child Health

CTC = Comprehensive Tobacco Control

FS = Food Safety

HEHWPA = Healthy Eating, Healthy Weights and Physical Activity

HHPM = Health Hazard Prevention and Management

IDPC = Infectious Diseases Prevention and Control

PHEP = Public Health Emergency and Preparedness

PI = Prevention of Injury

PSM = Prevention of Substance Misuse (including alcohol)

R = Requirement

RH = Reproductive Health

RPC = Rabies Prevention and Control

SH = School Health

SHSTIBI = Sexual Health, Sexually Transmitted Infections and Blood-borne Infections (including HIV)

SW = Safe Water

TPC = Tuberculosis Prevention and Control

VPD = Vaccine Preventable Diseases

The key subjects around which the linkages are made are 1) Surveillance 2) Settings 3) Situational Assessment 4) Community Partners 5) Healthy Public Policy 6) Priority Populations and 7) Public Education and Social Marketing

CATEGORY	OPHS REQUIREMENT	HEHWPA	RH	PI	PSM	CTC	SH	IDPC	RPC	SHSTIBI	TPC	VPD	FS	SW	HHPM	PHEP
Assessment & Surveillance	1. *The board of health shall conduct epidemiological analysis of surveillance data, including monitoring of trends over time, emerging trends and priority populations, in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current) in the areas of:* ▪ *Positive parenting;* ▪ *Breastfeeding;* ▪ *Healthy family dynamics;* ▪ *Healthy eating, healthy weights and physical activity;* ▪ *Growth and development; and* ▪ *Oral health.*	R1	R1	R1	R1	R1		R1 R2 R3	R2 R3 R4	R1 R2 R3	R1 R2 R3	R1 R2	R1 R2	R2 R3 R4 R5	R1 R2	
	2. *The board of health shall conduct surveillance of children in schools and refer individuals who may be at risk of poor oral health outcomes in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current) and the Population Health Assessment and Surveillance protocol, 2008 (or as current).*	R2 R3	R1			R3	CH R2	R1 R2 R3 R14	R2 R3 R4	R1 R2 R3 R6	R2 R3	R1 R2 R13	R1 R2	R2 R3 R4 R5	R1 R2	
	3. *The board of health shall report oral health data elements in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current)*	R3	R1			R3	CH R3									

CATEGORY	OPHS REQUIREMENT	HEHWPA	RH	PI	PSM	CTC	SH	IDPC	RPC	SHSTIBI	TPC	VPD	FS	SW	HHPM	PHEP
Health Promotion & Policy Development	4. *The board of health shall work with community partners, using a comprehensive health promotion approach, to influence the development and implementation of healthy policies and the creation or enhancement of supportive environments to address:* ▪ *Positive parenting;* ▪ *Breastfeeding;* ▪ *Healthy family dynamics;* ▪ *Healthy eating, healthy weights and physical activity;* ▪ *Growth and development; and* ▪ *Oral health.* *These efforts shall include:* *a. Conducting a situational assessment in accordance with the Population Health Assessment and Surveillance Protocol, 2008 (or as current); and* *b. Reviewing, adapting and/or providing behaviour change support resources and programs.* (Footnote # 17 ("This could include, but is not limited to, curriculum support resources (in preschools, schools, etc.), workplace support resources, and education and skill-building opportunities."	R3 R4 R5 R6 R7	R2 R4	R2	R2	R3 R4 R5 R6 R7		R4 R5	R5	R6	R4	R3 R6			R4	R3
	5. *The board of health shall increase public awareness of* ▪ *Positive parenting;* ▪ *Breastfeeding;* ▪ *Healthy family dynamics;* ▪ *Healthy eating, healthy weights and physical activity;* ▪ *Growth and development; and* ▪ *Oral health.* *These efforts shall include:* *a. Adapting and/or supplementing national and provincial health communications strategies; and/or* *b. Developing and implementing regional/local communications strategies.*	R5 R11 R12	R3 R5	R4 R5	R4 R5	R5 R11 R12		R4 R6	R5	R4		R3 R5	R5	R6 R7 R8 R12	R3	R5

CATEGORY	OPHS REQUIREMENT	HEHWPA	RH	PI	PSM	CTC	SH	IDPC	RPC	SHSTIBI	TPC	VPD	FS	SW	HHPM	PHEP
Health Promotion & Policy Development	6. *The board of health shall provide, in collaboration with community partners, prenatal programs, services and supports, which include:* *a. Consultation, assessment and referral; and* *b. Group sessions*	R7 R10	R4	R2 R3a	R2 R3a	R7 R10		R4 R5 R6 R13	R5	R6	R4	R3			R4	R3
	7. *The board of health shall provide advice and information to link people to community programs and services on the following topics:* ▪ *Positive parenting;* ▪ *Breastfeeding;* ▪ *Healthy family dynamics;* ▪ *Healthy eating, healthy weights and physical activity;* ▪ *Growth and development; and* ▪ *Oral health.*	R11 R12	R3 R5	R4 R5	R4 R5	R11 R12		R4 R5 R6	R6	R4	R4	R3 R5	R5	R6 R7 R8 R12	R3 R9	R4 R5
	8. *The board of health shall provide, in collaboration with community partners, outreach to priority populations to link them to information, programs and services.*	R8	R6	R3	R3	R9		R3	R4	R4 R5a R7 R11	R4	R6	R2	R4	R4	R5
Disease Prevention	9. *The board of health shall provide all the components of the Healthy Babies Healthy Children Program in accordance with the Healthy Babies Healthy Children Protocol, 2008 (or as current) (Ministry of Children and Youth Services).* Footnote 18 (While the Healthy Babies Healthy Children program does contain Health Promotion and Policy Development components, it has been included in the Disease Prevention section due to its focus on screening, assessment, referrals and support services.	R3	R7			R3		R6								
	10. *The board of health shall conduct oral screening in accordance with the Oral Health Assessment and Surveillance Protocol, 2008 (or as current).*	R10				R10										

CATEGORY	OPHS REQUIREMENT	HEHWPA	RH	PI	PSM	CTC	SH	IDPC	RPC	SHSTIBI	TPC	VPD	FS	SW	HHPM	PHEP
Disease Prevention	11. *The board of health shall facilitate access and support for families to complete screening tools to monitor their child's health and development, and provide a contact for families to discuss results and arrange follow-up.* Footnote 19 ("Screening tools will include those that are part of the Healthy Babies Healthy Children program (e.g., Nipissing District Developmental Screen) as well as other reliable, valid screening tools that may be identified, such as NutriSTEP and the Paediatric Dental Screening Instrument").	R10				R10										
	12. *The board of health shall provide the Children in Need of Treatment (CINOT) Program in accordance with the Children in Need of Treatment (CINOT) Program Protocol, 2008 (or as current). For CINOT-eligible children, the board of health shall provide referrals to oral health care providers and monitor the action taken.*															
	13. *The board of health shall provide or ensure the provision of the essential clinical preventive oral health services at least annually in accordance with the Preventive Oral Health Services Protocol, 2008 (or as current).*															
Health Protection	14. *The board of health shall review drinking water quality reports for its municipal drinking water supply(ies) where fluoride is added. These reports shall be reviewed at least monthly and, where necessary, action shall be taken in accordance with the Protocol for the Monitoring of Community Water Fluoride Levels, 2008 (or as current).*													R10 R11 R12		

References

1. Ministry of Health and Long-Term Care. Ontario public health standards. Toronto (ON): Queen's Printer for Ontario; 2008.

2. National Scientific Council on the Developing Child. The science of early childhood development: closing the gap between what we know and what we do. Cambridge (MA): Harvard University; 2007. Retrieved Feb 26, 2010. Available from: http://www.developingchild.net/pubs/persp/pdf/Science_Early_Childhood_Development.pdf

3. Irwin LG, Siddiqi A, Hertzman A. Early child development: a powerful equalizer. Final report of the Early Child Development Knowledge Network. Geneva: World Health Organization; 2007. Retrieved Feb 26, 2010. Available from: http://www.who.int/social_determinants/publications/earlychilddevelopment/en/index.html

4. UNICEF. Convention on the rights of the child. United Nations;1989. Retrieved Feb 23, 2010. Available at: http://www.unicef.org/crc/

5. Tremblay RE, Peters R deV, Boivin M, Barr, RG, editors. Encyclopedia on early childhood development. Montreal (PQ): Centres of Excellence for Children's Well-Being; 2008. Retrieved Feb 23, 2010. Available from: http://www.childencyclopedia.com/pages/PDF/parenting_skills.pdf

6. Edwards L. The Lever Fabergé family report 2004: Parenting under the microscope. London (UK): Institute for Public Policy Research; 2004. Retrieved Feb 26, 2010. Available from: http://www.unilever.co.uk/Images/Family%202004_tcm28-11231.pdf

7. Statistics Canada. Canadian community health survey 2007. Ottawa (ON): Statistics Canada; 2008.

8. Owen CG, Martin RM, Whincup PH, Smith GD, Cook DG. Does breastfeeding influence risk of type 2 diabetes in later life? A quantitative analysis of published evidence. Am J Clin Nutr 2006 Nov;84(5):1043-54. Retrieved Feb 23, 2010. Available from: http://www.ajcn.org/cgi/reprint/84/5/1043.pdf

9. The Breastfeeding Committee for Canada. Breastfeeding statement of the Breastfeeding Committee for Canada. Ottawa (ON): The Breastfeeding Committee for Canada; 2002. Retrieved Feb 23, 2010. Available from: http://www.breastfeedingcanada.ca/pdf/webdoc5.pdf

10. Canadian Paediatric Society, Dietitians of Canada, Health Canada. Benefits of breastfeeding to infants in Canada. In: Nutrition for healthy term infants. Ottawa (ON): Minister of Public Works and Government Services Canada; 2005. Retrieved Feb 23, 2010. Available from: http://www.hc-sc.gc.ca/fn-an/pubs/infant-nourisson/nut_infant_nourrisson_term_3-eng.php#benefits

11. Ogrodnik L. Family violence in Canada: a statistical profile. Ottawa (ON): Canadian Centre for Justice Statistics; 2008;15–26.

12. Ross L, Dennis C, Robertson E, Stewart D. Postpartum depression: a guide for front-line health and social service providers. Toronto (ON): Centre for Addiction and Mental Health; 2005.

13. Wisner KL, Peindl KS, Hanusa B. Timing of depression recurrence in the first year after birth. J Affect Disord 2004;78(3):249–52.

14. Kendall RE, Chalmers JC, Platz C. Epidemiology of puerperal psychosis. Br J Psychiatry 1987;Jul;150:662–73.

15. Nutrition Resource Centre. NutriSTEP implementation toolkit. Toronto (ON).
Available from: http://www.nutristep.ca/

16. Centre for Addiction and Mental Health. 2007 Ontario student drug use and health survey. Toronto (ON): Centre for Addiction and Mental Health; 2007. Retrieved Feb 26, 2010.
Available from: http://www.camh.net/News_events/News_releases_and_media_advisories_and_backgrounders/OSDUHS_2007.html

17. Trocme N, Wolfe D. Child maltreatment in Canada: Canadian incidence study of reported child abuse and neglect: selected results. Ottawa (ON): National Clearinghouse on Family Violence, Health Canada; 2001.

18. Ministry of Health and Long-Term Care, Public Health Division. Initial report on public health. Toronto (ON): Queen's Printer for Ontario; 2009.

19. King WJ, Mackay M, Sirnick A. Shaken baby syndrome in Canada: clinical characteristics and outcomes of hospital cases. CMAJ 2003 Jan;168(2):155–9.

20. Statistics Canada. Canadian community health survey: mental health and well-being. Ottawa (ON): Statistics Canada; 2003.

21. Volpe R, Davidson C, Bell R, Members of the University of Toronto Research Coordinator Unit. Preventing inflicted head trauma: a best practice implementation. Toronto (ON): University of Toronto; 2009.

22. Basrur, S. Healthy weights, healthy lives. Chief Medical Officer of Health report. Toronto (ON): Queen's Printer for Ontario; 2004.

23. Sheilds M. Measured obesity. Overweight Canadian children and adolescents. Ottawa (ON): Statistics Canada; 2008. Retrieved Feb 26, 2010.
Available from: http://www.statcan.gc.ca/pub/82-620-m/2005001/pdf/4193660-eng.pdf

24. Tremblay MS, Katzmarzyk PT, Willms JD. Temporal trends in overweight and obesity in Canada, 1981-1996. Int J Obes Relat Metab Disord 2002 Apr;26(4):538–43.

25. Tremblay MS, Willms JD. Secular trends in the body mass index of Canadian children. CMAJ 2000 Nov;163(11):1429–33.

26. Tremblay MS, Willms JD. Is the Canadian childhood obesity epidemic related to physical inactivity? Int J Obes Relat Metab Disord 2003 Sep;27(9):1100–05.

27. Thunder Bay District Health Unit. NutriSTEP implementation and results of preschooler eating and activity habits in Thunder Bay District. Thunder Bay (ON): Thunder Bay District Health Unit; 2009. Retrieved Mar 2, 2010. Available from: http://www.thdhu.com

28. Active Healthy Kids Canada. 2008 Report card on physical activity for children and youth. Ottawa (ON): Public Health Agency of Canada; 2008. Retrieved Feb 26, 2010. Available from: http://www.activehealthykids.ca/ecms.ashx/ArchivedReportCards/2008-AHKC-Long-Form-EN.pdf

29. Canadian Fitness and Lifestyle Research Institute. 2005 Physical activity and sport monitor. Ottawa (ON): Canadian Fitness and Lifestyle Research Institute; 2005. Retrieved Feb 26, 2010. Available from: http://www.cflri.can/eng/programs/canplay/documents/pam05_sec5.pdf

30. Active Healthy Kids Canada. 2009 Report card on physical activity for children and youth. Ottawa (ON): Public Health Agency of Canada; 2009. Retrieved Feb 26, 2010. Available from: http://www.activehealthykids.ca/ReportCard/2009ReportCardOverview.aspx

31. Kurc A, Leatherdale S. The effect of social support and school- and community-based sports on youth physical activity. Can J Public Health; 2009 Jan–Feb;100(1):60–4.

32. Kantomaa M, Tammelin T, Ebeling H, Taanila A. Emotional and behavioral problems in relation to physical activity in youth. Med Sci Sports Exerc 2008 Oct; 40(10):1749–56.

33. Donnelly P, Coakley J. The role of recreation in promoting social inclusion. Toronto (ON): The Laidlaw Foundation; 2002.

34. Canadian Centre on Substance Abuse. Intervention overview. Canadian Centre on Substance Abuse; 2009. Retrieved Feb 26, 2010. Available from: http://www.ccsa.ca/Eng/Topics/Populations/FetalAlcoholSpectrum/Pages/FASDInterventionOverview.aspx

35. Stade B, Ali A, Bennett D, Campbell D, Johnston M, Lens C et al. The burden of prenatal exposure to alcohol. Can J Clin Pharmacol 2009 Winter;16(1):e91–102.

36. Gareri J, Lynn H, Handley M, Rao C, Koren G. Prevalence of fetal ethanol exposure in a regional population-based sample by meconium analysis of fatty acid ethyl esters. Ther Drug Mont 2008 Apr;30(2):239–45.

37. Goh YI, Chudley AE, Clarren SK, Koren G, Orrbine E, Rosales T, et al. Development of Canadian screening tools for fetal alcohol spectrum disorder. Can J Clin Pharmacol 2008 Summer;15(2):e344–366.

38. FASD Stakeholders for Ontario. Working Groups. 2008. Available from: http://www.fasdontario.ca/groups/diagnosticClinics.htm

39. Tough SC, Clarke M, Hicks M, Cook J. Pre-conception practices among family physicians and obstetricians-gynecologists: results from a national survey. J Obstet Gynaecol Can 2006 Sep;28(9):780–8.

40. Ontario Association of Optometrists. Children. 2008. Retrieved Feb 26, 2010.
Available from: http://www.optom.on.ca/for_patients/eye_health_by_age_group/children

41. Beitchman J. Language Development and its impact on children's psychosocial and emotional development. Toronto (ON): University of Toronto; 2006.

42. Felsenfeld S, Broen PA, McGue M. 28-year follow-up of adults with history of moderate phonological disorder. Educational and occupational results. J Speech Hear Res 1994 Dec;37(6):1341–53.

43. Widen, J.E., Folsom, R.C. Practice standards & guidelines for hearing assessment of children by audiologists: CASLPO; 2008:3.

44. King A. Double cohort study: phase 3 report. Toronto (ON): Ontario Ministry of Education; 2004.

45. Woods EG. Reducing the dropout rate. School improvement research series. Research You Can Use. Portland (OR): Northwest Regional Educational Laboratory; 1995. Retrieved Feb 26, 2010.
Available from: http://www.nwrel.org/scpd/sirs/9/c017.html

46. Education Quality and Accountability Office. EQAO School Reports. 2008. Retrieved Feb 26, 2010.
Available from: http://www.eqao.com/categories/home.aspx?Lang=E

47. U.S. Department of Health and Human Services. Oral health in America: a report of the surgeon general. Rockville (MD): U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000.

48. Locker D, Matear D. Oral disorders, systemic health, well-being and quality of life. A summary of recent research evidence. Toronto (ON): University of Toronto; 2000.

49. Clarke M, Locker D, Berall G, Pencharz P, Kenny DJ, Judd P. Malnourishment in a population of young children with severe early childhood caries. Pediatr Dent 2006;28(3):254–259.

50. Milnes AR, Rubin CW, Karpa M, Tate R. A retrospective analysis of the costs associated with the treatment of nursing caries in a remote Canadian Aboriginal population. Community Dent Oral Epidemiol 1993;21:253–260.

51. Garfield ML, Colley-Gilbert BJ, Malvitz DM, Romaguera R. Oral health during pregnancy: an analysis of information collected by the pregnancy risk assessment monitoring system. J Am Dent Assoc 2001;132;1009–1016.

52. Quiñonez CR, Sherret L, Grootendorst P, Shim MS, Azarpazhooh A, Locker D. An environmental scan of provincial/territorial dental public health programs. Community Dental Health Services Research Unit, University of Toronto. Retrieved Feb 26, 2010.
Available from: http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/fnihb-dgspni/ocdo-bdc/project-eng.php#t2

53. Maund J, Hughes C. Child poverty in Ontario. Promises to keep. 2006 report card on child poverty in Ontario. Toronto (ON): Ontario Campaign 2000; 2007. Retrieved Feb 26, 2010. Available from: http://www.campaign2000.ca/reportCards/provincial/Ontario/2006ontarioreportcard_Engl.pdf

54. McIntyre L. Food security: more than a determinant of health. Policy Options 2003 March: 46–51.

55. Statistics Canada. Income trends in Canada 1980–2004. Ottawa (ON): Statistics Canada; 2006.

56. Kohns S, Richardson W. Ontario early years centres: the early development instrument. London (ON): 2007.

57. Government of Canada. The human face of mental health and mental illness in Canada. Ottawa (ON): Public Health Agency of Canada; 2006.

58. Jones M, O'Beney C. Promoting mental health through physical activity: examples from practice. J Ment Health Prom. 2004;3(1):39–47.

59. Leitch KK. Reaching for the top: a report by the advisor on healthy children and youth. Ottawa (ON): Health Canada; 2007. Retrieved Feb 23, 2010. Available from: http://www.hc-sc.gc.ca

60. McCain Hon. MN and Mustard JF. Early years study: reversing the real brain drain. Toronto (ON): Publications Ontario; 1999.

61. Bertrand J. Summary of research findings on children's developmental health. Ottawa (ON): Canadian Institute of Child Health, Canadian Child Care Federation; 2001.

62. Public Health Agency of Canada. First connections…make all the difference resource kit. Ottawa (ON): Health Canada Publications; 2002. Retrieved Feb 23, 2010. Available from: http://www.phac-aspc.gc.ca/mh-sm/mhp-psm/pub/fc-pc/index-eng.php

63. Janus M, Offord D. Readiness to learn in school. ISUMA: Canadian Journal of Policy Research 2000;1(2):71–75.

64. Best Start Resource Centre. Have a ball together. Toronto (ON); 2009. Retrieved Feb 23, 2010. Available from: http://www.beststart.org/haveaballtogether/index.html

65. Statistics Canada. National longitudinal survey of children and youth. Cycle 7 survey instruments 2006–2007. Ottawa (ON): Ministry of Industry; 2008. Retrieved Feb 23, 2010. Available from: http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=4450&lang=en&db=imdb&adm=8&dis=2

66. Oldershaw L. A national survey of parents of young children. Invest in kids. Toronto (ON): 2002. Retrieved Feb 23, 2010. Available from: http://www.investinkids.ca/Portals/0/documents/pdf/A%20National%20Survey%20-%20Final.pdf

67. Health Council of Canada. Their future is now: healthy choices for Canada's children and youth. Toronto (ON): Health Council of Canada; 2006. Retrieved Feb 26, 2010.
Available from: http://www.healthcouncilcanada.ca/docs/rpts/2006/HCC_ChildHealth_EN.pdf

68. Canadian Paediatric Society, Nutrition and Gastroenterology Committee. Exclusive breastfeeding should continue to six months. Paediatr Child Health 2005;10(3):148. Retrieved Feb 26, 2010.
Available from: http://www.cps.ca/english/statements/N/BreastfeedingMar05.htm

69. World Health Organization. Global strategy for infant and young child feeding. Geneva: World Health Organization; 2003. Retrieved Feb 23, 2010.
Available from: http://www.who.int/nutrition/publications/infantfeeding/9241562218/en/index.html

70. Ontario Public Health Association. Breastfeeding position paper; a position paper originally adopted at the 1993 Annual General Meeting. Revised July 2007. Toronto (ON): OPHA; 2007. Retrieved Feb 23, 2010.
Available from: www.opha.on.ca/our_vocie/ppres/

71. Canadian Child Care Federation, Canadian Institute of Child Health. Nourish, nurture, neurodevelopment. Neurodevelopmental research: implications for caregiver practice: what we know about the brain. Fold out resource sheet. Ottawa (ON): Canadian Child Care Federation, Canadian Institute of Child Health; 2001.

72. Human Resources Development Canada, Health Canada. The well-being of Canada's young children. Ottawa (ON): Health Canada; 2003. Retrieved Feb 26, 2010.
Available from: http://www.socialunion.gc.ca/ecd/2003/RH64-20-2003E.pdf

73. Jones C, Clark L, Grusec J, Hart R, Plickert G, Tepperman L. Poverty, social capital, parenting and child outcomes in Canada: final report. Gatineau (PQ): Applied Research Branch, Human Resources Development Canada; 2002.

74. Landy S, Tam K. Understanding the contribution of multiple risk factors on child development at various ages: research report. Gatineau (PQ): Applied Research Branch, Human Resources Development Canada; 1998.

75. Soubhi H, Raina P, Kohen D. Effects of neighbourhood, family and child behaviour on childhood injury in Canada. Gatineau (PQ): Applied Research Branch, Human Resources Development Canada; 2001.

76. Thomas H, Boyle M. Improving the mental health of young children in Toronto: needs assessment and literature review. Toronto (ON): 2002.

77. Registered Nurses' Association of Ontario. Woman abuse: screening, identification and initial response. Toronto (ON): Registered Nurses' Association of Ontario; 2005. Retrieved Feb 23, 2010.
Available from: http://www.rnao.org/bestpractices

78. Stroup D, Johnson V, Proctor D, Hahn R. Reversing the trend of childhood obesity: editorial. Prev Chronic Dis 2009 July;6(3):A83.

79. Koplan J, Liverman, C, Kraak V, editors. Preventing childhood obesity: health in the balance. Washington (DC): Institute of Medicine of the National Academies, The National Academies Press; 2005.

80. Lobstein T, Baur L, Uauy R. International Obesity Task Force, Childhood Obesity Working Group. Obesity in children and young people: a crisis in public health. Obesity Rev 2004;5(Suppl 1):4–85.

81. Freedman D, Dietz W, Srinivasan S, Berenson G. The relation of overweight to cardiovascular risk factors among children and adolescents. Pediatrics 1999;103:1175-82.

82. Falkner NH, Neumark-Sztainer D, Story M, Jeffery RW, Beuhring T, Resnick MD. Social, educational and psychological correlates of weight status in adolescents. Obes Res 2001;9(1):32–42.

83. Strauss R, Pollack H. Social marginalization of overweight children. Arch Pediatr Adolesc Med 2003;157(8):746–52.

84. Centres for Disease Control and Prevention. Childhood overweight and obesity. Retrieved Feb 23, 2010. Available from: http://www.cdc.gov/obesity/childhood/index.html

85. Vanhala M, Vanhala P, Keinanen-Kiukaanniemi S, Kumpusalo E, Takala J. Relative weight gain and obesity as a child predict metabolic syndrome as an adult. Int J Obes 1999;23:656–9.

86. Dietz W. Childhood weight affects adult morbidity and mortality. J Nut 1998 Feb;128(2):411s–14s.

87. Halton Region. A vision for children in Halton: child health report card. Halton (ON): Halton Region; 2008. Retrieved Feb 23, 2010.
Available from: http://www.ourkidsnetwork.ca/pdf/Our%20Kids%20Report%20Card.pdf

88. Ross CF, Wu C. The links between education and health. Am Sociol Rev 1995 Oct; 60:719–45.

89. Cutler D, Lleras-Muney A. Education and health: evaluating theories and evidence. Ann Arbor (MC): National Poverty Center; 2006. Retrieved Feb 26, 2010.
Available from: http://www.npc.umich.edu/publications/workingpaper06/paper19/working-paper06-19.pdf

90. Bloom DE. Education, health and development. Cambridge (MA): American Academy of Arts and Sciences; 2007. Retrieved Feb 26, 2010.
Available from: http://www.amacad.org/publications/ubase_edu_health_dev.pdf

91. Caldwell JC. Routes to low mortality in poor countries. Popul Dev Rev 1986;12:171–220.

92. Cleland JG, Van Ginneken JK. Maternal education and child survival in developing countries: the search for pathways of influence. Soc Sci Med 1988;27:1357–68.

93. Canadian Institute of Child Health. The health of Canada's children: a CICH Profile. 3rd Ed. Ottawa (ON): Canadian Institute for Child Health; 2000.

94. Ontario Task Group on Access to Recreation for Low Income Families. Affordable access to recreation for Ontarians policy framework; Every one plays. Parks and Recreation Ontario; 2009. Retrieved Feb 23, 2010. Available from: http://lin.ca/access-to-recreation

95. Faelker T, Pickett W, Brison R. Socioeconomic differences in childhood injury: a population-based epidemiologic study in Ontario, Canada. Inj Prev 2000;(6):203–8.

96. Fauth RC. The impacts of neighbourhood poverty deconcentration efforts on low-income children's and adolescents' well-being. Children, Youth and Environments 2004;14(1):1–55.

97. Kohen D, Brooks-Gunn J, Leventhal T, Hertzman C. Neighbourhood income and physical and social disorder in Canada: association with young children's competencies. Child Dev 2002;73(6):1844–60.

98. Boyle M, Lipman E. Do places matter? Socioeconomic disadvantage and behavioural problems of children in Canada. J Consult Clin Psychol 2002;70(2):378–89.

99. Romano E, Tremblay R, Boulerice B, Swisher R. Multilevel correlates of childhood physical aggression and prosocial behaviour. J Abnorm Child Psychol 2005;33(5):565–78.

100. Hertzman C, McLean S, Kohen D, Dunn J, Evans T. Early development in Vancouver: report of the community asset mapping project (CAMP). Vancouver (BC): Human Early Learning Partnership; 2002. Retrieved Feb 23, 2010. Available from: http://www.earlylearning.ubc.ca/resources_reportspubs.htm#EDI

101. Oliver L, Dunn J, Kohen D, Hertzman C. Do neighbourhoods influence the readiness to learn of kindergarten children in Vancouver? A multilevel analysis of neighbourhood effects. Environ Plan 2007;39(4):848–68.

102. Canadian Partnership for Children's Health & Environment.
Available from: http://healthyenvironmentforkids.ca

103. Mark S. Tremblay, Margot Shields, Manon Lavoiolette, Cora L. Craig, Ian Janssen and Sarah Connor Gorber. Fitness of Canadian children and youth: Results from the 2007–2009 Canadian Health Measures Survey. Statistics Canada. Health Reports 2009;21(1).

104. Sudbury and District Health Unit. A framework to integrate social and economic determinants of health into the Ontario Public Health Mandate. Final Draft Discussion Paper. Sudbury (ON): Sudbury and District Health Unit; 2006.

105. Ontario Public Health Association. Towards evidence informed practice project. Ontario Public Health Association. Toronto (ON). Retrieved Feb 26, 2010.
Available from: http://www.opha.on.ca/programs/teip.html

106. Public Health Agency of Canada. The Chief Public Health Officer's report on the state of public health in Canada. Ottawa (ON): Public Health Agency of Canada; 2008.

107. Daghofer D, Edwards P. Towards health equity: a comparative analysis and framework for action. Working document. Public Health Agency of Canada, Strategic Initiatives and Innovations Directorate; 2009.

108. Best Start Resource Centre and Canadian Partnership for Children's Health and Environment. Playing it safe: service provider strategies to reduce environmental risks to preconception, prenatal and child health. Toronto (ON): 2006. Retrieved Feb 23, 2010.
Available from: http://beststart.org/resources/env_action/pdf/envirostrategies.pdf

109. Herrman H, Saxena S, Moodie R, editors. Promoting mental health: emerging evidence, practice: report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. Geneva: World Health Organization; 2005.

110. Health Canada. The population health template: key elements and actions that define a population health approach. Policy Directorate, Strategic Population and Public Health Branch. Retrieved Feb 26, 2010.
Available from: http://www.phac-aspc.gc.ca/ph-sp/pdf/discussion-eng.pdf

111. Patychuk D, Seskar-Hencic D. Steps to equity: ideas and strategies for health equity in Ontario, 2008–2010. Toronto (ON); 2008. Retrieved Feb 26, 2010.
Available from: http://www.healthnexus.ca/policy/firststeps_healthyequity.pdf

112. Pascal C. With our best future in mind: implementing early learning in Ontario 2009. Toronto (ON): Queen's Printer for Ontario: 2009.

113. Ontario Government. Realizing potential: our children, our youth, our future. Ontario Ministry of Children and Youth Services Strategic Framework 2008–12. Toronto (ON): Ministry of Children and Youth Services; 2008. Retrieved Feb 23, 2010.
Available from: http://www.hastingscas.org/uploaded/file/MinistryOfChildrenandYouthServicesStrategicPlan.pdf

114. Trefler D. This business of kids inc.: you don't know just how rich the returns to investments in children are. The Globe and Mail 2009 Jun 22. Retrieved Feb 26, 2010.
Available from: http://www.theglobeandmail.com/news/opinions/this-business-of-kids-inc/article1199223/

115. Kirkwood T, Bond J, May C, McKeith I, Teh M. Foresight mental capital and wellbeing project. Mental capital through life: future challenges. London (UK): The Government Office for Science; 2008. Retrieved Feb 26, 2010.
Available from: http://www.foresight.gov.uk/Mental%20Capital/Mental_capital_through_life.pdf

116. Invest in Kids. Toronto (ON). Retrieved Feb 23, 2010. Available from: http://www.investinkids.ca/

117. Fallon B, Trocme N, Maclaurin B, Knoke D, Black T, Daciuk J et al. Ontario incidence study of reported child abuse and neglect (OIS 2003): Major findings report. Toronto (ON): Centre of Excellence for Children's Well-Being; 2003.

118. Toronto Public Health. The health of Toronto's young children. Series 1–3. Toronto (ON): Toronto Public Health; 2006.

119. Tardiff E. A community fit for children. A focus on young children in Waterloo Region. 2nd ed. Waterloo (ON): Community Fit for Children Advisory Committee; 2009. Retrieved Feb 23, 2010. Available from: http://issuu.com/ckwymca/docs/a_community_fit_for_children?mode-embed&layout=http%3A%2F%skin.issuu.com%2Fv%2Flight%2Flayout.cml&showFlipBtn=true

120. Halton Region. Our Kids Network. Halton (ON): 2006. Retrieved Feb 23, 2010. Available from: http://www.ourkidsnetwork.ca

121. Region of Waterloo Public Health. Why we need to work with priority populations and how this relates to population health. Waterloo (ON): Region of Waterloo Public Health; 2009. Retrieved Feb 23, 2010. Available from: http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument

122. Region of Waterloo Public Health. Process to determine priority populations. Waterloo (ON): Region of Waterloo Public Health; 2009. Retrieved Feb 23, 2010. Available from: http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument

123. Region of Waterloo Public Health. Process to determine priority neighbourhoods. Waterloo (ON): Region of Waterloo Public Health; 2009. Retrieved Feb 23, 2010. Available from: http://chd.region.waterloo.on.ca/web/health.nsf/DocID/FD80C0D143A204F78525761D0061829A?OpenDocument

124. Toronto Public Health. Healthiest babies possible. Eligibility process: screening and nutrition assessment. Toronto (ON): Toronto Public Health; 2007.

125. Registered Nurses' Association. Breastfeeding best practice guidelines for nurses. Toronto (ON): Registered Nurses' Association of Ontario; 2003. Retrieved Feb 23, 2010. Available from: http://www.rnao.org/bestpractices

126. Ontario Public Health Association, Breastfeeding Promotion Workgroup. A breastfeeding information and activity kit for secondary school teachers. Toronto (ON): Ontario Public Health Association; 2009.

127. The Psychology Foundation of Canada. Toronto (ON). Retrieved Feb 23, 2010. Available from: http://www.psychologyfoundation.org/

128. Best Start Resource Centre. Breastfeeding local campaigns and displays. Toronto (ON). Retrieved Feb 23, 2010. Available from: http://www.beststart.org/resources/breastfeeding/index.html

129. National Social Marketing Centre. It's our health! Retrieved Feb 23, 2010. Available from: http://www.nsmcentre.org.uk/component/remository/NSMC-Publications/Its-Our-Health-(Full-report)/

130. Clanz K, Rimer BK, ViswanathK. Health behavior and health education, 4th ed. San Francisco (CA): Jossey-Bass; 2008.

131. Best Start Resource Centre. Checklist for the development of resources for preconception, prenatal and child health. Toronto (ON). Retrieved Feb 23, 2010.
Available from: http://www.beststart.org/resources/howto/index.html

132. Best Start Resource Centre. Health fairs and preconception, prenatal and child health. Toronto (ON). Retrieved Feb 23, 2010.
Available from: http://www.beststart.org/resources/howto/index.html

133. National Health Service. The United Kingdom's baby life check. Retrieved Feb 26, 2010.
Available from: http://www.babylifecheck.co.uk

134. Substance Abuse and Mental Health Services Administration, Centre for Mental Health Services, 1994. Retrieved Feb 26, 2010.
Available from: http://mentalhealth.samhsa.gov/

135. INFACT Canada. Infant Feeding Action Coalition. Toronto (ON). Retrieved Feb 23, 2010.
Available from: http://www.infactcanada.ca

136. Region of Waterloo Public Health. Put breastfeeding on the menu. Waterloo (ON): Region of Waterloo; 2008.

137. SMARTRISK. The economic burden of injury in Canada. Toronto (ON): SMARTRISK; 2009.

138. Widen, J.E., Folsom, R.C. Practice standards & guidelines for hearing assessment of children by audiologists: CASLPO; 2008:4.

139. Russell CC. Parent education: what is required to build the skills parents need to raise healthy children? Toronto (ON): Invest in Kids; 2003. Retrieved Feb 26, 2010.
Available from: http://www.investinkids.ca/Portals/0/documents/pdf/What_is_Required_to_Build_the_Skills_Parents_Need_to_Raise_Healty_Children_-_Full_Report_(en).pdf

140. Niagara Regional Public Health Department. Healthy babies/parent child program manual: seeing is believing: procedures and guidelines. Niagara (ON): Niagara Regional Public Health Department; 2008.

141. Toronto Public Health. Mental wellness assessment for adult/adolescents. Toronto (ON): Toronto Public Health; 2008.

142. National Health Services, Health Scotland, University of Warwick, University of Edinburgh. Warwick-Edinburgh mental well-being scale. Scotland: National Health Services Scotland; 2008.

143. National Health Services, Health Scotland, University of Warwick, University of Edinburgh. Warwick-Edinburgh mental well-being scale user guide – version 1. Scotland: National Health Services Scotland; 2008.

144. Tennant R, Hiller L, Fishwick R, Platt S, Joseph S, Weish S et al. The Warwick Edinburgh mental well-being scale (WEMWBS): development and UK validation. Health Qual Life Outcomes. 2007;5(63). Retrieved Feb 26, 2010. Available from: http://www.hqlo.com/content/5/1/63

145. Abidin RR. Parenting stress index. 3rd ed. Lutz (FL): Psychological Assessment Resources Inc.; 1995. Retrieved Feb 26, 2010.
Available from: http://www.friendsnrc.org/download/outcomeresources/toolkit/annot/psi.pdf

146. Centre for Parenting and Research, NSW Department of Community Services. Assessment of parenting capacity: literature review. Ashfield (NSW): Government of Australia; 2005.

147. National Health Services. Change4Life. United Kingdom Department of Health; 2009. Retrieved Feb 23, 2010. Available from: http://www.change4life.co.uk society

148. Hanson M, Fall C, Robinson S, Baird J. Early life, nutrition and lifelong health. British Medical Association; 2009. Retrieved Feb 26, 2010.
Available from: http://www.bma.org.uk/images/Early%20life%20nutrition%20FINAL_tcm41-182859.pdf

149. Best Start Resource Centre. Populations at higher risk: when mainstream approaches don't work. Toronto (ON). Retrieved Feb 26, 2010. Available from: http://www.beststart.org/resources/howto/index.html

150. Best Start Resource Centre. Reducing the impact: working with pregnant women who live in difficult life situations. Toronto (ON): Best Start Resource Centre; 2002.

151. Best Start Resource Centre. How to reach Francophones – maternal and early years programs. Toronto (ON). Retrieved Feb 26, 2010.
Available from: http://www.beststart.org/resources/howto/index.html

152. Best Start Resource Centre. Self-help/peer support strategies in maternal, newborn and child health: examples from the provincial landscape. Toronto (ON). Retrieved Feb 26, 2010.
Available from: http://www.beststart.org/resources/howto/index.html

153. Public Health Agency of Canada. CAPC/CPNP national projects fund directory. Ottawa (ON).
Retrieved Feb 23, 2010.
Available from: http://www.phac-aspc.gc.ca/dca-dea/programs-mes/npf_projects-eng.php

154. Region of Waterloo Public Health. Evidence and practice planning framework for addressing health inequities. Waterloo (ON): Region of Waterloo Public Health; 2009.

155. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: development of the 10-item Edinburgh postnatal depression scale. Br J Psychiatry. 1987;(150):782-6.

156. National Center on Shaken Baby Syndrome. Period of purple crying. Retrieved Feb 26, 2010.
Available from: http://www.dontshake.org/sbs.php?topNavID=4&subNavID=32

157. Corbett T, Noyce J. Human services systems integration: a conceptual framework. Washington (DC): Association for Public Policy Analysis and Management; 2007.

158. Nutbeam D, Harris E. Theory in a nutshell. Australia: McGraw Hill; 2004.

159. Toronto Public Health. Narrative and solution focused approaches training evaluation summary report. Toronto (ON): Toronto Public Health; 2006.

160. Love A, editor. Evaluation methods sourcebook II. Toronto (ON): Canadian Evaluation Society; 1995. Retrieved Feb 26, 2010.
Available from: http://www.evaluationcanada.ca/site.cgi?s=6&ss=5&_lang=en

161. Freidman M. Planning and evaluation outcome tools through results based accountability. USA: Trafford Publishing; 2005. Retrieved Feb 23, 2010.
Available from: http://www.resultsaccountability.com