Section 1 The On Track Guide

Background

The development of the On Track guide was guided by the principles that all children:

- Develop at their own pace
- Develop within the context of their families and communities.

The On Track guide uses a strength-based, holistic approach and provides a tool to support:

- The healthy development of all children within their own pace and context
- Early identification of indicators that may put a child at risk
- Strategies to support children and those who work with and care for them as they access additional services, further assessment and interventions

How to Use the On Track Guide

Why use the On Track Guide?

The purpose of this guide is to provide professionals who work with young children and families with some indicators of healthy child development from birth to 6 years of age. These indicators come from the five domains: social, emotional, physical, language, and cognitive and from other areas of development. If a child does not meet the expected milestones for his age range, further investigation is required, and a referral can be made to the appropriate specialist or program. In the past, a "wait and see" approach was often adopted due to the wide range of individuality in development. This approach resulted in children with developmental concerns being identified later and the loss of valuable time when brain development can be positively and fundamentally influenced. The On Track Guide provides a tool to support:

- The healthy development of all children within their own pace and context
- Early identification of indicators that may put a child at risk
- Strategies to support children and those who work with and care for them as they access additional services, further assessment and interventions

The On Track guide is not to be used as an assessment tool, or to label or diagnose children. But early referrals can lead to early identification and early intervention by the appropriate professionals. In turn, this early intervention leads to more positive outcomes for children, such as less need for special education services, improved academic achievement, lower rates of grade retention, and higher rates of school completion. A "wait and see" approach is

not an acceptable alternative, as a delay in support can translate into increasingly profound delays in a child's development.

What to expect in the On Track Guide

The On Track Guide aims to create a culture, focused on enhancing and supporting the healthy development of children. It provides information and tools to assist each professional in his observation of the child. It encourages professionals to connect children and their families to community resources and, if needed, to appropriate services. The guide assists professionals to make sure children stay on track in their development even when risk factors are present.

The On Track Guide offers:

- Information about factors that influence a child's development
- The continuum of healthy child development grouped into domains within an ages and stages approach
- A list of signs of atypical development
- Information on play as the central activity through which a child learns and reinforces his developing skills
- Information about children's safety and well-being, including how to recognize signs of maltreatment
- Questions from professionals, answers and resources that help support caregivers
- Links to local services and contact information

Acknowledgements

The On Track Guide assists professionals in supporting healthy development in all children through a strength-based approach. The development of this comprehensive reference guide required the dedication and support of many experts who work with young children and families. We want to acknowledge the advisory committee and the authors of the Red Flags reference guides for their impressive work and contributions to the On Track Guide.

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The On Track Guide was also reviewed in part and as a whole by topic and practice experts. They provided valuable information on content related to accuracy and usability of the final version. We thank the reviewers for their thoughtful and timely input.

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We would also like to thank the professionals working with young children, who provided feedback through surveys and field testing, during the planning and implementation stages of this guide.

Disclaimer

On Track - Supporting Healthy Child Development and Early Identification in the Early Years: A Reference Guide for Professionals in Ontario is designed to support professionals who work with young children.

The goal of the resource is to:

Support professionals by providing specific strategies and information to:

- Support and promote healthy development in all children
- Decide when a child could benefit from additional support or services and
- Refer the child and his parents to the appropriate local children's service for advice, screening, assessment and/or treatment.

The On Track Guide is not a formal screening or diagnostic tool for children, families and professionals. It is not to be used to diagnose or label a child. It is intended to support professionals working with children from 0 - 6 years of age.

This guide cannot substitute for the advice and/or treatment of professionals trained to properly assess the development and progress of young children. Although this document may help one decide when to seek professional help, the information contained in this document should not be used to diagnose or treat perceived developmental limitations and/or other health care needs.

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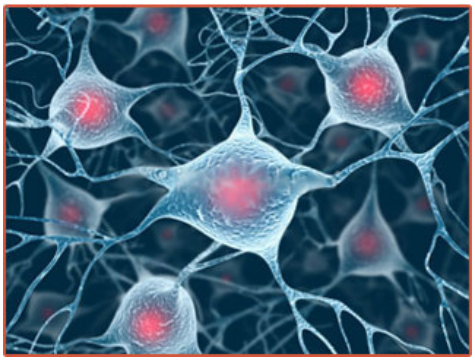
Section 1 The On Track Guide

Early child development sets the foundation for lifelong learning, behavior, and health. The experiences children have in early childhood shape the brain and the child's capacity to learn, to get along with others, and to respond to daily stresses and challenges.

Early Brain Development

There are some important concepts that help us understand early brain development:



- At birth, newborns start with very similar brains and brain structures.
- Beginning in the last trimester of the prenatal period, brain pathways are formed by developing new connections. This growth increases after birth and follows a predictable sequence (McCain, Mustard & Shanker, 2007; National Scientific Council on the Developing Child, 2007)
- There are "sensitive periods" during a child's development, when the wiring of the brain for specific abilities is established (Couperus & Nelson, 2006)
- Providing responsive, nurturing and stimulating experiences establish the wiring of the brain connections. Children who are well supported and nurtured physically, emotionally, socially and intellectually will develop a multitude of neural connections that will serve them well throughout their life course.
- A child's interest and curiosity are the motivators that create new connections to acquire new skills. Each new skill builds on a skill already learned. (Blair & Diamond, 2008; Miller & Keating, 1999; Posner & Rothbart, 2006; Shanker, 2008). The child's environment can support and enhance his interest and curiosity.
- Early brain development establishes a child's social competence, cognitive skills, emotional well-being, language, literacy skills, physical abilities and is a marker for well-being in school and life resiliency (Blair, 2002; Posner & Rothbart, 2006; Shanker & Greenspan, 2009).

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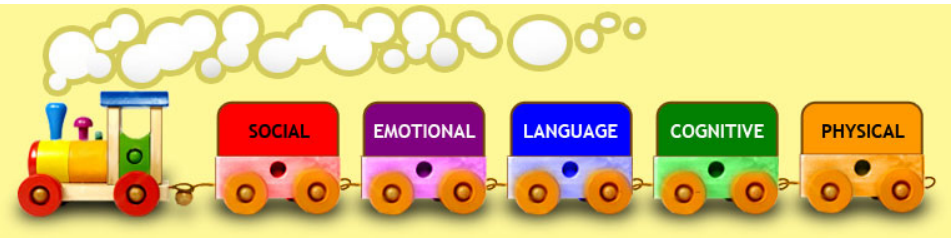
Self-regulation

- Self-regulation is the critical, interlocking component of social, emotional, language, cognitive and physical domains of development.
- Early experiences shape early brain development and set the stage for the acquisition of self-regulation skills.
- Self-regulation is a child's growing ability to regulate his emotion, behaviour and attention. This characterizes his growth from a helpless newborn to a competent child. By the time a child is 4 or 5 years old he has established basic voluntary regulatory systems to adapt his emotions, behaviour and attention according to the situation.
- This ability is the foundation for the skills needed to plan and problem-solve, understand other's intentions, emotions, desires or beliefs, interpret behaviour and regulate social interactions. The regulation of attention is essential for a child's learning disposition and habits, such as persistence, curiosity and confidence (Shanker, 2010)
- The child's environment and interactions can promote or hinder the brain activity where self-regulation skills are developed. Adults can seek out opportunities to enhance a child's strengths and build strategies to address challenges.

Domains of Development

Human development is complex and all aspects are interconnected. Yet, in most texts and writings, early human development has been artificially divided into developmental domains. This categorization can assist professionals in ensuring that all areas of the child's development are observed and supported, thus furthering his whole development. Professionals must keep in mind that all domains or areas of development are interconnected. For example, learning to talk is usually placed in the language domain, but involves physical, social, emotional and cognitive development. In this resource, children's development has been grouped into the following domains:



Early Learning

In the past decade, there has been considerably more interest and investment in the early years both in Canada and abroad. By supporting young children and families now, society will benefit later with "healthy, educated, confident and productive adults" (Expert Panel on the 18-Month Well Baby Visit, p. 2). Dr. Charles Pascal's report, With Our Best Future in Mind (2009), provides Ontario with an action plan to implement a comprehensive vision for investing in the early years. His report can be found at: www.ontario.ca/en/initiatives/early_learning/ONT06_018876

- Children are cared for as their families provide nutrition, shelter, nurturing, stimulation and protection. The care they receive enables children to learn and develop to their full potential with increasing influence from the world outside the family.
- Parents want to understand how their child develops and learns. Prenatal and parenting classes, drop-in programs, home visiting and many other opportunities can be explored to support parents from various cultural, educational, geographic and socio-economic backgrounds.
- High-quality child care settings and pre-school education improve children's developmental outcomes. Two longitudinal studies, theHigh/Scope Perry Preschool project and the Carolina Abecedarian project, compared children who received high-quality, early-yearsprograms with children who did not.When comparing the two groups of children over several decades, key differences emerged. The children who received the quality program scored higher on language,literacy, and numeracy tests throughout their schooling; finished more years of school; and had higher rates of employment (Campbell &Pungello, 2000; Schweinhart, 2004). In Canada, Quebec has developedan educational program adapted from the High/Scope model thatfosters full and holistic development of children through an evidence-based curriculum and has demonstrated positive results (Gouvernement du Québec, 1998). Other studies have also found that participation in quality early childhood education and care settings has been positively linked to child outcomes such as improved language, literacy, and numeracy development, school readiness and social skills (Barnett, 1995, 2004; Barnett, Lamy, &. Jung, 2005; Berlinski, Galiani, & Gertler, 2006;

Boethel, 2004; Magnusen et al., 2004; McCall, Larsen and Ingram, 2003; Shonkoff and Phillips, 2000; Ziegler & Styfco, 2003).

- Parent participation in early childhood education and care settings not only improves children's development (Greenspan & Shanker, 2004; Mustard 2006), but also strengthens families and parenting skills through connecting and sharing with other families (Gordon, 2005; Wilson, 2006). When parent and family involvement is planned into the early childhood education and care setting, and relationships between professionals and family members are built on trust and respect, the greatest benefits are reaped (Bernhard, Freire, & Mulligan, 2004: Gonzalez-Mena, 2005). Clearly, when children have access to quality early childhood environments and experiences, it can set the stage for positive trajectories later on in life.

Holistic Concept of Healthy Child Development

There are many interrelated factors which influence a child's overall healthy development. Education, health, social status, access to quality health and social services, housing, access to stimulating early learning environments, adequate nutrition, clean water, and a secure and nurturing parent-child relationship all play a role (see section 2-Developmental Health). Given the importance of the early years in shaping a child's brain development, every child has a right to an enriched and supportive environment in order to reach his full potential.

To meet the needs of children and families, an integrated and holistic approach to service delivery is essential.

Families of young children need access to health care, quality and affordable child care, parenting supports, and education within their local community. The concept of a 'community hub' is not a new one. More than a decade ago, McCain and Mustard (1999) called for centres which operate using "a 'hub and spoke' model" (p. 17), to provide "seamless supports and access to early intervention for families in need" (p. 17). In a few communities, this holistic, seamless approach has been used with success (e.g., Toronto First Duty sites, integrated Best Start sites). But the goal of "An integrated continuum of early child development and parenting centres to serve all Ontario children" (McCain & Mustard, 1999) is still a work in process.

In keeping with this holistic approach to service delivery, care must be taken to address the

needs of the whole child. Within this holistic concept of healthy child development, paying attention to the social, emotional, physical, cognitive and language domains of each child's development serves as a guide for professionals to ensure all areas of a child's development are included. The On Track Guide also contains information about a child's sensory, aesthetic, and ethical or moral development.

Although children's development follows a sequence, there are many variations within the continuum of development. Children develop skills at similar ages and stages, but there are many growth spurts in a child's development. With these peaks and valleys in growth, some children may reach some developmental milestones earlier than others. Every child is different and unique, and the environment in which each child develops is also different and unique. Through careful and regular observation, professionals working with young children can monitor the child's development over time.

The Importance of Observation

As a child's development occurs on a continuum, the most effective and comprehensive way to assess children is through observation. Observation is "the process through which data are gathered about a child's overall development, learning styles, interests, attitudes, and behaviours" (Vaclavik, Wolanski, & Wannamaker, 2001, p. 10). Its use is endorsed by the Ontario Ministry of Education (2006). Jablon, Dombro and Dichtelmiller (2007) describe observation as "an ongoing cycle of asking questions; watching, listening, and taking notes; reflecting; and responding" (p. 93).

Through careful observation of children, some atypical patterns of development may arise. By using the information in the On Track Guide, professionals may be alerted to some concerns in a child's development and provide additional support to the child and family. These concerns should be followed up with the appropriate referral, which may then lead to early identification of a specific difficulty and subsequent early intervention. Some services can be accessed without a formal referral; others may require a referral from the child's primary health care provider. In some cases, the professional may want to consult with a particular specialist (e.g., physiotherapist, speech/language pathologist, psychologist, psychiatrist, paediatrician, occupational therapist, child protection worker) for either additional information or a referral.

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Referral is the first and most important step to supporting children and families when concerns arise. As a professional, your role may include:

- Writing a referral
- Encouraging parents to seek a referral from the appropriate specialist or program
- Supporting parents through the process of obtaining a referral

Parent engagement has been identified as an important element in supporting healthy child development and is linked to improved outcomes. At any level, professionals working with young children will also be working with parents. This is particularly important when supporting a family through the identification of an atypical developmental pattern and the resulting referral. A section of the guide has been dedicated to Supporting Parents and Professionals.

Section 2 Developmental Health

Introduction to Developmental Health

Developmental Health has been defined as the physical and mental health, well-being, coping and competence of human beings (Keating, 1999) and is the combination of health and developmental outcomes. Many different factors can positively or negatively affect developmental health. If we want to impact a child's development and ultimate life trajectory, we must understand the key risk and protective factors that strongly influence children's future health and well-being.

Some of the factors influencing children's developmental health include income, education, health, culture, parenting, neighbourhood, and social status. It is a challenge to present this complex web of factors which influence child development, as most of them are interrelated. For example, income is a powerful indicator which can impact education level, access to health and child care services, choice of neighbourhood, stress level, transportation, and social status.

Child development is cumulative in nature. A nurturing and stimulating environment will promote learning skills that in turn allow the child's curiosity and creativity to blossom and may even "open future possibilities in spite of biological interventions" (Shanker, 2008) . On the other hand, adopting a "wait and see" approach when a child is showing some atypical or delayed development in one domain, can negatively impact many areas of development over time (OCFP, 2005).

Over the years, a number of different models have emerged which attempt to explain the interaction of factors that influence child development. To date, Bronfenbrenner's ecological system of human development (1979) is the most widely used models in both public health and child developement. This system evolved to represent the interconnectedness of biological and social environments.

Bronfenbrenner's Ecological Model

In his original model, Bronfenbrenner (1979) outlines four different levels that interact with one another: the microsystem, the mesosystem, the exosystem, and the macrosystem. A visual representation of his model is shown in Figure 1. Bronfenbrenner's (1979) definition of each system provides further clarification.

- Microsystem - "a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (p. 22). Sample settings can include

the home, school, and child care centre. Tudge et al. (2000) note that there is "a tendency to focus on development within a single microsystem – on development within the family, or at school, or with the peer group" (p. 2).

- Mesosystem - "the interrelations among two or more settings in which the developing person actively participates (such as: for a child, the relations among home, school, and neighborhood peer group; for an adult, among family, work, and social life)" (p. 25)
- Exosystem - "one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person. Examples of an exosystem … might include the parent's place of work, a school class attended by an older sibling, the parents' network of friends …" (p. 25)
- Macrosystem - "consistencies … at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies" (p. 26). Some examples provided include the differences in playgrounds, schools or coffee shops in different counties.

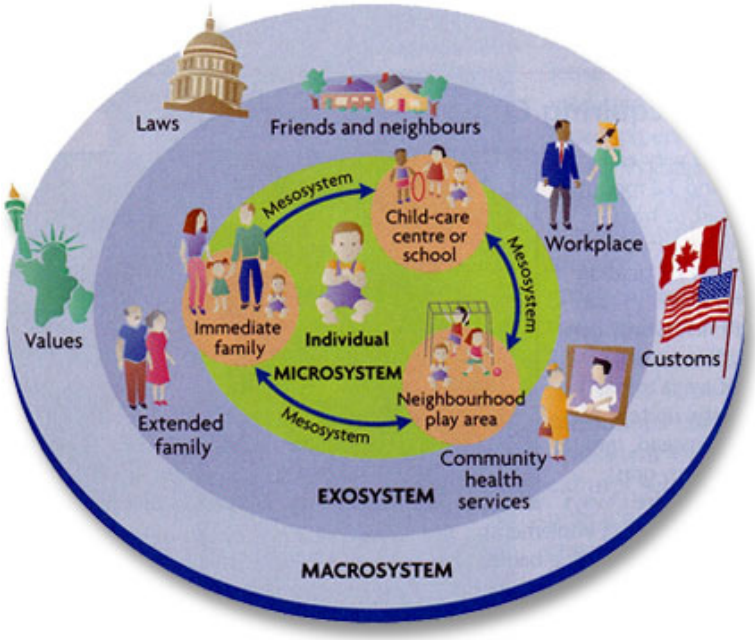

Figure 1. Bronfenbrenner's ecological systems theory (in Berk & Roberts, 2009, p. 28)

Determinants of Chronic Conditions and Special Health Care Needs Among Children

A similar type of model, often used in the context of social pediatrics, shows the determinants of chronic conditions and special health care needs among children (see Figure 2). As in Bronfenbrenner's model, each level is nested within another system, and incorporates factors affecting the child, family, community, and society. A common feature of both models is that the child is found at the core, and remains the central focus. In this model (see Newacheck et al., 2008), a wide range of determinants are outlined. They are essentially based on the Determinants of Health (Health Canada, 2001; WHO, 2003). These physical and social factors affect a person's health and well-being, but have an even more significant impact on a child's trajectory of development

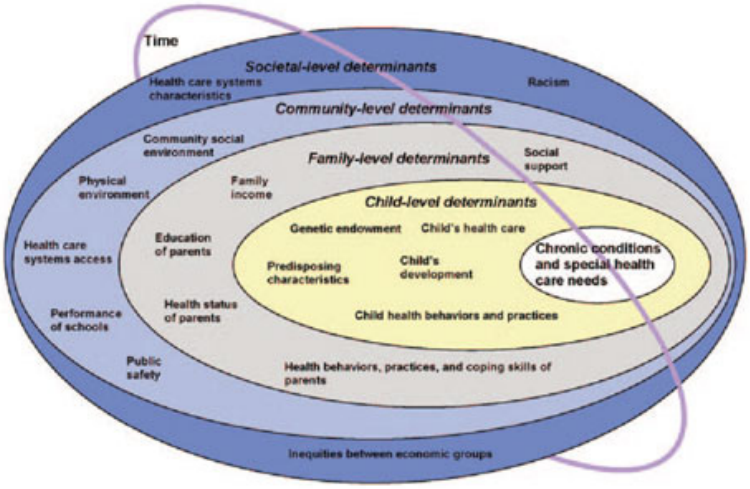

Figure 2. Determinants of Chronic Conditions and Special Health Care Needs Among Children [from Newacheck, Rising, & Kim, 2006 in Newacheck et al. (2008), p.348]

Determinants of Health

In recent years, there has been a shift from looking at the health of individuals, to looking at the health of populations (Ford-Jones, Williams, & Bertrand, 2008; Hertzman & Irwin, 2007) and how their health is determined. Children are in need of support through parenting and supportive communities and therefore most affected by the determinants of health.

Section 2 Developmental Health

The first six years of life set "a base for learning, behaviour and health over the life cycle" (McCain & Mustard, 1999, p. 2). Furthermore, it has now been well established that both nature (e.g., genes) and nurture (e.g., environment) interact and influence developmental outcomes throughout life (Ford-Jones, Williams, & Bertrand, 2008; Mustard, 2008; National Collaborating Centre for Determinants of Health, 2008a).

The key determinants of health identified by Health Canada (2001) are:

- Income and social status
- Employment
- Education
- Social environments
- Physical environments
- Healthy child development
- Personal health practices and coping skills
- Health services
- Social support networks
- Biology and genetic endowment
- Gender
- Culture

Section 2 Developmental Health

An environmental scan completed by the National Collaborating Centre for the Determinants of Health (2008b) assessed the challenges faced by professionals supporting early child development. The following themes emerged across Canada:

- Early child development needs to be a priority issue in policy and practice.
- Poverty is the factor creating most stress within families and undermines healthy child development.
- Some population groups face considerable inability to access services related to:
  - Language barriers,
  - Transportation issues,
  - Availability of programs and services,
  - Stigma
  - Cost
- There is lack of coordination of services.
- There are not enough human resources allocated to programs and services for early child development.
- Home visiting programs have demonstrated good results, but lack scientific evidence.
- Children enter school demonstrating various levels of school readiness.

These themes will need to be kept in mind when assessing the factors affecting each child's development.

To help professionals assess the factors affecting a child's development, they have been grouped into four areas:

- Environmental factors
- Biological factors
- Interpersonal relationships
- Early environments and experiences (Shanker, 2008; Blair & Diamond, 2008)

From the many factors affecting the child's development, we have taken some examples to illustrate each category.

Section 2 Developmental Health

Environmental Factors

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
Housing	Does the child have space to play and explore?	Is there overcrowding?	Is there green space such as parks where children can play?	Is there evidence of community building when planning new developments?
	Is the child safe from injury or contaminants such as lead?	Are there any housing conditions contributing to ill health such as moisture and molds?	Is the community safe from crime and environmental pollution?	Is there housing support for low income families?
Income	Does the child have adequate clothing -e.g. snowsuit and boots in winter weather?	Is the family experiencing financial stress or a high debt load?	Are there low cost community programs for children and families?	Are social assistance programs and subsidies available and accessible to those in need?
	Does the child receive adequate nutrition? Fresh fruits and vegetables are more costly in Northern communities.	Is the family a single parent family or do they have to rely on one income?	Does the community provide secure access to food such as food banks?	Do programs exist that provide specific subsidies for food?
Employment	Does the child have quality child care, when parents are working?	Do families, especially single parents, have child care stress?	Does the community have high rates of employment?	Is there equality in income?
		Do families have meaningful and adequate employment?	Do families have to commute to access meaningful employment?	
Education	Does someone read and play with the child?	What level of education do family members have?	Is parental engagement in early education encouraged in the community?	Are programs in place to keep adolescents in school and improve their education?

Section 2 Developmental Health

Environmental Factors

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
	Does the child have access to books and toys that stimulate literacy development?	Do families have practices and beliefs that encourage literacy development?	Are there options for adult and family education, including ESL classes?	
	Does the child attend quality early childhood education programs?	Do families have access to early childhood education programs?		Is early childhood education valued, and supported through policies and practice?

Section 2 Developmental Health

Biological Factors

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
Gender	Is the child a boy or a girl? Boys and girls tend to develop and learn differently (e.g. currently boys have lower levels of school readiness).	Is there evidence of gender stereotyping, or abuse in the family?	Are women and men from various cultures and backgrounds evident as community leaders?	Are women's rights, women's equality and children's rights protected?
General health	Was the child born with a healthy birth weight? Being born small or large for gestational age is linked to obesity and chronic disease.	How was the mother's preconception and prenatal health? Folic acid intake for 3 months prior to conception significantly reduces neural tube defects.	Is there access to health services in the community (e.g. medical, dental, vision, hearing, speech and language)?	Is there universal access to quality health and specialty services for children?
	Does the child have a medical condition?	Do family members have chronic conditions? Parents with disabilities or chronic disease may require added supports.	Is there community support for people with disabilities?	Is there adequate financial and program support for families with disabilities?
Mental Health	Does the child have a warm and nurturing environment?	How is the mother's perinatal mental health? 1 in 5 mothers will suffer from depression, anxiety or another mood disorder during pregnancy or the first year after birth.	Are there programs to support mothers' mental health during pregnancy and postpartum?	Is there societal support to reduce social stigma of mental illness and provide perinatal mental health services?

Section 2 Developmental Health

On Track

Biological Factors

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
	Does the child have consistent and responsive care-givers?	Do family members experience trauma, abuse or poor mental health?	Are there community supports such as shelters, respite care, programs and services that promote coping skills?	Is there societal support to reduce social stigma of abuse and provide services for victims of trauma and abuse and those experiencing mental illness?
Health practices	Does the child have a pattern for eating, sleeping and playing?	Does the family attend to nutrition, set consistent times for sleep and engage in active play?	Are there parenting classes that offer information on nutrition, sleeping and activity?	
	Is the child breastfed or receiving breastmilk?	Does the family have information and support to make an informed choice to breastfeed?	Is there public, peer and professional support for breastfeeding women?	Is the practice of exclusive breastfeeding to 6 months and continued breastfeeding with complementary foods accepted and encouraged?
	Does the child take part in structured and unstructured physical activities for at least 60 minutes and up to several hours per day?	Are physical activity practices encouraged by family members?	Are community programs and spaces available to encourage physical activity year round?	Is free, active play and physical activity encouraged in pre-school and kindergarten curriculum?
	Are children introduced to consistent oral hygiene practices?	Are oral hygiene and dental health practices encouraged?	Are low cost dental programs available?	

Section 2 Developmental Health

Interpersonal Relationships

Relationships are particularly important as infants learn primarily through their relationship with others. Eye contact, smiles and imitation set the stage for more sustained communication and meaningful exchanges and engagement with parents and other caregivers, and a growing world of relationships (Field, 2007; Gerhardt, 2004; Greenspan & Shanker, 2004; Shanker, 2008).

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
Attachment	Does the child show a secure attachment pattern to her primary caregiver?	Is the primary caregiver available and responsive to the child cues to assist her in developing a secure attachment?	Are programs available to promote attachment parenting?	Are primary caregivers given financial and instrumental support to develop a secure attachment with their child (e.g. self-employed mothers do not receive maternity benefits)?
Parenting styles	Does the child experience a consistent parenting style?	Do parents provide a consistent parenting style (e.g. authoritative, authoritarian, permissive or uninvolved)?	Are parenting programs available? Parents use their own parents as role models, but don't want to make the same mistakes as their parents.	Are the rights and responsibilities of parents recognized in workplace and other policies?

Section 2 Developmental Health

Interpersonal Relationships

Factor or condition	Child-level determinants	Family-level determinants	Community-level determinants	Society-level determinants
Social networks	Does the child have relationships with other adults and children?	Does the family have extended family and/or social networks they belong to?	Are interest groups available that include the whole family (e.g. religious groups, cultural groups, activity groups)?	Is there societal support for the development of diverse interest groups that include the whole family?
	Does the child have friends and is there evidence of peer acceptance?	Is there evidence of acceptance of the family within the community or network?	Does the community foster a sense of belonging for all families regardless of cultural, sexual or religious orientation?	Is there evidence of support of human rights, and lack of discrimination?

Early Environments and Experiences

These have already been mentioned in the examples given. The most important early environment for an infant is her primary caregiver. How the primary caregiver responds to the child shapes the early brain pathways and builds the foundation for future learning. Early experiences involve all senses through:

- Touch - e.g., skin-to-skin holding
- Smell - e.g., smell of mother's skin and breastmilk
- Taste - e.g., taste of breastmilk
- Sight - e.g., eye contact, gazing at face
- Hearing - e.g., hearing a familiar voice

A child needs experiences like these to develop her social, emotional, language, cognitive, and physical skills (Greenspan & Shanker, 2004; McCain, Mustard & Shanker, 2007; Shanker 2010). Over time these experiences become more and more complex until she has reached the ability to think symbolically, build bridges between ideas, connect feelings and develop an understanding of how the world works. All this is done through continued reciprocal interactions with adults and peers (Greenspan & Shanker, 2004; Mandler, 2004).

Section 2 Developmental Health

Supporting Aboriginal Development

"Aboriginal people believe that children do not belong to us but are gifts sent from the Creator. It is our job to nurture and guide children throughout their childhood so they will grow to fulfill their purpose while on earth. Because children are so sacred, it is everyone's responsibility to nurture them and keep them safe, to provide them with unconditional love and attention so they will know they are wanted and hold a special place in the circle. Every child regardless of age or ability has gifts and teaches us a lesson. They are all unique and should be respected" (Best Start Resource Centre, 2006, p. 19).

by Melanie Ferris/Huntinghawk

The Aboriginal approach to early child development is holistic and includes all areas of development within the child as represented by the medicine wheel. The four areas of the circle represent the following areas of development:

- Physical - includes motor development, sleep, body weight, nutrition, medical care, and physical environment
- Mental - includes cognitive and language development
- Emotional - includes social and emotional development including self-confidence and a sense of belonging
- Spiritual - includes the child's relationship to her self, family, nation, land, animals and the spirit world
- (Best Start Resource Centre, 2006)

Although many factors have contributed to the challenges in the health and healthy development of some Aboriginal children, not all face these challenges. And when an Aboriginal child is given the opportunity to learn her language, customs and traditions through respectful and nurturing environments, she is more likely to develop resiliency (Best Start Resource Centre, 2006). Aboriginal parents need to be supported in reclaiming their parenting skills and traditions. Non-Aboriginal early childhood programs need staff and curriculum that incorporate Aboriginal cultures in a respectful way that must be evident in practice (Ball, 2008; OECD, 2004). This should include learning from Elders, traditions, ceremonies and families (Ball, 2008; Best Start Resource Centre, 2006; CCL, 2007).

Cultural Considerations

Stressors Faced by Newcomers

There are many reasons why people come to Canada. Some immigrate based on the promise of a brighter future for families. Others leave their homeland because of persecution or war. To leave a home country and transition to a new one, often with a different language and set of customs, can be very stressful. Although this major life transition may at first be exciting, all newcomer families experience "acculturative stress" (Neufeld et al., 2002, p. 752).

Newcomers may face a multitude of stressors which in turn can impact the development of children born prior to or after the parent's arrival in Canada. These can include:

- Unemployment and underemployment
- Poverty
- Social exclusion, isolation
- Racism, discrimination
- Language and education challenges, such as waiting for English classes or the need to retrain or recertify
- Challenges accessing services due to language barriers, cost, transportation, social stigma, beliefs, lack of knowledge about services and understanding of services
- Lack of culturally appropriate services
- Altered expectations for women, such as having to fulfill traditional roles, new roles and added caregiver burdens without the support of extended families

(Berry, 2001; Cheong et al., 2007; National Collaborating Centre for Determinants of Health, 2008a; Neufeld et al., 2002; Oliver et al., 2007; Phinney et al., 2001; Thomas, 1995)

Understanding Cultural Differences

Childrearing practices across cultures share these broad goals:

- To promote the child's physical well-being
- To promote the child's psycho-social well-being
- To provide children with the competencies necessary for economic survival in adulthood
- To transmit the values of their culture

Families are the first and most important channel for the transmission of culture. Culture and family characteristics affect both resilience and vulnerability in the healthy development of young children (Melendez, 2005). Childrearing practices are embedded in the culture and determine behaviours and expectations surrounding childhood, adolescence, and the way children parent as adults (Small, 1998).

A lack of understanding of the various childrearing practices can lead to tension between the dominant culture, often represented by professionals, and the practices of a family. How families or caregivers raise their children varies across cultures. For example, the parenting values of Western societies give importance to independence such as the ability to problem solve independently, being assertive and inquisitive. In contrast many non-Western societies value interdependent attributes such as cooperation, respect for authority and sharing. In some cultures, parenting is assumed by a single individual, usually the mother, while at the other end of the continuum a child may have multiple caregivers, and any adult can assume the caregiving role.

Different practices are particularly noticed in:

- Feeding practices
- Sleeping arrangements
- Verbal interactions
- Eye contact
- Interactions between children and adults

Ultimately, every parent wants a healthy and thriving child. As Small (1998) indicates, “no parenting style is ‘right’ and no style is ‘wrong.’ It is appropriate or inappropriate only according to the culture.” (p. 108).

Responding to Cultural Differences

The first step in addressing possible cultural differences in an early childhood is to be aware of these specific cultural differences in parenting or care. For example, professionals need to “recognize that co-sleeping is an accepted practice in most parts of the world” (Gonzalez-Mena & Bhavnagri, 2001, p. 92), and that some may consider common North American child care practices the “very opposite of good care” (Gonzalez-Mena & Bhavnagri, 2001, p. 92).

Navigating through some of these cultural differences in parenting and child care is not simple, and requires great sensitivity. Early years professionals need to openly communicate with parents, in order to build a solid rapport and trust (Okagaki & Diamond, 2000). Parents need to feel that their views have been heard and understood. Dodge, Colker, and Heroman (2002) suggest the following ways to constructively address these differences in the early childhood setting:

- Seek to understand the family's position – Ask open-ended questions to learn what concerns the parents may have.
- Validate the family's concerns and wishes – Restate what you hear them say to be sure you understand and to let the family know you hear them.
- Explain how your program addresses the family's concern – Acknowledge that there are different points of view on any topic. If possible, share research on topics of concern to parents and evidence-informed risk factors associated with the behaviour of concern to the professional.
- Make a plan to check in with one another to assess progress.

Finally, newcomers to Canada often rely on both formal (e.g., professionals) and informal (e.g., relatives, friends) social networks to access support services (Neufeld et al., 2002). Not surprisingly, newcomers tend to start with their informal networks, where typically a relative or friend from the same ethnic background is able to make important connections for the family to needed services. In some cases, no such network is available to newcomers. In all cases, professionals need to engage in greater community outreach. Agencies need to provide access to appropriate translation supports, and to ensure that they are offering culturally sensitive services. Professionals need to do their part to ensure that newcomer families receive the appropriate assistance, so that all children in their communities will thrive.

For more on cultural considerations go to Section 6 Supporting Parents and Professionals

Section 3 Children's Development

The changes that occur in a child's development in the first few years of life are truly remarkable. Caregivers and professionals note children's development as they begin to smile, laugh, sit, crawl, babble and talk. Children begin to socialize and play cooperatively with other children. They acquire important skills to get along with others such as turn-taking, sharing and following instructions, as well as skills that will help them academically such as drawing, counting, reading, and writing.

Early child development usually follows a sequence, as the child needs to master one skill before he can acquire the next, but all children develop at their own rate. At times, a child may take a long time to master a new skill; at other times, he may seem to skip a skill in the expected sequence in his speed of development. Through careful observation, assessment and communication with the child's caregivers, professionals can draw a clear picture of the child within their setting. Identifying risks, concerns or delays requires interpretation within the entire context of the child.

Although observation requires time, a "wait and see" approach, when delays are identified, is not in the interest of the child. Early identification should lead to early intervention. Early intervention should lead to increased brain stimulation at a time when the child's brain is most receptive and malleable. Early interventions may include:

- Increased parental engagement
- Added opportunities to socialize with other children and adults
- Engaging the child in a variety of play activities
- Specialized services

Early intervention is also highlighted in the enhanced 18 months strategy. This strategy emphasizes the need to assess each child's development and developmental health at the 18 months visit with his primary care provider. For more information visit: www.18monthvisit.ca.

Section 3 Children's Development

Children develop on a continuum that is influenced by different factors. For example, differences in children's physical development have been noted based on gender, geography, and early experiences (Berk, 2008). Cultural practices can also influence the development of language, character, self-concept, and drawing (Berk, 2008). Understanding the continuum of development will assist professionals in promoting each child's development and identify delays.

Children develop as a whole, but development is often grouped into domains. In this resource, developmental skills and development have been grouped into five domains to help professionals understand the specific indicators within each area. This section contains some key information about the following developmental areas:

- Growth
- Nutrition
- Feeding Skills
- Dental Health
- Sleep
- Perceptual Development
- Character Development
- Aesthetic Development

All developmental items listed within the age and domain categories in this resource should be viewed within each child's continuum. Although most children will have achieved the skills listed for each age section, there are sometimes good reasons why a child will not have achieved that skill. For example, some First Nations practice a "Walking Out Ceremony". This means that the infant's feet up to one year of age do not touch the ground. A practice like this may temporarily affect the infants crawling and walking development and should be noted when observing the child's development.

Professionals need to keep all of these considerations in mind as they use and reference this resource. If one or more significant delays in a developmental domain are noted, professionals should encourage families to seek a referral from a physician, other expert or specialized children's services (See Section 7 Local Contacts and Services). Two other key resources are:

- The Early Learning for Every Child Today document that provides a continuum of development with examples on how the child's increasing skills can be assessed.

- The Nipissing District Development Screen is a set of 13 developmental checklists that can be completed by parents or caregivers at key developmental ages for all children from birth to 6 years. It is not a diagnostic tool, but is designed to assist parents, health care and child care professionals to record the developmental progress of infants and children. The checklists are free for users in Ontario and can be ordered from the website at http://ndds.ca/ontario/home.html.

Similar to these resources, the On Track guide provides a reference tool to assist professionals in their observation of the development of all children.

Physical Development

Growth

One of the most used indicators of healthy development is physical growth. Infants grow at an astounding rate. By the age of two, a child will have more than tripled his birth weight and have reached about half of his adult height. His bones, that were somewhat flexible at birth, harden and become better able to support his weight. The bones of his skull also harden and fuse. The soft spots on his head disappear by 18 months.

Each individual child will have a growth trajectory or follow a particular "curve" that is right for him. His growth curve is dependent on a combination of factors including:

- Cultural background
- Genetic potential
- Environmental inputs such as nutrition, exercise and social stimulation.

The exact location on a measurement graph is less important than the trend over time.

Section 3 Children's Development

A child's growth is measured using three parameters:

- Weight
- Height
- Head circumference

Weight

Infants grow quickly and put some of their weight gain into body fat, giving them the characteristic infant look. As they continue to grow and increase their motor skills, fat is gradually replaced by muscle. This contributes to their change in body proportions (Oswalt, 2007). During the first four months, infants grow about 20 - 30 grams (2/3 - 1 oz) per day for a total of 3.6 kg (8 lbs) in boys and 3.15 kg (7 lbs) in girls. After this time, weight gain begins to slow somewhat.

Height

Height also increases rapidly. During the first four months infants grow about 14 cm (6 inches). The increase in height also begins to slow somewhat thereafter. By the age of two, children have reached about half of their adult height.

Head Circumference

At birth, most of the infant's body mass is in his head, but over the next two years his body growth catches up giving him more adult-like proportions. His head also continues to grow and is measured by head circumference.

Growth Charts

These three parameters are plotted on a growth chart. Although ups and downs are common in the first 18 months, by age 2 a child usually follows a curve on the growth chart. Boys and girls have different patterns in growth. Because of this, there are different growth charts for both sexes. For example, if a boy follows the 50th percentile in height, it means that 50% of boys at the same age will be taller and 50% will be shorter than him. If a girl follows the 60th percentile in weight, it means 40% of girls at the same age will be heavier and 60 % will be lighter.

The most up-to-date growth standards were developed with a large, multi-population cohort of children from six different countries and four different continents and are based on breastfeeding infants by the World Health Organization (WHO). The WHO charts have been adopted by the Canadian Pediatric Society (CPS) and can be downloaded from www.cps.ca/english/publications/cps10-01.htm

Nutrition

The first three years of a child's life are the most crucial for a child's development, as the child grows rapidly than during this period (WHO, 2003). Healthy eating not only supports growth, it is fundamental to brain development and has been linked to learning and school readiness. The effects of poor nutrition early in life can lead to a variety of challenges in children, such as:

- Delayed motor and cognitive development
- Social/emotional problems
- Attention difficulties
- Poor academic achievement (WHO, 2003)

Another significant concern is the growing problem of childhood obesity. In 2004, it was reported that 26% of Canadian children and youth aged 2 to 17 were either overweight or obese. Obesity has been linked to a number of illnesses such as diabetes, stroke, heart disease, hypertension, and certain cancers (Leitch, 2007).

Readers are encouraged to explore the key nutrition resources available in Ontario. They include resources from:

- Best Start Resource Centre on breastfeeding, infant and child nutrition
  www.beststart.org/resources/breastfeeding/index.html
  www.beststart.org/resources/nutrition/index.html
- The Canadian Pediatric Society
  www.caringforkids.cps.ca/healthybodies/index.htm
- EatRight Ontario
  www.eatrightontario.ca/en/default.aspx
- Health Canada's Eating Well With Canada's Food Guide
  www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index-eng.php#1
- Health Canada Infant Feeding Guidelines
  www.hc-sc.gc.ca/fn-an/pubs/infant-nourrisson/nut_infant_nourrisson_term-eng.php

- The Nutrition Resource Centre
  www.nutritionrc.ca/
- Pediatric Nutrition Guidelines for Primary Health Care Providers

Key Recommendations

- Infant is breastfed exclusively for 6 months and continues to breastfeed for up to 2 years and beyond
- Exclusively breastfed infant receives a Vitamin D supplement daily up to one year
- Formula is prepared and stored following preparation and storage guidelines
- Expressed breastmilk is stored following storage guidelines
- Expressed breastmilk or formula is not heated in microwave ovens
- Solids or sweetened substances are not added to the infant's bottle (e.g. cereal or corn syrup)
- Water or other fluids are not given to the infant before 6 months
- Complementary foods are introduced when the infant reaches 6 months of age, with particular attention to iron-rich foods (e.g., iron-fortified cereal, meat, fish, cooked egg yolk, well-cooked legumes, or tofu)
- A variety of age appropriate foods are offered to the infant from 6 months of age
- The infant is given iron-rich foods (e.g., iron-fortified cereal, meat, fish, cooked egg yoke, well-cooked legumes or tofu) after solids are introduced
- High mercury fish is avoided or offered rarely
- Cow's milk (3.25% M.F.) is not given to the infant before 9-12 months of age
- Fortified soy beverage is not given before 24 months of age
- Other vegetarian based beverages (e.g., rice) are not given as a substitute for cow's milk
- The infant drinks no more than 4 oz of fruit juice per day until the age of 18 months and no more than 6 oz from 18 months to 6 years
- Sweetened, carbonated or caffeinated drinks are not given to the infant
- The child drinks between 16 oz to 24 oz of milk per day once he is no longer breastfeeding
- The child drinks whole cow's milk (3.25% M.F.) until the age of 2 years, then reduced-fat cow's milk
- (e.g., 1% or 2% M.F.)

- The child has access to water between meals and snacks to quench thirst as needed
- The child is consistently offered foods from all food groups daily
- The child is allowed to decide how much food to eat (e.g., no force feeding)
- The child has a feeding schedule that includes 3 meals and 2 - 3 healthy snacks daily, leaving 2 - 3 hours between meal and snack times
- The child's food intake rarely includes trans fats and additional saturated fats are limited
- Meals and snacks are offered at a table without distractions (e.g., TV)
- Family mealtimes are a regular occurrence for the child

Feeding Skills

Infants are born with the ability to suck and, when born full-term, are usually able to coordinate sucking, swallowing and breathing. Increased feeding skills depend on the development of:

- Gross motor skills (e.g. the ability to sit)
- Fine motor skills (e.g. the ability to pick up small items)
- The ability to see (e.g. coordinate hand to mouth movements)
- Dental/oral development (e.g. the ability to chew or bite)

Feeding skills are included in the Children's Development by Age for Infants, Toddlers and Preschoolers because:

- Feeding skills are often included in assessing the child
- Some feeding skills are also indicators of school readiness

Note. Child feeding practices may vary depending on cultural practices <link> (e.g., hand-feeding child until school age, utensil use, adding culture-specific supplements to diet). Professionals should explore and support cultural practices unless the child's health will be directly harmed as a result of a specific practice.

Dental Health

20 deciduous (primary or non-permanent) teeth appear by the time the child is two to three years old. Dental development in children can be delayed by up to a year. The age of appearance of the teeth is not as important as the sequence. Permanent teeth begin to develop around birth (Alsada et al., 2005), but the first permanent tooth will only erupt at approximately 6 years of age (Meadow & Newell, 2002).

The deciduous teeth tend to be small and short, with a milky white colour, while permanent teeth are wide, with a white to grey colour (Brown, 2007). Some variations have also been noted by sex (e.g., teeth usually erupt a few months earlier in girls) (Meadow & Newell, 2002). The following table provides an overview of the approximate appearance of primary or deciduous teeth in children.

Deciduous (non-permanent or baby) teeth	Appearance (in months)
Central incisors - lower	6 - 10
Central incisors - upper	7 - 12
Lateral incisors - upper	8 - 12
Lateral incisors - lower	7 - 16
Canines	16 - 23
First molars	12 - 19
Second molars	20 - 33

(Brown, 2007; Meadow & Newell, 2002)

A major concern among dental professionals continues to be the number of young children with Early Childhood Tooth Decay (ECTD) also known as Early Childhood Caries (ECC), a preventable public health concern. Dental bacteria are often transmitted by the caregiver to the child through practices such as sharing utensils or cleaning a dropped pacifier with a caregiver's saliva (American Academy of Pediatric Dentistry, (AAPD) 2004).

- ECTD can impact a child's:
  - Concentration
  - Ability to eat and sleep
  - Appearance
  - Health of permanent teeth
  - Growth
  - General health (AAPD, 2008; Ontario Association of Public Heath Dentistry (OAPHD), 2003)

- Several risk factors are linked to early childhood tooth decay, including:
  - Low socioeconomic status
  - Lack of access to dental care
  - Lack of awareness of the importance of dental care
  - Low parental education level
  - Familial history of dental caries
  - Sugar-rich diet
  - No breastfeeding
  - On-demand breastfeeding without oral hygiene practices
  - Lack of fluoride exposure to the teeth
  - Second and third hand smoke exposure (American Academy of Pediatrics (AAP), 2003; Bogges & Edelstein, 2006; Dini et al., 2000; Nurko et al., 2003).

An initial indicator of Early Childhood Tooth Decay is a white lesion in the tooth enamel (Nurko et al., 2003), which may lead to a brown discolouration that indicates the presence of a dental cavity (Yarnell, 2007).

- Dental health and development can also be affected by:
  - Injuries in childhood affecting the mouth or teeth and
  - Prolonged sucking habits after all deciduous teeth have erupted

In Ontario, dental hygiene and dental visits are not covered under OHIP, but children without dental coverage can receive treatment through the Children in Need of Treatment (CINOT) program www.mhp.gov.on.ca/english/health_promotion/cinot.asp.

- Good oral health provides the foundation for good dental health and development. The following factors promote good oral and dental health:
  - Healthy pregnancy
  - Healthy nutritious diet
  - Good oral hygiene
  - Appropriate use of fluoride
  - Regular dental visits
    (Kulkarni, 2003)

Connection: Healthy Pregnancy - Healthy Teeth

- An infant's deciduous teeth begin to develop during the first three months of pregnancy. The following factors build the foundation for good dental health and development:
  - A healthy pregnancy
  - Good nutrition
  - Adequate calcium intake and
  - Avoiding nicotine, alcohol and certain medications
- Healthy Nutritious Eating
  - Infants and children should eat a healthy nutritious diet following Canada's Food Guide www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php).
  - Sweetened substances should not be added to drinks; sucrose is the substance most likely to cause cavities.
  - Sweetened drinks and foods should be limited to mealtimes; sweet and starchy snacks between meals promote cavities.

Practicing Good Oral Hygiene

Dental bacteria are often transmitted by the caregiver to the child. Caregivers can transmit bacteria through playing, kissing, and practices such as sharing utensils or cleaning a dropped pacifier with a caregiver's saliva. The parent or caregiver must have good oral health for the child to have good oral health.

- Promoting good oral health in children includes:
  - Using clean feeding utensils, toys and pacifiers
  - Cleaning the gums of infants younger than 12 months of age with a damp cloth after feeding, and before they are put to bed
  - Cleaning teeth with a soft, age-appropriate toothbrush once they have erupted
  - Brushing the child's teeth twice a day or after each feeding if risk factors are present
  - For young children, brushing should be carried out or supervised by an adult
  - Not putting the child to bed with a bottle containing milk, juice or any sweetened liquid (only water is recommended)
  - Paying attention to injury prevention strategies
  - Encouraging children to stop non-nutritive sucking habits such as using pacifiers or fingers after all baby teeth have erupted

- Appropriate Use of Fluoride
  - In areas where tap water is fluoridated, using tap water to rinse the mouth may provide some fluoride protection in young infants.
  - If fluoridated water is not available, the dentist may recommend fluoride treatment once the teeth are present.
  - Fluoride toothpaste should not be used in children younger than 3 years or until the child is able to spit competently.
  - Toothpaste, once used, should be limited to a small smear or pea sized drop.
  - Children should not be allowed to swallow fluoride toothpaste as it can cause discolouration of the permanent teeth.
- Regular Dental Visits
  - The child's first dental visit should be within 6 months after the first tooth erupts but no later than 12 months of age.
  - Ensure the child has regular visits to a dental professional.
  - Most dental problems are preventable and prevention costs are significantly less than treatment costs.

(AAP, 2003, 2008; AAPD, 2004; AAPD/AAP, 2008; Alsada et al., 2005; Boggess & Edelstein, 2006; Dini et al., 2000; Kulkarni, 2003; Nainar & Mohummed, 2004; OAPHD, 2003)

A good resource is the online video: Baby Oral Health: Pregnancy through Childhood at www.utoronto.ca/dentistry/newsresources/kids/index.html.

For more information check the Ontario Association for Public Health Dentistry at www.oaphd.on.ca

Sleep

- Sleep is a critical, but much overlooked function of child development. Adequate sleep promotes:
  - Self-regulation
  - Growth
  - Physical health
  - Memory
  - Cognitive functioning
- Lack of sleep has also been associated with:
  - Family distress
  - Attachment difficulties
  - Parental depression

It takes time for infants to develop a sleep-wake system and develop a circadian rhythm. It can take much longer in some infants than others. Factors such as time cues, biological factors, environmental factors like the home environment and infant temperament all play a part (Centre of Excellence for Early Childhood Development (CEECD), 2008).

Infants at birth have a very different sleep pattern than adults. Half of the infants sleep is spent in REM or active sleep. REM sleep is recognized by faster and irregular breathing, frequent body movements, noises such as grunting or cries, and rapid eye movements (Anders, 2003). During this time the infant puts his experiences into memory. REM sleep is therefore a very important part of learning.

Infants also spend fifty percent of sleep in non-REM or quiet sleep. This type of sleep is characterized by deeper sleep where breathing is slow and regular, the body is quiet and the infant cannot be disturbed easily.

In infants the sleep cycle is only about 50 - 60 minutes long. This means he will spend about 25 - 30 minutes in REM sleep followed by the same amount of quiet sleep. After that he will wake, moving from drowsy to quiet alert to active alert. It is not until the infant is about four to six months of age that he has learned enough self-soothing behaviours to consolidate sleep during the night hours.

By three years of age, REM sleep has been reduced to 30% with 70% of sleep spent in quiet sleep. Sleep cycles also lengthen gradually. By adolescence, children will have reached adult levels of 20% REM and 80% quiet sleep in 90-minute sleep cycles.

The amount of sleep varies greatly from one child to the other. Infants up to six months of age may spend up to 16 hours per day sleeping (CPS, 2007), but as little as 10 hours has been reported in some infants. Infants from six to 12 months may sleep up to 14 hours per day, Toddlers about 10 - 13 hours and preschoolers 10 - 12 hours (CPS, 2007).

- Sleep disturbances in toddlers and preschoolers can be linked to a number of issues:
  - Resistance to being put to bed or to sleeping in his bed
  - Dependence on caregiver presence and soothing actions - e.g., nursing or rocking
  - Fears and anxieties around night-time
  - Airway functioning/airway obstruction - e.g., noisy breathing, snoring or breathing pauses due to enlarged adenoids or a respiratory infection (Anders, 2003)

- Because sleep is important for healthy development, it is a good idea for caregivers to develop strategies to help their child over six months develop a healthy sleep pattern:
  - Infants need naps as well as night time sleep. Opportunities for naps should be offered by either setting a routine or following the child's lead.
  - Infants can be put to bed while they are drowsy, but still awake. This will help the child to develop behaviours to soothe himself to sleep.
  - Good bedtime and naptime routines and a set place to sleep may help the child feel secure and allow him to fall asleep easier.
  - A pacifier may help a child fall asleep once breastfeeding has been well established.
  - Picking the child up as soon as he makes a sound may disturb his sleep cycle as he may be in REM sleep at that time (CPS, 2007).

More tips on how to establish healthy sleep for older babies, toddlers and preschoolers can be found at: www.caringforkids.cps.ca/healthybodies/HealthySleep.htm and

http://www.child-encyclopedia.com/en-ca/child-sleeping-behaviour/how-important-is-it.html.

Perceptual (Sensory)

- The child learns about the world around him through his senses. Five senses have been described:
  - Touch
  - Taste
  - Smell
  - Hearing
  - Vision

By the time the child is born some of his senses are already well or fully developed and help him connect to his caregivers and make sense of his experiences. Perceptual development is linked and inter-related to the five domains. For example, hearing is closely related to language development, vision to cognitive development and touch to emotional development. **Perceptual milestones are mostly listed in Infant's Development by Age. Vision and Hearing Milestones are also listed in the Toddler's Development by Age.** After that they are included in the five domains of development.

Note: *Berk (2008) highlights the fact that little research evidence is available in the areas of touch, taste, and smell beyond birth.*

Touch

Touch after birth and even before birth enhances early physical growth and is vital to solid emotional development. Touch provides security and comfort as well as exploration. Exploration through touch initially occurs though skin and mouth and later through hands and fingers (Berk, 2008).

Taste and Smell

From birth,infants can show that they like and dislike a number of smells. Amniotic fluid and later breastmilk have changes in taste and smell depending on a mother's diet, providing her child with a range of early experiences that stimulate these senses and influence his preferences (Berk, 2008).

Hearing

Hearing is fully developed at birth and a congenital hearing loss can be identified in newborns. Hearing loss in young children can have a profound and lasting effect on their future outcomes in life. Depending on the severity, hearing loss in children has been related to delayed psychological, social/emotional, cognitive, academic, language, and speech development (Puig et al., 2005; Thompson et al., 2001; Wada et al., 2004). Early identification and intervention strategies are key to positive later outcomes.

- Some of the interventions commonly used with children who are hearing impaired include:
  - Hearing technology (e.g., hearing aids, cochlear implant)
  - Sign language
  - Total communication
  - Auditory-verbal therapy programs
  - Speech and language therapy
  - Family support (Puig et al., 2005; Thompson et al., 2001)

- Risk factors that have been linked to childhood hearing loss include:
  - Family history of permanent childhood hearing loss
  - Prematurity; neonatal intensive care for more than 5 days; assisted ventilation
  - In-utero or postnatal infections
  - Low birth weight
  - Perinatal hypoxia (oxygen deficiency)
  - Jaundice
  - Craniofacial and temporal bone anomalies; head trauma (especially fractures)
  - Syndromes associated with hearing loss
  - Neurodegenerative disorders or sensory motor neuropathies
  - Chemotherapy
    (Joint Committee on Infant Hearing, 2007; Puig, Municio, & Medà, 2005)

In Ontario, the Infant Hearing Program (IHP) with universal screening of newborns, began in 2002 (Canadian Working Group on Childhood Hearing, 2005) and is now well established. All hospitals in Ontario are screening infants after birth and follow up services are available in each community. You can find more about the Infant Hearing Program in Ontario on the Ministry for Children and Youth website at: www.children.gov.on.ca/htdocs/English/topics/earlychildhood/hearing/index.aspx.

Vision

An infant's vision is the least developed of all senses at birth. The development of the eyes is completed by about 6 months of age, and coordination between the eyes is achieved by about 12 months of age (Pantell et al., 2009). At that point, the infant's vision has reached adult levels (Rudolph et al., 2003). A child's visual ability presents many opportunities for learning and overall development, especially in the critical first few years of life. Vision has been regarded as the "most important sense" (Rudolph et al., 2003, p 492), as it impacts

early learning through "imitation, primarily visual imitation. … communication, bonding, motor development, spatial concepts, balance, object permanence, language development and social interaction" (Rudolph et al., 2003 p 492). In fact, 80% of a child's learning involves vision. Poor vision is therefore linked to adverse effects on a child's educational achievement and later career choices (CPS, 2009).

Due to the importance of vision in a child's development, early detection and intervention of vision problems are essential. If detected early enough, many vision problems can be treated, with favourable outcomes in children (Carreiro, 2003; CPS, 2009; Rudolph et al., 2003). Vision screening in Ontario is free for children up to the age of 19 and should occur at six months, three years and yearly thereafter. It can be done by an optometrist or the child's primary physician. Ontario's Blind – Low Vision Early Intervention Program is designed to give children who are born blind or with low vision the best possible start in life. Specialized family-centred services are funded by the province and are available for children from birth to Grade 1. For more information check the Ministry for Children and Youth Services website at: www.children.gov.on.ca/htdocs/English/topics/earlychildhood/blindnesslowvision/index.aspx.

Many factors can contribute to vision loss, such as malnutrition, poor hygiene or vitamin deficiencies (Oyiborhoro, 2005). These are rare in Canada and more likely to occur in developing countries.

- Here are a few factors related to vision loss:
  - Perinatal factors (e.g., drug use, infection, medications, Fetal Alcohol Spectrum Disorder, prematurity)
  - Hereditary factors
  - Retinal disease
  - Eye injury
  - Cataracts
  - Glaucoma
  - Disability (e.g., cerebral palsy, Down syndrome)
  - Brain tumour
  - Diabetes

  (Carreiro, 2003; Olver & Cassidy, 2005; Oyiborhoro, 2005; Rudolph et al., 2003)

Often children with vision problems show no symptoms. In fact they may be misdiagnosed with an attention or learning difficulty. Although not exhaustive, some of these signs may indicate a concern:

- Excessive blinking
- Frequently rubbing eyes
- Eye-hand and coordination difficulties
- Difficulty with depth perception
- Double vision
- Squinting
- Positioning self close to television or books
- Closing or covering one eye frequently
- Excessive tearing or one or both eyes
- Extreme sensitivity to light
- Overly prominent-appearing eyes
- Eyes crossing frequently or constantly past 6 months of age
- Drooping eyelid
- Eye infections – itchiness, crusty eyelashes, lumps on or around eyelid
- Red swelling of eyelid
- Lack of eye contact by 3 months of age
- Lack of visual fixation or following moving objects by 3 months of age
- Lack of accurate reaching for objects by 6 months of age
- Frequent horizontal or vertical jerky eye movements
- Any asymmetry of pupil size
- Any obvious abnormalities of the shape or structure of the eyes
- Lack of a clear black pupil (e.g., haziness of the cornea, a whitish appearance inside the pupil)
  (Ciner 1997, Tamplin, 1995 as cited in Rudolph et al., 2003; Olver & Cassidy, 2005; Pantell et al., 2009; Shelov & Hanneman, 1997)

Character

Character development includes the development of:

1. Moral understanding and ethical behaviour including a sense of justice and fairness, right and wrong and the consequences that follow
2. Empathy and pro-social behaviour including being able to understand another's emotions and feel what they are feeling, use actions to help or comfort focusing on the other person and not on self

Social, emotional and cognitive functions are strongly involved in a child's character development.

Moral Understanding and Ethical Behaviour

Although adults initially are the largest influence on child's moral understanding and ethical behaviour, over time, children develop a personal set of internal standards (Berk, 2008). By the end of the early childhood stage, children have internalized many moral rules and behaviours (Berk, 2008) and can tell the difference between moral imperatives, social conventions and matters of personal choice.

- From two to five years of age, expect the child to:
  - Model ethical behaviours (e.g., does not damage another child's property)
  - Respond to breaking of rules with empathy-based guilt (e.g., understands that his action hurt the other's feelings or caused physical damage)
  - Focus on observable features and consequences when making moral judgments (e.g., physical damage, punishment, an adult's status)
- By 6 years of age expect the child to:
  - Understand differences in authority figures' legitimacy
  - Know the difference between moral imperatives, social conventions, and matters of personal choice
  - Delay gratification
  - (e.g., wait for an appropriate time and place to engage in a self-serving or tempting act)
  - Have a strong sense of justice and fairness based on equality (Berk & Roberts, 2009)

Levels of Reasoning about Positive Justice

Children's views about positive justice (or how they believe goods should be distributed fairly) also change with age. Over time, children believe that equality should form the basis for sharing with others. Damon (1980 as cited in Cole & Cole, 1993) has outlined levels of reasoning for children up to 10 years of age and beyond. Here are the descriptions of his levels of reasoning about positive justice in children up to age 7:

- Level 0-A (Age 4 and under)
  - Positive-justice choices come from wishing that something should happen. Reasons simply assert the wishes rather than attempting to justify them ("I should get it because I want to have it").
- Level 0-B (Ages 4 to 5)

- Choices still reflect desires but the child now justifies them on the basis of external, observable realities such as size, sex, or other physical characteristics of persons (e.g., we should get the most because we are girls). Such justifications, however, are invoked in a changing, after-the-fact manner, and are self-serving in the end.

◆ Level 1-A (Ages 5 to 7)

- Positive-justice choices come from notions of strict equality in actions (e.g., that everyone should get the same). Children now see equality as preventing complaining, fighting, or other types of conflict.

Empathy

Empathy is the ability to understand another's emotions and feel what they are feeling. This begins to emerge as early as 18 months of age (Berk, 2008). With the increase in a child's vocabulary, he is able to express his feelings and emotions with greater precision. Expressing one's own feelings does not automatically lead to empathy. Children must learn to understand what others are feeling by reading cues from the other person and putting themselves in the other's place. Empathy serves as a motivator for pro-social behaviour, actions that benefit another person without any expected reward for the self (Eisenberg, Fabes and Spinrad, 2006 as cited in Berk, 2008).

One unique program, Roots of Empathy, is designed for children from Kindergarten to Grade 8. Throughout the year, a baby and his or parent(s) visit the classroom. The children interact with the baby and discuss the baby's development and feelings. In turn, children's empathy and social/emotional skills are enhanced. Children who participated in Roots of Empathy also showed lower levels of aggression. Seeds of Empathy, an off-shoot of Roots of Empathy, brings the program to children from 3 to 5 years of age. For more information about the programs, visit:

Roots of Empathy - www.rootsofempathy.org
Seeds of Empathy - www.seedsofempathy.org

Ways to Promote Character Development in the Early Years

The following suggestions are ways to enhance children's character development in an early childhood environment:

- Build a sense of community so that children learn together in an atmosphere of respect and security.
- Provide opportunities for children to have a voice in creating the rules and the consequences for not following them.
- Give reasons for consequences, stressing where possible the effect of the child's actions on the group.
- Provide opportunities for children to collaborate with peers.
- In stories and discussions of everyday experiences, help the children to consider the feelings of other persons, real or fictional.
- Use role-play from events in daily life that lead to disappointments, tensions, fights, and joys in order to provide opportunities for the students to see things from perspectives other than their own.
- Discuss concepts of fairness and unfairness.
- Use stories, literature, history, current events and/or films. Stimulate discussions that will provoke higher-stage reasoning.
- Be a role model and point out other role models within the family and community. (Adapted from Duska & Whelan, 1975; Higgins, 1995, as cited in Berns, 2004)
- Promote the introduction of the Seeds of Empathy or Roots of Empathy program in your early childhood education and care setting.

Aesthetic (Artistry)

As children gain greater control over their fine motor skills and their cognitive abilities you may note progress in their creative expression through drawing. A number of factors can influence a child's art development, such as:

- Ability to hold various writing instruments
- Exposure to different art media and culture (Berk, 2008)
- Gender differences

Although the ages at which children pass through the various stages of art development may vary, children typically pass through these stages in the same sequence.

Stages of Art Development

(Berk, 2008; Eden, 1983, Gaitskell, 1958, Kellogg, 1969, Lasky & Mukerji, 1980, as cited in Vaclavik, Wolanski, & Wannamaker, 2001; Lowenfeld & Brittain, 1987)

1. The scribble stage (about 18 months to three years) is characterized by:
    - Dots
    - Lines
    - Zigzags
    - Whorls
2. The symbolic or pre-schematic stage (about three to six 6 years) is characterized by:
    - Shapes (e.g., circles, triangles, squares) and crosses
    - Radials
    - Mandalas
    - Suns
    - Large heads
    - Simple humans (hairpin, tadpole shapes)
3. The representational or schematic stage (about six to nine years) is characterized by:
    - Common features are present in the child's art - animals, trees, flowers, houses, cars, etc.

Art such as visual arts, music and drama have been shown to play an important part in children's development. El Sistema, a music program for children from two to 18 years of age in Venezuela, is one such example. The program has been adapted in over 20 other countries including Canada, because of its positive results on children (McCarthy, Hurst, & McCarthy, 2009). It shows us that arts are an important part of learning by engaging all domains and can be a key to elevating a child's trajectory.

Human infants need intensive care and nurturing from birth until they are able to live competently within our complex world. Although an infant is almost helpless at birth, he has some skills and a strong set of reflexes to help him survive. While some of these reflexes gradually disappear, his skills grow rapidly during his first 12 months.

Newborn Reflexes

Newborns have a wide variety of reflexes that are important for survival and later development (Berk, 2008). A reflex can be described as "an inborn, automatic response to a particular form of stimulation" (Berk, 2008, p. 147). Although the age at which these reflexes disappear may vary, the continuation of these reflexes well beyond the normal age range may indicate neurological problems in children (Comley & Mousmanis, 2007). Please refer to the ***Signs of Atypical Development in Infants*** section for additional information about patterns in child development which may indicate a more serious concern. In the following table, a summary of some newborn reflexes is provided.

(Knobloch & Pasamanick, 1974; Prechtl & Beintema, 1965; Thelen, Fisher, & Ridley-Johnson, 1984 as cited in Berk, 2008)

Reflex	Stimulation	Response	Age of Disappearance	Function
Eye blink	Shine bright light at eyes or clap hand near head	Infant quickly closes eyelids	Permanent	Protects infant from strong stimulation
Rooting	Stroke cheek near corner of mouth	Head turns toward source of stimulation	3 weeks (becomes voluntary head turning at this time)	Helps infant find the nipple
Sucking	Place finger in infant's mouth	Infant sucks finger rhythmically	Replaced by voluntary sucking after 4 months	Permits feeding
Swimming	Place infant face down in pool of water	Infant paddles and kicks in swimming motion	4-6 months	Helps infant survive if dropped into water
Moro	Hold infant horizontally on back and let head drop slightly, or produce a sudden loud sound against surface supporting infant	Infant makes an "embracing" motion by arching back, extending legs, throwing arms outward, and then bringing arms in toward the body	6 months	In human evolutionary past, may have helped infant cling to mother
Palmar grasp	Place finger in infant's hand and press against palm	Spontaneous grasp of finger	3-4 months	Prepares infant for voluntary grasping

Reflex	Stimulation	Response	Age of Disappearance	Function
Tonic neck	Turn infant's head to one side while he is lying awake on back	Infant lies in a "fencing position". One arm is extended in front of eyes on side to which head is turned, other arm is flexed	4 months	May prepare infant for voluntary reaching
Stepping	Hold infant under arms and permit bare feet to touch a flat surface	Infant lifts one foot after another in stepping response	2 months in infants who gain weight quickly; sustained in lighter infants	Prepares infant for voluntary walking
Babinski	Stroke sole of foot from toe toward heel	Toes fan out and curl as foot twists in	8-12 months	Unknown

Infant Development by Age and Domain

Note: all domains are interrelated, for example "recognize and calm down to familiar gentle voice" in the cognitive domain is also part of social, language and hearing development.

Note: All skills are listed by the age when most children should have accomplished them unless otherwise indicated. When observing a child between two ages refer to the younger age group (e.g., expect a three month-old child to accomplish the skills listed for two months of age).

Section 3 Children's Development

By Two Months of Age

Expect the child to:

Social

- Look at caregiver
- Study caregiver's face
- Smile in response to caregiver
- Imitate some facial expressions

Emotional

- Calm down when comforted by caregiver
- Enjoy being touched and cuddled

Language

- Have different cries
- (e.g., tired, hungry)
- Have a variety of sounds
- (e.g., coos, gurgles)
- Laugh out loud

Cognitive

- Recognize and calm down to familiar gentle voice
- Watch faces intently

Motor

Gross Motor

- Lift head when on tummy
- Hold head up when held at caregiver's shoulder
- Raise head when lying on back
- Bring hands together (at midline of body)

Fine Motor

- Open and shut hands

Perceptual (sensory)

Hearing

- Startle to loud or sudden noises
- Can be quieted by a familiar friendly voice
- Prefer complex sounds (e.g., noises, voices) to pure tones
- Distinguish some sound patterns
- Listen longer to human speech than to non-speech sounds
- Turn eyes and head in the general direction of a sound

Vision

- Follow things that are moving slowly with his eyes
- Eyes wander and occasionally cross
- Prefer black-and-white or high-contrast patterns (e.g., large squares, stripes, circles)
- Prefer the human face to all other patterns
- Prefer caregiver's face over unfamiliar faces
- Slow and inaccurate eye movements in tracking moving objects
- Turn eyes and head to look at light source

Section 3 Children's Development

Perceptual (sensory)	
Touch	**Taste and Smell**
• Respond to touch and pain • Distinguishes shape of object • placed in palm • Prefer soft to coarse sensations • Dislike rough or abrupt handling • Touch, especially skin-to-skin, decreases infant's stress hormones	• Recognize the scent of his own mother's breastmilk • Prefer the scent of human milk, even that of a different mother • Distinguish odours; prefer those of • sweet-tasting foods • Avoid bitter or acidic smells • Distinguish sweet, sour, and bitter tastes; • prefer sweetness
Nutrition/Feeding	
Nutrition	**Feeding skills**
• Breastfeed exclusively • Take 400 IU of Vitamin D per day • If not breastfeeding, take • iron-fortified formula • Take no other fluids or solids	• Suck well on the nipple • Use negative pressure to create effective seal • Cough or gasp if flow is too fast • Use a rhythmic sucking pattern with sucking bursts of 10 - 20 sucks • Coordinate suck - swallow - breathe pattern • Feed at least 8 times per day

Section 3 Children's Development

By Four Months of Age

Expect the child to:

Social	Emotional
◆ Laugh and smile at caregiver ◆ Respond to caregiver by making sounds and moving arms and legs ◆ Enjoy playing with people and may cry when playing stops ◆ Imitate some facial expressions	◆ Cry differently for different needs ◆ Show comfort and discomfort
Language	**Cognitive**
◆ Make sounds when looking at toys or people ◆ Responds to caregiver by making sounds ◆ Blow bubbles, sputter loudly ◆ Make simple vocalizations containing mostly vowel, but sometimes a number of consonants (cooling stage)	◆ Follow a moving object or ◆ person with his eyes ◆ Glance from one object to another ◆ Recognize familiar objects and people ◆ Begin to have some awareness that objects exist even when he cannot see them
Motor	
Gross Motor	**Fine Motor**
◆ Bring both hands to chest and keep head in midline when lying on back ◆ Lift head and chest and support self on forearms when placed on tummy ◆ Head does not lag when he is pulled into a sitting position ◆ Push down on legs when feet are placed on a firm surface ◆ Hold head steady when supported at the chest or waist in a sitting position. ◆ Roll from side to back	◆ Play with hands at midline of body ◆ Bring hand to mouth (e.g. put toys or fingers in mouth) ◆ Suck fingers and fists ◆ Take swipes at dangling objects with hands ◆ Grasp and shake hand toys ◆ Reach for an object when supported in a sitting position ◆ Hold an object briefly when placed in hand ◆ Use ulnar grasp when reaching (e.g., infant's fingers close against the palm)
Perceptual (sensory) View "by two months of age"	
Nutrition/Feeding	
Nutrition	**Feeding**
◆ View "by two months of age"	◆ View "by two months of age" ◆ May have developed a "routine" for feeding times ◆ Feed frequently both day and night (7 - 12 times per day)

By Six Months of Age

Expect the child to:

Social	Emotional
◆ Smile and babble when given adult attention ◆ Enjoy social play ◆ Be interested in mirror images ◆ Mimic facial expressions better and repeat them even after a time delay of up to one day ◆ Inspect faces of his caregiver	◆ Engage in self-soothing behaviours to control emotions (e.g., sucking fingers) ◆ Express pleasure and displeasure ◆ Distinguishes emotions by tone of voice

Language	Cognitive
◆ Turn head and look in direction ◆ of a new sound ◆ Respond to own name ◆ Seem to respond to some words ◆ (e.g., daddy, bye-bye) ◆ Recognize and prefer caregivers voice ◆ Listen and look at caregiver's face ◆ when he or she speaks ◆ Smiles and laughs in response to caregiver's smiles and laughter ◆ Make sounds while caregiver is ◆ talking to him ◆ Vocalize pleasure and displeasure (e.g., squeal with excitement or grunt in anger)	◆ Find partially hidden object ◆ Swipe at and reach for object within view ◆ Explore with hands and mouth ◆ Respond to "peek-a-boo" ◆ Spend longer studying toys and what to do with them

Language	Cognitive
◆ Imitate cough or other sound ◆ (e.g. "ah, eh, buh") ◆ Babble, using a variety of sounds ◆ Babble chains of consonants; make "ga, gu, da, ba" sounds (joins vowels and consonants); repeat syllables	

Section 3 Children's Development

Motor

Gross Motor

- Roll from back to side
- Sit with support (e.g. pillows)
- Support his whole weight on his legs when held in standing position
- Push up on hands when on tummy

Fine Motor

- Use hands to reach, grasp, bang, and splash
- Bring hands or toy to mouth
- Shake objects
- Reach with one hand
- Use raking grasp (not pincer) using all fingers
- Hold onto toys or objects
- Pat and pull at your hair, glasses, and face

Perceptual (sensory)

Hearing

- Respond to speech sounds by stopping
- to play, becoming quiet
- Turn head toward either side to
- locate a source of sound
- Brighten to sound, especially to
- people's voices
- Can distinguish musical tunes
- Identify location of a sound
- more precisely
- Become sensitive to syllable stress patterns in own language

Vision

- Turn head from side to side to follow a toy
- Glance from one object to another
- Prefer more complex pattern (e.g., checkerboard)
- Colour vision is well developed by 4 months of age
- 20/20 vision reached by 6 months of age
- (ability to see object clearly)
- Eyes track moving objects with increasing skill; by 5 months of age, can track objects moving at differing speeds and on intricate paths

Touch

- Explore most objects with his mouth
- Enjoy touch
- (e.g., being held, stroked, tickled)

Taste and Smell

- Prefer a salty taste to plain water
- Readily change taste preferences through experience

Nutrition/Feeding

Nutrition

- View "by two months of age"
- Begin to try iron-rich foods such as iron-fortified infant cereal or pureed meats

Feeding

- Show signs of readiness for solid foods:
- Hold head steady when supported
- in a sitting position
- Have lost the protrusion reflex that causes
- him to push solids out of his mouth
- Show interest in foods others are eating

By Nine Months of Age

Expect the child to:

Social	Emotional
◆ Have a special smile for familiar adults ◆ Fuss or cry if familiar caregiver looks or behaves differently ◆ Become upset when caregiver leaves ◆ Possibly turn away from strangers in anxiety, caution, shyness or fear (stranger anxiety) ◆ Smile at his image in a mirror	◆ Respond to expressions of emotion ◆ from other people ◆ Reach to be picked up and held
Language	**Cognitive**
◆ Turn to look for a source of sound. ◆ Respond to telephone ringing or a ◆ knock on the door ◆ Understand short instructions ◆ (e.g., "Wave bye-bye, "No", "Don't touch") ◆ Babble a series of different sounds ◆ (e.g., "babababa", duhduhduh") ◆ Make sounds and/or gestures to ◆ get attention or help. ◆ Imitate speech sounds	◆ Look for a hidden toy ◆ Struggle to get objects that are ◆ just out of reach ◆ Drop toys and watch them fall ◆ Begin to manipulate toys to make them do something (e.g., banging blocks together)
Motor	
Gross Motor	**Fine Motor**
◆ Sit without support for a few minutes ◆ Attempt to move by crawling, "bum" shuffling or pivoting on tummy ◆ Stand with support, when helped ◆ into standing position ◆ Control his upper body and arms ◆ Lunge forward to grab toy	◆ Pass an object from one hand to the other ◆ Pick up small items using thumb and first finger (e.g., crumbs, cheerios, rice) ◆ Bang two objects together ◆ Use his hands and mouth to explore an object ◆ Throw and drop objects ◆ Pounce on moving toys

Section 3 Children's Development

Perceptual (sensory)

Hearing

- Respond to soft levels of speech and other sounds
- Temporarily stop action in response to "no"
- Babble using a variety of repeated consonant-vowel combinations - e.g. "ba-ba", "ga-ga"
- Make sounds with rising and falling pitches

Vision

- Notice small items the size of breadcrumbs
- Show interest in pictures
- Recognize partially hidden objects
- Have developed depth perception

Touch

- View "by six months of age"

Taste and Smell

- View "by six months of age"

Nutrition/Feeding

Nutrition

- Continue frequent and on demand breastfeeding
- Take complementary iron-rich foods
- 2 - 3 times per day
- Take pureed, mashed or very soft foods

Feeding

- Begin to drink from cup
- Show an interest in foods, open mouth, may lean forward when solids are offered
- Show disinterest in food by keeping mouth closed, leaning or turning away
- Swallow pureed or mashed food with very small, soft lumps
- Use tongue in an up and down, not sideways movement

Section 3 Children's Development

By 12 Months of Age

Expect the child to:

Social

- Be shy or anxious with strangers
- Cry when caregiver leaves; separation anxiety
- Possibly be fearful in some situations
- Imitate people in play
- Show specific preferences for
- certain people and toys
- Prefer mother and/or regular caregiver
- over all others
- Extend arm or leg to help when being dressed
- Test parental responses to his actions during feedings and play
- Repeat sounds or gestures for attention
- Play games with caregiver
- (e.g., peek-a-boo, pat-a-cake)
- Show caregiver toys

Emotional

- Use facial expressions, actions, and lots of sounds or words to make needs known or to protest
- Show many emotions such as affection, anger, joy or fear
- Regulate emotions by moving (e.g., crawling) away from various situations
- Seek comfort
- (e.g., reach up to be held when upset)

Language

- Pay increasing attention to speech
- Look at person saying his name
- Understand simple requests and questions
- (e.g., "Where is the ball?" "Find your shoes").
- Use simple gestures, such as shaking head
- for "no"; wave "bye-bye"
- Combine sounds together as though talking
- (e.g. bada banuh abee)
- Take turns making sounds with you
- Use exclamations such as "oh-oh!"
- Consistently use 3 or more words including "dada" or "mama" even if not pronounced accurately
- Show interest in simple picture books

Cognitive

- Explore objects in many different ways (shaking, banging, throwing, dropping)
- Respond to music
- Look at correct picture when the
- image is named
- Imitate gestures
- Begin to use objects correctly (drinking from cup, brushing hair, dialing phone, listening to receiver)
- Begin to explore cause and effect

Section 3 Children's Development

Motor

Gross Motor

- Get up into a sitting position from
- lying down, without help
- Crawl or "bum" shuffle easily.
- Creep on hands and knees supporting
- trunk on hands and knees
- Get from sitting to crawling or prone
- (lying on stomach) position
- Pull up to stand at furniture
- Walk holding onto your hands or furniture
- Stand momentarily without support
- May take two or three steps without support
- Start to climb stairs/steps or furniture

Fine Motor

- Put objects into container
- Take things out of containers (e.g., blocks)
- Let objects go voluntarily
- Pick up small items using tips
- of thumb and first finger
- Push a toy
- Take off socks

Perceptual (sensory)

Hearing

- Recognize the same melody played
- in different keys
- Will turn and find sound in any direction
- "Screens out" sounds not used in native language
- Detect speech units crucial to understanding meaning, including familiar words and regularities in sound and word sequences

Vision

- Prefer patterns and moving patterns
- Detect familiar objects even when represented by an incomplete drawing
- Look through windows and
- recognize people
- Recognize pictures or people in pictures
- Play hide and seek

Touch

- Explore a variety of textures with hands and sometimes with mouth

Taste and Smell

- Willing to try a variety of new tastes
- Show likes and dislikes of tastes and smells

Nutrition/Feeding

Nutrition

- Take complementary iron-rich foods
- Take bite-sized pieces of table food
- May drink whole milk

Feeding

- Feed at regular times
- May have 3 meals and 2 snacks
- Finger-feed himself some foods
- Hold, bite and chew crackers
- Use side to side tongue movements as well as up and down

Section 3 Children's Development

Milestones taken from: Berk, 2008; Berk & Roberts, 2009; Curtis & Schuler, 2005; Ertem et al., 2008; Grenier & Leduc, 2008; Kent, 2005; Nipissing District Developmental Screen; Rourke, Leduc, & Rourke, 2006; Sears & Sears, 2003; Shelov & Hannemann, 2004

Also referenced:

(Health Canada 2004; CPS, Dietitians of Canada & Health Canada, 2005; Watson Genna, 2008)

Atypical Development

Although all children develop at their own rate, there are certain signs in a child's development which may indicate more serious concerns. If any of the following signs of atypical development are noted in children, these concerns should be discussed with the child's primary health care professional (First & Palfrey, 1994; Shelov & Hannemann, 2004). Subsequently, a referral to the appropriate specialist may be required.

- Age: two to four weeks
  - Sucks poorly and feeds slowly
  - Doesn't blink when shown a bright light
  - Doesn't focus and follow a nearby object moving slowly from side to side
  - Rarely moves arms and legs; seems stiff
  - Seems excessively loose in the limbs, or floppy
  - Lower jaw trembles constantly, even when not crying or excited
  - Doesn't respond to loud sounds
- Age: one to four months
  - Doesn't seem to respond to loud sounds
  - Doesn't notice his hands by two months
  - Doesn't smile at the sound of mother's voice by two months
  - Doesn't follow moving objects with his eyes by two to three months
  - Doesn't grasp and hold objects by three months
  - Doesn't smile at people by three months
  - Cannot support his head well at three months
  - Doesn't reach for and grasp toys by four months
  - Doesn't babble by four months
  - Doesn't bring objects to his mouth by four months
  - Begins babbling, but doesn't try to imitate any of your sounds by four months

- Doesn't push down with his legs when his feet are placed on a firm surface by four months
- Has trouble moving one or both eyes in all directions
- Crosses his eyes most of the time (occasional crossing of the eyes is normal in these first months)
- Doesn't pay attention to new faces, or seems very frightened by new faces or surroundings
- Is not alert to mother by three months
- Still has the tonic neck reflex at four months (also known as "fencing reflex" - link)
- Does not turn his head to locate sounds by four months

◆ Age: five to eight months

- Still has Moro reflex after six months
- (e.g., "startle reflex" involving the spreading and unspreading of arms - link)
- Seems very stiff, with tight muscles
- Seems very floppy, like a rag doll
- Head still flops back when body is pulled up to a sitting position
- Reaches with one hand only
- Refuses to cuddle
- Shows no affection for the person who cares for him
- Doesn't seem to enjoy being around people
- One or both eyes consistently turn in or out
- Persistent tearing, eye drainage, or sensitivity to light
- Does not respond to sounds around him
- Has difficulty getting objects to his mouth
- Seems inconsolable at night after five months
- Doesn't smile spontaneously by five months
- Cannot sit with help by six months
- Does not laugh or make squealing sounds by six months
- Doesn't roll over in either direction (front to back or back to front) by six months
- Does not actively reach for objects by seven months
- Doesn't follow objects with both eyes in the near (25cm) and far (1.5m) ranges by seven months
- Does not bear some weight on legs by seven months
- Does not try to attract attention through actions by seven months
- Unable to hold rattle by seven months

- Not searching for dropped objects by seven months
- Unable to hold an object in each hand by seven months
- Does not babble by eight months
- Shows no interest in games of peek-a-boo by eight months

◆ Age: nine to 12 months

- Does not crawl
- Consistently drags one side of body while crawling
- Cannot stand when supported
- Does not search for objects that are hidden while he watches
- Says no single words ("mama" or "dada")
- Does not use gestures, such as waving or shaking head
- Does not point to objects or pictures
- Does not use the pincer grasp by 12 months
- Is hard to console, stiffens when approached

If you are concerned about the development of a child, go to Local Information.

Toddler Development by Age and Domain

Note: all domains are interrelated, for example "recognize and calm down to familiar gentle voice" in the cognitive domain is also part of social, language and hearing development.

Note: All skills are listed by the age when most children should have accomplished them unless otherwise indicated. When observing a child between two ages refer to the younger age group (e.g., expect a 21 month-old child to accomplish the skills listed for 18 months of age).

By 15 Months of Age

Expect the child to:

Social	Emotional
• Respond to own name when called • Repeat an action that made you laugh • Stop an action when you say "no" • Imitate during play	• Look at you to see how you react • (e.g., after falling, when a stranger enters the room) • Be shy or anxious with strangers
Language	**Cognitive**
• Look at your face when you are talking to him • Look at pictures when you name them • Understand 50 words • Try to get something by making sound, while reaching or pointing • Imitate a few animal sounds • Use connected sounds that seem like little stories	• Start to recognize body parts on self and dolls • Explore objects in different ways • (e.g., shaking, banging, throwing, dropping) • Search for hidden objects in several locations • Recognizes image of self in mirror

Section 3 Children's Development

Motor	
Gross Motor	**Fine Motor**
◆ Crawl up stairs/steps	◆ Use two hands when
◆ Walk sideways holding onto furniture	◆ playing with toys
◆ Try to squat to pick up a toy from the floor	◆ Remove socks and try to undo shoes
◆ Get from a sitting to a crawling or prone position	◆ Stack two blocks
◆ Stand alone easily without support	◆ Poke things with index finger
◆ Walk holding onto an adults hand and may be able to take a few steps without support	◆ Scribble with crayon
	◆ Push a toy
Perceptual (sensory)	
Hearing	**Vision**
◆ View "by 12 months of age"	◆ View "by 12 months of age"
Nutrition/Feeding	
Nutrition	**Feeding**
◆ Eat many foods his family is eating	◆ Eat many foods his family is eating
◆ Have 3 - 4 nutritious meals and 1-2 snacks	◆ Have 3 - 4 nutritious meals and 1-2 snacks
◆ Continue to breastfeed	◆ Continue to breastfeed

Section 3 Children's Development

By 18 Months of Age

Expect the child to:

Social	Emotional
◆ Join in play with familiar adults, ◆ siblings, and peers ◆ Recognize image of self in mirror ◆ Look at you when you are talking ◆ or playing together ◆ Point to show you something ◆ Comply with simple directions ◆ Use familiar gestures (e.g., waving) ◆ Demonstrate some pretend play with toys (e.g., pretend to give teddy a drink, use bowl as a hat) ◆ Begin to select gender-stereotyped toys	◆ Show affection towards people, pets or toys ◆ Begin to realize that others' emotional reactions may differ from one's own; early signs of empathy ◆ Come for comfort when distressed
Language	**Cognitive**
◆ Add to vocabulary steadily ◆ Say 20 or more words. Words do ◆ not have to be clear. ◆ Enjoy being read to and looking at simple book with caregiver ◆ Point to familiar objects when asked ◆ Follow directions using "on" and "under" (e.g., "Put the cup on the table") ◆ Use a variety of familiar gestures (e.g., such as waving, pushing, giving, reaching up) ◆ Makes at least four different consonant sounds (e.g., b,n,d,h,g,w) ◆ Point to at least three different body parts when asked (e.g., "Where is your nose?") ◆ Try to get your attention to see ◆ something of interest	◆ Use objects as tools ◆ Imitate actions across a change in context (e.g., act out at home a behaviour learned at child care or on TV) ◆ Exhibit improved recall memory for people, places, objects, and actions ◆ Actively sort objects into a single category (e.g., same colour or same shape) ◆ Identify pictures in book, "show me the baby" ◆ Pretend play with toys and figures ◆ (e.g., feed stuffed animal) ◆ Consistently choose the larger of two piles of favourite foods (e.g., raisins or pieces of fruit)

Section 3 Children's Development

Motor

Gross Motor

- Walk up a few stairs/steps holding your hand
- Walk alone
- Trot, prance
- Squat to pick up a toy and stand
- back up without falling
- Push and pull toys or other objects
- while walking forward
- Climb stairs one at a time with help
- (e.g., holding adult's hand)
- Climb onto furniture, try to climb out of crib
- Walk backward two steps without support
- Kick a ball

Fine Motor

- Manipulate small objects with
- improved coordination
- Stack three or more blocks
- Turn a few board-book pages at a time
- Make vertical strokes with a crayon
- Turn over a container to pour out the contents
- Remove some clothing on his own
- Open drawers

Perceptual (sensory)

Hearing

- Respond to music by trying to dance,
- sway, clap or vocalize
- Look for source of sound in all directions

Vision

- Hold objects close to eyes to inspect
- Follow objects as they move from
- above head to feet
- Point to objects or people using a word that means "look" or "see"

Nutrition/Feeding

Nutrition

- Transition well to family foods
- and mealtimes
- Continue to breastfeed or take whole
- milk with meals or at bedtime
- Continue to have 3 - 4 meals and
- 1 - 2 snacks per day

Feeding

- Hold bite and chew crackers or
- other crunchy foods
- Use a spoon well; feed self with
- spoon with little spilling
- Swallow without loss of food or saliva from mouth; may lose some during chewing

Section 3 Children's Development

By 24 Months of Age

Expect the child to:

Social	Emotional
◆ Imitate behaviour of others, especially adults and older children ◆ Become increasingly aware of himself as separate from others; self-recognition is well under way; identify self in photos ◆ Become increasingly enthusiastic about company of other children ◆ Ask for help using words ◆ Say "no" and like to do some ◆ things without help ◆ Start to use words to influence ◆ a playmate's behaviour ◆ Show gender-stereotyped toy preferences ◆ Like to watch and play near other children	◆ Begin to tolerate caregiver's absences more easily; separation anxiety declines ◆ Acquire an emotion vocabulary for talking about feelings, including negative feelings, aiding emotional self-regulation ◆ Self-conscious emotions (shame, embarrassment, guilt, and pride) emerge
Language	**Cognitive**
◆ Point to object or picture when ◆ it's named for him ◆ Recognize names of familiar people, objects, and body parts ◆ Join two words together (e.g., "want cookie", "car go", "my hat") ◆ Follow simple instructions and two step directions (e.g., "find your teddy bear and give it to grandma") ◆ Hum and sing ◆ Learn and use one or more new words a week (may only be understood by family) ◆ Ask for help using words ◆ Use 10 to 20 consonants and have sufficient phonetic ability to learn ◆ many new words ◆ Use two pronouns ◆ (e.g.; "you", "me", "mine") ◆ Hold book the right way up and turn pages ◆ Pretends to read to stuffed animal or toy	◆ Find objects even when hidden under ◆ two or three covers ◆ Actively sort objects into two categories ◆ (e.g., all cars and all dolls) ◆ Show an understanding that items can be counted and that there are special counting words that are used (e.g., "one", "two", "three") ◆ Imitate actions of peers and adults even after a time delay of up to several months ◆ Engage in make-believe play, using simple actions ◆ Solve simple problems suddenly (instead of through trial and error) ◆ Use skills already learned and develop new ones (e.g., no loss of skills) ◆ Copy your actions ◆ (e.g., you clap your hands and he claps hands) ◆ Complete a simple shape-matching puzzle ◆ Understand and remember two-step request

Section 3 Children's Development

Motor	
Gross Motor	**Fine Motor**
• Carry large toy or several toys • while walking • Try to run • Play in a squat position • Walk backwards or sideways pulling a toy • Jump in place • Walk on tiptoe • Throw a ball • Climb onto and down from • furniture unassisted • Walk up and down stairs one step at a time holding on to support • Push riding toy with feet • Open doors	• Make scribbles and dots on paper or in sand • Scribble in circular pattern • Make horizontal stroke with a crayon • Turn over container to pour out contents • Build tower of four blocks or more • Possibly use one hand more frequently • than the other • Manipulate small objects with good coordination • Put objects into a small container • Turn board-book pages easily, one at a time • Take off own shoes, socks or hat
Perceptual (sensory)	
Hearing	**Vision**
• View "by 18 months of age"	• Look when reaching or grasping for • objects within vision • Look where he is going when walking, • climbing or running • Look for and point to pictures in books
Nutrition/Feeding	
Nutrition	**Feeding**
• View as by "18 months of age" • Take number of Food Guide Servings as recommended by Canada's Food Guide	• Eat most food without coughing and choking • Feed self most foods with spoon, fork • or fingers competently • Use tongue to clean food from upper • and lower lips and teeth

Milestones taken from: Berk, 2008; Berk & Roberts, 2009; Davies, 2004; Grenier & Leduc, 2008; Kent, 2005; Nipissing District Developmental Screen; Rourke, Leduc, & Rourke, 2006; Sears & Sears, 2003; Shelov & Hannemann, 2004

Atypical Development

Although all children develop at their own rate, there are certain signs in a child's development which may indicate more serious concerns. If any of the following signs of atypical development are noted, these concerns should be discussed with the child's primary health care professional. A referral to the appropriate specialist may then be required (First & Palfrey, 1994; Shelov & Hannemann, 2004).

- Age: Two Years
  - Does not seem to know the function of common household objects
  - (brush, telephone, bell, fork, spoon) by 15 months
  - Cannot walk by 18 months
  - Fails to develop a mature heel-toe walking pattern after several months of walking,
  - or walks exclusively on his toes
  - Does not show interest in cause-and-effect games by 18 months
  - Does not speak at least 15 words by 18 months
  - Unable to remove socks or mittens by self by 20 months
  - Does not use two-word sentences by age two
  - Does not imitate actions or words by age two
  - Does not follow simple instructions by age two
  - Cannot push a wheeled toy by age two

If you are concerned about the development of a child, go to Local Information.

Preschooler Development by Age and Domain:

Note: all domains are interrelated, for example "recognize and calm down to familiar gentle voice" in the Cognitive domain is also part of social, language and hearing development.

Note: All skills are listed by the age when most children should have accomplished them unless otherwise indicated. When observing a child between two ages refer to the younger age group (e.g., expect a four and a half year-old child to accomplish the skills listed for four years of age).

By 3 Years of Age

Expect the child to:

Social	Emotional
◆ Imitate adults and playmates ◆ Greet friends and familiar adults when reminded ◆ Be able to take turns in games most of the time ◆ Understand concept of "mine" and "his/hers" ◆ Share some of the time (e.g., toys, books) ◆ Play with others comfortably ◆ Cooperate with parent's request half of the time ◆ Put toys away ◆ Ask for help ◆ Possibly engage in aggression: instrumental (e.g., want something and pull it away from someone else or push or shout at someone to get it) or hostile (e.g., want something and deliberately hurt someone to get it)	◆ Spontaneously show affection for familiar playmates ◆ Show affection with words and actions ◆ Be able to wait for his needs to be met some of the time ◆ Object to major changes in routine ◆ Express a wide range of emotions ◆ Show awareness of own and other's feelings ◆ Begin to show an understanding of other's feelings ◆ Begin to describe himself as either "good" or "bad". (This indicates that the child is beginning to develop self-esteem. In the preschool years self-esteem is primarily linked to feedback from caregivers.)

Section 3 Children's Development

Language	Cognitive
◆ Understand two-and three-step directions (e.g., "Pick up your hat and shoes and put them in the closet") ◆ Understand and use some describing words like big, dirty, wet and hot ◆ Understand "who", "why", "what" and "when" questions ◆ Understand physical relationships (e.g., on, in, under) ◆ Recognize and identify almost all common objects and pictures ◆ Speak in five or more word sentences (e.g., "I go home now and play") ◆ Can say full name, age, and gender ◆ Use pronouns (e.g., I, you, me, we, they) and some plurals (e.g., cars, dogs, cats) ◆ Speak clearly enough to be understood most of the time by family ◆ Name body parts ◆ Talk about past events (e.g., trip to grandparents house) ◆ Listen to music or stories for 5 to 10 minutes with caregiver ◆ Turn the pages of a book one at a time ◆ Be aware of the function of print (e.g., lists, menus, signs) ◆ Begin to make over-regularization errors (e.g., I runned home; I have two feets); these types of errors continue into middle childhood	◆ Make mechanical toys work ◆ Match an object in his hand or in the room to a picture in a book ◆ Play make-believe games with actions and words (e.g., "pretending to cook a meal, fix a car") ◆ Sort objects by shape and colour using two categories (e.g., all blue circles and all yellow triangles) ◆ Complete puzzles with three or four pieces ◆ Can use appropriate counting words to identify quantities of 3 or more ◆ Ask a lot of questions

Section 3 Children's Development

Motor	
Gross Motor	**Fine Motor**
• Climb well • Walk up the stairs using the handrail • Run easily • Bend over easily without falling • Stand on one foot briefly • Throw a ball forward at least one meter (three feet)	• Make vertical, horizontal, and circular strokes with pencil or crayon • Can copy a circle or a cross with a crayon • Hold a pencil in writing position • Turn book pages one at a time • String big beads • Build a tower of six blocks • Twist lids off jars or turn knobs • Work latches and hooks • Dress or undress with help
Nutrition/Feeding	
Nutrition	**Feeding**
• Have improved appetite and interest in food • Be influenced by TV commercials • May have food "jags" (e.g., refusal of one or two favourite foods over an extended period of time) • Eat a variety of foods according to Canada's Food Guide	• Lift and drink from a cup and replace it on the table • Hold handle on cup • Insists on doing it "myself" (may not be common in all cultures)

Section 3 Children's Development

By 4 Years of Age

Expect the child to:

Social	Emotional
◆ Be interested in new experiences ◆ Take turns and share with other children in small group activities ◆ Play near and talk to other children while continuing with own activity ◆ Play "mom" or "dad" ◆ Engage in increasingly inventive fantasy play ◆ Look for adult approval ("Watch me." or "Look what I did") ◆ Be more independent ◆ Form first friendships ◆ View self as a whole person involving body, mind, and feelings ◆ Negotiate solutions to conflicts	◆ Try to comfort someone who is upset ◆ Use words to communicate empathic feelings ◆ Persevere longer on a difficult task ◆ Show improvement in emotional self-regulation (e.g., controlling expression of emotions); decline in emotional outbursts
Language	**Cognitive**
◆ Understand the concepts of "same" and "different" ◆ Master some basic rules of grammar ◆ Matches some letters with their sound (e.g., letter T says "tuh") ◆ Speak in sentences of five to six words ◆ Speak clearly enough to be understood most of the time without repeating or stuttering on sounds or words ◆ Speak clearly enough for strangers to understand ◆ Say rhymes (e.g. cat-bat-hat) or sing children's songs ◆ Ask and answer a lot of questions (e.g., Why, What are you doing?) ◆ Tell stories with a clear beginning, middle and end ◆ Recognize familiar signs ◆ Distinguish writing from non-writing	◆ Correctly name some colours and numbers ◆ Identify written digits up to 9 ◆ Count correctly to determine quantities of more than 10 ◆ Understand three-part related directions and longer sentences (e.g., "Put your toys away and wash your hands before lunch") ◆ Approach problems from a single point of view ◆ Imagine that many unfamiliar images may be "monsters"; often have difficulty distinguishing between fantasy and reality ◆ Recall parts of a story ◆ Understand the concept of same/different ◆ Know his address

Section 3 Children's Development

Motor	
Gross Motor	**Fine Motor**
• Stand on one foot up to five seconds • Go up and down stairs alternating feet (e.g., with one foot on each step) • Kick ball forward • Throw ball overhand • Catch a large ball with outstretched arms • Move forward and backward with agility • Use the toilet/or potty during the day (e.g., toilet trained)	• Hold a crayon or pencil correctly • Draw a person with three or more body parts • Snip paper with scissors • Draw circles, squares, crosses • Begin to copy some capital letters • Undo buttons and zippers • Dress or undress but may need help with closures • Twiddle thumbs • Build a tower of nine blocks • Manipulate and shape clay
Nutrition/Feeding	
Nutrition	**Feeding**
• Request favourite foods • May want favourite food at most meals • Eat a variety of foods according to Canada's Food Guide • Prefer foods plain and not mixed together	• Use a fork at mealtimes (use of utensils varies by culture) • Self-feed well using fingers, spoon or fork • Finish most meals

By 5 Years of Age

Expect the child to:

Social	Emotional
• Respond verbally to "hi" and "how are you" • Show more independence and may even visit a next-door neighbour by himself • Want to be like his friends • Talk about having a best friend • Usually play well in groups • Play make-believe games with others • Share willingly with others • Be more likely to agree to rules • Like to sing, dance, and act • Be aware of sexuality • Cooperate with adult requests most of the time • Work alone at an activity for 20-30 minutes	• Separate easily from caregiver • Want to please friends • Recognize another's need for help and give assistance • Identify and talk about feelings in relation to events
Language	**Cognitive**
• Understands directions involving "if…then" (e.g., "If you are wearing runners, then line up for gym.") • Use future tense • Recall part of a story • Describe past, present and future tense • Tell long stories about own past experiences • Say name and address • Speak clearly in adult-like sentences most of the time • Use almost all the sounds of his own language with few or no errors • Understand that letters and sounds are linked in systematic ways	• Count out loud or on fingers to answer "How many are there?" • Can solve simple addition problems up to 5 + 5 from memory or using fingers • Know common shapes and most of the letters of the alphabet • Have an improved ability in distinguishing fantasy from reality • Understand time of day and days of the week • Experiment with strategies to solve simple arithmetic problems • Know about things used every day in the home (e.g., money, food, appliances) • Begin to know that others have thoughts (e.g., "Mommy thinks I am hiding in the bedroom.")

Section 3 Children's Development

Motor	
Gross Motor	**Fine Motor**
◆ Stand on one foot for 10 seconds or longer ◆ Hop on one foot several times ◆ Somersault ◆ Swing, climb ◆ Walk on a straight line, only stepping off once or twice ◆ Stop, start, and change direction smoothly when running ◆ Throw and catch a ball successfully most of the time ◆ Climb playground equipment without difficulty ◆ Usually care for own toilet needs ◆ Walk backward, toe to heel	◆ Draw lines, simple shapes and a few letters ◆ Draw person with body ◆ Use scissors to cut along a thick line drawn on a piece of paper ◆ Dress and undress with little help
Nutrition/Feeding	
Nutrition	**Feeding**
◆ See food as an important part of social occasions ◆ Prefer plain food, but will try some mixtures ◆ Eat a variety of foods according to Canada's Food Guide	◆ Use fork, spoon, and (sometimes) a table knife (use of utensils varies by cultures) ◆ Can open most food containers

Section 3 Children's Development

By 6 Years of Age

Expect the child to:

Social

- Play cooperatively with 2-3 children for 20 minutes
- Apologize for actions he didn't mean to do
- Listen while others are speaking; pay attention and follow instructions in a group
- Help others
- Explain rules of a game or activity to others
- Engage in better social problem-solving

Emotional

- Able to control emotions in most situations
- Show empathy in most situations or when made aware of another's feelings
- Can wait his turn or wait to have his needs met
- Can complete most tasks with few reminders

Language

- Understand some words about time and order (e.g., morning, afternoon, yesterday, next, last)
- Correctly say almost all of the sounds in words
- Identify sounds at the beginning of some words. (e.g., "What sound does pop start with? "puh")
- Recognize some familiar written words (e.g., own name, some store signs)
- Recognize short, high-frequency words in text (e.g., the, in, on, is)
- Tell about own experiences and ask about yours
- Speak clearly enough to be understood by everyone
- Pay attention and follow instructions in a group
- Have a vocabulary of about 10,000 words

Cognitive

- Copy shapes (e.g., circle, square, triangle)
- Solve simple addition and subtraction problems either from memory, using fingers or drawings
- Know number words beyond 50
- Use tokens to solve simple real-world problems (e.g., "if we have 6 cookies and 3 children, how many cookies can each child have, if they all share equally?")
- Learn more complicated games and play by the rules most of the time
- Know right from left on own body
- Be able to distinguish between fantasy and reality
- Show an understanding of right and wrong
- Demonstrate a more realistic understanding of space, size of objects, and distance in drawings
- Demonstrate a more realistic sense of self by assessing their strength and weaknesses (e.g., I am a good runner, but I have trouble riding my bike")

Motor	
Gross Motor	**Fine Motor**
◆ Skip across a room ◆ Walk on a beam without falling (e.g., curb) ◆ Hop on one foot for 3 meters (10 feet) ◆ Run lightly on toes ◆ Jump rope ◆ Ride a bicycle with or without training wheels	◆ Catch a small ball ◆ Cut out simple shapes following an outline (e.g., circle, square) ◆ Tie shoelaces ◆ Complete washroom routines without help ◆ Skate ◆ Print words and numerals ◆ Colour within lines ◆ Have an adult grasp of pencil ◆ Use glue appropriately
Nutrition/Feeding	
Nutrition	**Feeding**
◆ Eat a variety of foods according to Canada's Food Guide	◆ Begin to use chop sticks (use of utensils varies by culture) ◆ Able to open and close most food containers

Milestones taken from: Berk, 2008; Davies, 2004; DePoy & Gilson, 2007; Grenier & Leduc, 2008; Health Canada, 2007a; Health Canada, 2007b; Kent, 2005; Nipissing District Developmental Screen; Ollendick & Schroeder, 2003; Pelletier & Astington, 2004; Rourke, Leduc, & Rourke, 2006; Scannapieco & Connell-Carrick, 2005; Simmons, 1987 as cited in Wachtel, 2004; Shelov & Hannemann, 2004

Atypical Development

Although all children develop at their own rate, there are certain signs in a child's development which may indicate more serious concerns. If any of the following signs of atypical development are noted in children in your care, these concerns should be discussed with the child's primary health care professional. Subsequently, a referral to the appropriate specialist may be required (First & Palfrey, 1994; Shelov & Hannemann, 2004).

- Age: three to four years
  - Cannot throw a ball overhand
  - Cannot jump in place
  - Cannot ride a tricycle
  - Cannot grasp a crayon between thumb and fingers
  - Has difficulty scribbling

- Still clings or cries whenever his caregiver leaves
- Shows no interest in interactive games
- Ignores other children
- Does not respond to people outside the family
- Does not engage in fantasy play
- Resist dressing, sleeping, using the toilet
- Lashes out without any self-control when angry or upset
- Does not use sentences of more than three words
- Does not use "me" and "you" appropriately
- Unable to draw a straight line - 3 years
- Less than half of his speech is understandable - 3½ years

◆ Age: four to five years

- Exhibits extremely fearful or timid behaviour
- Exhibits extremely aggressive behaviour
- Is unable to separate from primary caregiver without major protest
- Is easily distracted and unable to concentrate on any single activity for more than five minutes
- Shows little interest in playing with other children
- Refuses to respond to people in general, or responds only superficially
- Rarely uses fantasy or imitation in play
- Seems unhappy or sad much of the time
- Doesn't engage in a variety of activities
- Avoids or seems aloof with other children and adults
- Does not express a wide range of emotions
- Has trouble eating, sleeping, or using the toilet
- Seems unusually passive
- Cannot understand two-part commands using prepositions ("Put the cup on the table"; "Get the ball under the couch.")
- Cannot correctly give his first and last name
- Does not use plurals or past tense properly when speaking
- Does not talk about his daily activities and experiences
- Cannot build a tower of six to eight blocks
- Seems uncomfortable holding a crayon
- Has trouble taking off his clothing
- Cannot brush his teeth efficiently
- Cannot wash and dry his hands

- Does not understand prepositions - 4 years
- Cannot hop on one foot - 4 years
- Unable to copy a square - 4 ½ years
- Cannot count in sequence - 4½ years
- Does not use proper syntax in short sentences - 5 years
- Does not know colours or any letters - 5 years
- Unable to walk a straight line back and forth or balance on one foot for 5 to 10 seconds - 5 years
- Unable to copy a cross - 5 years
- Does not know own birthday or address - 5 ½ years

◆ 3 - 5 years:

- in constant motion
- resists discipline consistently
- does not play with other children

If you are concerned about the development of a child, go to Local Information.

Section 4 School Readiness Through Play

Importance of Play

Spontaneous play is natural and healthy for children. Children learn best through play. Through play all areas of a child's development can be enhanced. Play positively supports children's social/emotional, physical, cognitive, language, and literacy skills, is essential to a child's overall healthy development (Ginsburg, 2007; Packer Isenberg & Quisenberry, 2002) and enhances self-regulation. Daily physical and active play for children is recommended by the Canadian Paediatric Society (Grenier & Leduc, 2008), to foster optimal development. The right to play is also recognized for all children in the United Nations Convention on the Rights of the Child (1989). Hirsh-Pasek et al. (2009) states that "play offers a key way to support the learning of whole children in developmentally appropriate play" (p23). Play, therefore, is an important vehicle that promotes children's school readiness.

Stages of Play

Since the 1800s, the play of children has been the focus of considerable study. One aspect of play, the various stages of play through which children progress, has been observed and recorded extensively. Mildred Parten (1932; 1933) categorized the stages of play in pre-school children.

Mildred Parten (1932; 1933)

In her famous study, Parten (1932) developed six categories of social participation among preschool children. Her play categories are still actively used by educators today. They include:

1. Unoccupied behaviour - not engaged in any activity
2. Solitary independent play - child playing alone, no other children within 1 meter (3 feet)
3. Onlooker behaviour - child observing others play but not joining in
4. Parallel play - child playing next to others without verbal interaction
5. Associative play - verbal interaction, but few attempts to organize the play situation
6. Co-operative or organized supplementary play - each child taking an active role to plan and structure the play situation while collaborating with each other.

Parten found that with increasing age, the children tended to participate in more social forms of play. Younger children tended to engage in more unoccupied behaviour, onlooker behaviour, and solitary play, while older preschoolers engaged in more cooperative play.

Sara Smilansky (1968)

Sara Smilansky is known for her four stages of play. These play stages are considered to reflect a child's cognitive development. Smilansky's four stages consisted of:

1. Functional play (also called practice play)
2. Constructive play – children create or assemble a structure or object
3. Dramatic or symbolic play
4. Games with rules

- Play can also be classified into play behaviour that corresponds to some developmental domains, although there is always considerable overlap:
  - Locomotor play - physical
  - Social play - social/emotional
  - Pretend play - social/emotional
  - Object play - cognitive
  - Language play - language and literacy (Smith & Pellegrini, 2008)
- It has been found that children engage in increasingly more complex stages of play as they get older. Rubin, Watson, and Jambor (1978) found:
  - Infants engage in solitary-functional play
  - Toddlers engage in parallel-functional play
  - Preschoolers engage in associative play, constructive play and dramatic play
  - Four and five year olds engage in cooperative-constructive play, socio-dramatic play and begin to play games with rules.
  - Kindergarten and school age children elaborate cooperative-constructive play, socio-dramatic play and games with rules.
- There are times when individual children choose solitary play. A master lego builder, for example, may want the concentration allowed in solitary play. When day after day is spent in solitary play and play seems "stuck" adults should extend their observations to determine if:
  - The child is being isolated by peers
  - The child has some emerging interest and social skills
  - The child chooses to play alone
  - The child needs some assistance to move beyond the present form and level of play.

Section 4 School Readiness Through Play

Functional play includes the investigation of the properties and functions of objects through sensory motor exploration. When we are introduced to a new medium like clay for the first time we all may pinch, poke and pull apart the clay in functional play. When children are "stuck" using functional play and do not move with time and experience from poking, pinching and pulling clay to rolling it and forming shapes and eventually creating objects then it may be time to intervene.

Benefits of Play in Children's Development

As an essential part of childhood, studies have shown that play has a positive impact on children's overall development. The positive benefits of play on a child's social/emotional, physical, cognitive, language and literacy development have been well documented (Ginsburg, 2007; Pronin Fromberg, 2002; Roskos & Christie, 2000; Zigler, Singer, & Bishop-Josef, 2004).

- What are some of the benefits of play for young children?
  - Play enhances children's creativity and problem-solving (Smith & Simon, 1984).
  - Play contributes to the development of self-regulation and social skills such as turn-taking, collaboration and following rules, empathy, and motivation (Bodrova & Leong, 2007; Krafft & Berk, 1998).
  - Children, who engage in social and dramatic play, are better able to take others' perspectives, and are viewed as more intellectually and socially competent by their teachers (Connolly & Doyle, 1984; Sawyer, 2001).
  - Outdoor play helps to promote children's physical well-being, attention, conflict resolution, coordination, muscle development, and healthy weights (Clements & Jarrett, 2000; Council on Physical Education for Children, 2001; Fjortoft, 2001; National Association of Early Childhood Specialists in State Departments of Education, 2002).
  - Adding literacy-related materials to dramatic play centres, increases reading and writing activities and use of more varied language (Bagley & Klass, 1997; Neuman & Roskos, 1997; Stone & Christie, 1996).
  - Children, who play out events in a story, have improved story comprehension and develop a stronger theory of mind, the understanding that others have different feelings, thoughts, views and beliefs (Pellegrini & Galda, 1980).
  - Positive links between children's dramatic play and early reading achievement have been found (Pellegrini, 1980).

Section 4 School Readiness Through Play

What is School Readiness?

In recent years, areas such as school readiness and school transition have received considerable attention. Even the terminology is not consistently defined. Generally in Ontario professionals use the following to indicate what is meant by 'school readiness'

- **'Transition to school'** is the terminology used for programs that prepare children to a more formal setting. It usually includes 3 - 5 year olds and includes three different types of programs.
- Pre-school is a play-based setting that supports learning for 2 - 5 year olds. Pre-school programs can be formal or informal and are offered through a variety of public and private organizations. Pre-schools are not mandatory and may have fees associated with them.
- Junior Kindergarten (JK) is usually, but not always, offered in a school-based setting to support the beginnings of curriculum-based learning. Children are usually 3 or 4 years old at entry to JK and 4 or 5 years old by completion of a JK program. JK is publicly funded; but attendance is voluntary.
- Senior Kindergarten (SK) is offered in a school-based setting in all schools across Ontario as a publically funded 'transition to school' program for 4 and 5 year olds (at start of school-year). JK and SK are offered on a half-day or alternate full day basis.
- Some schools offer Full Day Kindergarten. The province of Ontario is set to expand the Full Day Kindergarten Program to all schools in Ontario.
- **'School readiness'** is the terminology used to indicate that a child is ready to enter grade one. Children entering grade one are usually 5 or 6 years old in Ontario.

Section 4 School Readiness Through Play

- In the report: With our Best Future in Mind: Implementing Early Learning in Ontario, Charles Pascal (2009a p5) sets the goals for every child in Ontario to enter the primary grades:
  - "Healthy and secure
  - Emotionally and socially competent
  - Eager, confident and successful learners and
  - Respectful of the diversity of their peers".

A child's ability to learn depends on how well she has mastered the art of self-regulation. Posner and Rothbart (2006) show that there is a sensitive period, when self-regulation can be enhanced, between the ages of three to five. During this time, the area of the brain that supports the development of self-regulation, experiences a major growth spurt. While self-regulation continues to develop into adulthood, having acquired age appropriate self-regulation by the time a child enters formal schooling, will benefit his learning trajectory. Following directions, staying on task, and managing emotions and social situations are the skills that will allow the child to focus on his academic activities. Self-regulation develops well in an environment that provides;

- Opportunities for playful learning by stimulating the child's imagination and curiosity.
- Caregivers that respond to the child's cues warmly, sensitively and consistently.

Children, experiencing circumstances that do not encourage healthy development and developmentally appropriate play, will greatly benefit from early interventions, before brain processes have become entrenched (Tierney & Nelson, 2009). The fundamental neural pathways for the development of self-regulation are more difficult to aquire after the age of six. The foundation, therefore, must be laid in the early years (Shonkoff & Philips, 2009).

Factors Affecting School Readiness

- School readiness consists of three areas:
  - The child's readiness for school
  - The school's readiness for children
  - The family and community's ability to support healthy child development (High, 2008).
  - Professionals can play a role in enhancing the readiness within all three areas.

Two primary factors have been noted to promote the individual child's school readiness

- **Participation in quality early childhood education and care programs** is an important factor that promotes school readiness (Boethel, 2004; Zigler &

Styfco, 2003) and has been linked to the following improvements:

- Language development, early literacy, and numeracy skills (Barnett, Lamy, & Jung, 2005; Berlinski, Galiani, & Gertler, 2006; Magnuson et al., 2004; Shonkoff & Phillips, 2000)
- Self-esteem, behaviour skills and attention skills (Barnett, 1995, 2004; Berlinski, Galiani, & Gertler, 2006; McCall, Larsen, & Ingram, 2003)
- High quality early childhood programming has also proven to be particularly effective for children from high-risk, low-income families (Barnett, 2008; Magnuson et al., 2004; Ramey & Ramey, 2004; Shonkoff & Phillips, 2000). High quality programs encourage age-appropriate, play-based learning.

- The **direct involvement of caregivers in their child's early learning** and development also enhances school readiness. Research has demonstrated that active involvement of caregivers in the child's preschool program improves her success in school (Jordan & Rodriguez 2004). Children from low-income families, not surprisingly, benefit significantly from programs with caregiver engagement (Shonkoff & Phillips, 2000).

Unfortunately, not all children arrive at school with the same types of positive early experiences. There are a number of issues which contribute to a child's lack of school readiness and may need to be addressed. They include:

- Issues related to preschool programs – insufficient number, cost, wait lists
- Income-related factors including poverty, overcrowding in the home, lack of parental education, or inability to provide school transition resources
- Parenting factors including coping strategies, mental health issues, or lack of understanding of the importance of school transition programs
- Child factors including lack of social skills, physical activity or the impact of media overuse (e.g., television, internet)
- Insufficient access to safe spaces where children can play or insufficient play structures or equipment
- Lack of awareness or resources to support children's play
- Lack of consensus of the school readiness definition across disciplines (e.g., health, education, social services)
- Lack of support services, such as literacy programs for newcomers
- (Active Healthy Kids Canada, 2009; National Collaborating Centre for Determinants of Health, 2008).

Section 4 School Readiness Through Play

All areas of a child's development need to be nurtured though learning-based play, in order to enhance school readiness. Considering that school readiness indicators are all interconnected, support in one area can positively influence other domains. For some additional ideas of ways to enhance healthy child outcomes, click on the Ways to Support School Readiness through Play link in this section, and the section Supporting All Children. Health and physical development, social and emotional development, language development, cognition and approaches to learning should be considered when promoting a child's school readiness (High, 2009).

- When a child is engaged in play with caregivers and other adults in a warm and responsive relationship, she will develop qualities that will help her succeed in school:
  - Strong oral communications skills
  - Confidence
  - The ability to make friends
  - Persistent, creative problem-solving
  - Task completion
  - Curiosity
  - Eagerness to learn.
- In homes and early learning programs, where security forms the foundation for exploration and learning, each child learns a number of things that increases her readiness to learn:
  - Increased awareness of and modification of emotions
  - Ability to focus and shift attention
  - Ability to control impulses, tolerate frustration, delay gratification
  - Ability to relate to others.

All children are unique with strengths that provide a foundation for facing the challenges that emerge as they grow and develop. The skills and experiences listed here will vary because of individual differences, diverse early learning experiences and the context in which the skills emerge. The lists below can be seen as a background for school entry but not an inventory that fits all children the same way.

To assess each child's unique development when preparing to enter JK or SK, view section 3 Preschoolers (2½-6 Years).

Section 4 School Readiness Through Play

Health and Physical Development

As one aspect of school readiness, the area of health and physical development covers a wide range of important indicators. First and foremost, a child's basic needs must be met, including the provision of healthy food and adequate sleep. Children are unable to maximize the learning experiences within an educational setting if they are constantly hungry or tired. A child's fine and gross motor skill development also affect school readiness. For example, if a child is unable to hold a pencil properly, later writing skills are impacted.

Health and physical domain	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Healthy and adequate nutrition	Section 3	• Eat according to Eating Healthy with Canada's Food Guide. • Have breakfast before school.
Adequate sleep	Section 3	• Have a regular bed time and getting up routine. • Have a nap or quiet time with books or quiet toys during the day.
Physical activity and active play	Section 3	• Be physically active for at least 60 minutes throughout the day. • Engage in active play both indoor and outdoors. • Watch less than 2 hours of TV or computer screens per day. For ideas and strategies see: www.haveaballtogether.ca
Hearing	Section 3	• Have passed hearing screening shortly after birth. • Have a hearing check if there have been any concerns, such as frequent ear infections, prematurity, antibiotic use or language difficulties. • Enjoy and use music, rhymes and repetition.
Vision	Section 3	• Complete a vision screen by the age of one or as soon as concerns are noted. • Visual deficits that are not corrected early can compromise a child's learning and may not be noted easily. • Enjoy exploring a variety of art forms, colours and other visual experiences.
Dental health	Section 3	• Brush and floss teeth daily under the supervision of an adult. • Visit a dentist regularly.

Section 4 School Readiness Through Play

Health and physical domain	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Physical health	Section 3	◆ Have all her pre school immunizations. ◆ Have a complete physical examination by the child's primary health care provider prior to starting school.
Mental health	Section 2 Section 5	◆ Spend time in a nurturing environment without undue stress. ◆ Have developed secure attachments with adult caregivers. ◆ Have access to factors that promote resilience.
Motor skills	Section 3	◆ Have reached the age-appropriate gross and fine motor skills. ◆ Have the opportunity to use both gross and fine motor skills in a variety of play situations.

Self-Care Skills are also important for school readiness as the child takes a large step towards future independence.

Self-care and safety skills	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Dressing	Section 3	◆ Dress and undress self without help depending on age. ◆ Be able to do most buttons and zippers. ◆ Put on shoes, may not be able to tie laces. ◆ Have the opportunity to practice dressing with a variety of dress up clothes.
Feeding	Section 3	◆ Be able to open lunch and snack containers. ◆ Feed himself, finish most meals.
Toileting	Section 3	◆ Be able to tell an adult when she needs to go to the washroom. ◆ Go to the washroom independently. ◆ Wash and rinse hands safely and independently.
Help-seeking	Section 3	◆ Ask for help. ◆ Tell an adult if she is upset or sick.
Safety	Section 3 Section 5	◆ Know her first and last name. ◆ Know her address and telephone number (more likely for 5-year olds).

Section 4 School Readiness Through Play

Self-care and safety skills	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
General safety	Section 3 Section 5	• Know how to follow instructions and routines. • Pay attention to instructions.
Safe play	Section 5	• Use appropriate safety precautions during play (e.g., wear a helmet when riding a bicycle, use rounded scissors when cutting).
Getting to and from school safely - by bus	Section 5	• Know the safety rules of riding a school bus. • Complete a practice ride if possible.
Getting to and from school safely - walking	Section 5	• Walk with an adult or older sibling. • Know not to talk to strangers, not to get into a stranger's car and where to go for help if someone approaches her. • Complete a practice walk.
Getting to and from school safely - by car	Section 5	• Walk from car to school or school to car observing safety rules and precautions. • Cross the road with an adult or older sibling.

- Click here to view the resource, Early learning for every child today: A framework for Ontario early childhood settings (Best Start Expert Panel on Early Learning, 2006).
- Click here to view The Kindergarten Program - Revised (Ministry of Education, 2006).

Section 4 School Readiness Through Play

Social/Emotional Development

When children are socially competent and emotionally healthy, they function well within the social parameters of a classroom setting. They interact easily with others, share materials, express their feelings, work well in group settings, and develop positive relationships with peers and adults. A positive sense of well-being will contribute greatly to a child's school readiness (National School Readiness Indicators Initiative, 2005). Social and emotional development is fostered in reciprocal and cooperative play (e.g., turn taking, sharing, dramatic play, games with rules).

Social Domain	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Playing with other children	Section 3	• Take turns and share. • Play along side and cooperatively with other children.
Conflict resolution and problem solving	Section 3	• Express feelings, wants and needs. • Use self-regulation strategies to deal with highly emotional situations. • Begin to identify consequences.
Helping skills	Section 3	• Follow a routine (e.g., set out placemats for snack time, put on gym shoes and line up for gym) • Use some pro-social behaviour.
Empathy	Section 3	• Begin to see things from another's point of view. • Be able to describe what another person might be feeling.
Interacting with adults	Section 3	• Be able to pay attention. • Make eye contact while talking.

Section 4 School Readiness Through Play

Emotional Domain	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Emotional skills can be enhanced through social play, reading and discussion of stories. Active play and physical activity also increase self-esteem, self-confidence and self-concept.		
Self-concept	Section 3	• Have responsibilities for some personal, family and group routines (e.g., feeding a pet, setting the table). • Use some positive social comparisons and personality traits to define himself (e.g., "I am strong; I can climb better than my sister").
Self-awareness	Section 3	• Begin to understand that she is separate from others and that others live and think differently.
Self-esteem	Section 3	• Understand that she has some areas of strength. • Complete tasks and show pride in her accomplishments.
Self-expression	Section 3	• Have an expanding vocabulary to express her emotions. • Begin to understand that she can feel mixed emotions at times.
Self-regulation	Section 1 Section 3	• Use self-talk and other strategies to regulate her emotions. • Respond to inductive justice (making a child aware of the feelings or harm she has caused by her misbehaviour) by displaying pro-social behaviour.
Positive attitude towards learning	Section 4	• Click here for: Approaches to Learning

- Click here to view the resource, Early learning for every child today: A framework for Ontario early childhood settings (Best Start Expert Panel on Early Learning, 2006).
- Click here to view The Kindergarten Program - Revised (Ontario Ministry of Education, 2006).

Section 4 School Readiness Through Play

Language and Early Literacy

The development of language and literacy skills begins at birth, and is influenced by a wide range of factors, including the vocabulary used at home, early reading and opportunities to play.

Oral language is the foundation for later literacy skills. A rich vocabulary and well-developed expressive language skills are essential for literacy development. Any delays in the development of a child's language skills need to be addressed quickly by caregivers and professionals.

The age at which children learn to read varies greatly. Some children begin to read at age four, while others don't develop reading skills until age six or later. Children pass through several stages of reading, writing and spelling development, as they move along the continuum of literacy development. For more information on these stages see:

- The Hanen Centre at www.hanen.org for information and programs to support oral language delays
- Speech and language milestones, as well as talking tips are provided at www.speechdelay.com

Language and early literacy consist of four areas: attention, receptive language, pre-speech and expressive language and pre-literacy skills. These are closely interrelated with hearing, social, emotional and physical development. For more information on all language and early literacy milestones click on Supporting Preschooler's Development by Age.

Reading/Writing Continuum

In May 1998, the National Association for the Education of Young Children (NAEYC) and the International Reading Association (IRA) came out with a joint position statement on reading and writing expectations for young children. The continuum spans from preschool to the third grade. The first two phases are listed here (NAEYC, 1998, p. 15):

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Phase 1: Awareness and exploration (goals for preschool)	Phase 2: Experimental reading and writing (goals for kindergarten)
• By **entry into Junior Kindergarten** children should have achieved the following skills.	• By **entry into Grade One** children should have achieved the following skills.
Children explore their environment and build the foundations for learning to read and write. **Preschoolers can:** • enjoy listening to and discussing storybooks • understand that print carries a message • engage in reading and writing attempts • identify labels and signs in their environment • participate in rhyming games • identify some letters and make some letter-sound matches • use known letters or approximations of letters to represent written language	Children develop basic concepts of print and begin to engage in and experiment with reading and writing. **Kindergartners can:** • enjoy being read to and themselves retell simple narrative stories or informational texts • use descriptive language to explain and explore • recognize letters and letter-sound matches • show familiarity with rhyming and beginning sounds • understand left-to-right and top-to-bottom orientation and familiar concepts of print • match some spoken words with written ones • begin to write letters of the alphabet and some high-frequency words

- Click here to view the Language/Early Literacy Development domain in section 3
- Click here to view the resource, Early learning for every child today: A framework for Ontario early childhood settings (Best Start Expert Panel on Early Learning, 2006).
- Click here to view The Kindergarten Program - Revised (Ontario Ministry of Education, 2006).
- Click on the following link to download Foundations for Literacy: An Evidence-based Toolkit for the Effective Reading and Writing Teacher: http://foundationsforliteracy.ca/index.php/Main_Page

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Cognition and General Knowledge

As children are exposed to new experiences and learning opportunities, their understanding of their world expands. A rich and stimulating environment will enhance a child's learning and interest in further inquiry. Cognitive development encompasses many aspects, such as "language and literacy, mathematical knowledge, scientific thinking, the arts, music and other vehicles for knowledge acquisition, creative expression, reasoning and problem solving" (National School Readiness Indicators Initiative, 2005, p. 68).

Cognitive Domain	Where to find more information	Developmental skills and healthy habits that will enhance the child's readiness to learn
Cognitive skills • general	Section 3	Have reached the age-appropriate, cognitive developmental milestones. **Emerging skills should include:** • Questioning • Critical thinking • Problem solving • Spatial abilities • Observation • Categorization • Communicating findings
Numeracy skills	Section 3	Have acquired the age-appropriate numeracy skills.
Attention	Section 3	Be able to focus on a task or situation for more than a few minutes. Be able to shift attention to a new situation. Return attention to task or situation easily following a brief distraction.
Memory and recall skills	Section 3	Increasingly use descriptive words to tell about past events or experiences. Use memory of past experiences to construct or plan for new and future experiences.
Working memory	Section 1	Increasingly use working memory to keep in mind information while adapting to changes in play or real life situations. Use working memory to solve some problems and simple science experiments.

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Approaches to Learning

- Caregivers can help the child develop approaches to learning and skills that will help her be successful at school. Children need:
  - Routines
  - A quiet place for reading and homework,
  - Books and literacy aids such as paper, crayons, pencils to encourage preliteracy
  - Space and props to stimulate play
  - Reciprocal play with nurturing adults.
- The following skills should be encouraged when observed in play as they will be transferred to academic tasks later:
  - Curiosity
  - Engagement
  - Enthusiasm
  - Attention
  - Persistence
  - Problem solving
  - Task completion
  - Reliability
  - Organization and planning
  - Time management
  - Risk-taking while using safety precautions (e.g., practicing swimming without floating device while adult is at arm's length)
  - Self-direction and initiative
  - Ability to work independently
  - Collaboration with others.
  - (National Education Goals Panel, 1998)

- Click here to view the Cognitive Development domain in section 3
- Click here to view the resource, Early learning for every child today: A framework for Ontario early childhood settings (Best Start Expert Panel on Early Learning, 2006).
- Click here to view The Kindergarten Program - Revised (Ontario Ministry of Education, 2006).

Section 4 School Readiness Through Play

Ways to Support School Readiness through Play

School readiness is comprised of many different and interconnected factors. We can support children's school readiness by encouraging children to explore the world around them through play. We can also support the development of public policies that ensure schools are ready for children, and communities support healthy child development. The goals of healthy public policies should be:

- All children have access to high quality early learning and care environments with highly qualified professionals
- All families have access to a wide range of social supports within their community, such as dental and medical care, child and family programs, and more. The need is especially acute for families who live in poverty or families who are unfamiliar with the resources that may be available to them
- Professionals working with children from zero to six continue to seek out free or subsidized programs, resources or services to support children and families in need
- Schools are part of the community hub that supports healthy child development and each child's transition to school
- Schools are ready for all children and continue to support healthy child development of the whole child.

Here are some strategies how professionals can support and promote school readiness:

- Build a strong rapport with caregivers
- Encourage positive adult-child interactions and relationships
- Promote the creation of a nurturing, rich, and stimulating early learning environment for children and families
- Plan activities to involve caregivers regularly in their child's learning and development
- Lend toys, books, and videos to families; work to establish toy-lending libraries in your community
- Continue to provide outreach to families in your community, especially to those who may be harder to reach; support and refer to family home visiting programs such as Healthy Babies Healthy Children
- Encourage caregivers to read to their children on a daily basis; encourage caregivers to listen to children read to them on a daily basis (even if it is "pretend" reading)

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- Encourage caregivers to set up a centre in their home with materials that promote school readiness through various types of play
- Encourage participation in and provide information about:
  - high quality early learning and care programs
  - parenting programs
  - public library programs
  - parent support networks and programs
  - family literacy programs
  - prenatal care programs
  - informal and formal networks and playgroups
- Continue to support adult and family literacy, as well as English-language learning for newcomers to Canada (e.g., LINC programs – Language Instruction for Newcomers to Canada)
- Sign up for the Welcome to Kindergarten program (www.thelearningpartnership.ca under the Programs tab), which provides a literacy resources bag and workshop for caregivers to help support readiness for school
- Create partnerships with schools, early years and early learning centres, community and health care agencies and neighbourhood centres to help provide supports for and resources about:
  - prenatal care
  - mental health care
  - nutrition and food banks
  - vision, dental, and medical care
  - health and immunizations
  - emotional/behavioural concerns
  - shelters
  - subsidized housing
  - early intervention
  - employment or job retraining
- Plan or participate in family resource fairs
- Promote programs that provide universal screening such as hearing and vision screening programs
- Ensure that resources provided to families are culturally sensitive and when possible, translate the resources or provide translation services for families
- Help families to make referrals for additional services, if help is needed with the process

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- Promote the availability of workshops and training programs in your community for caregivers and service providers
- Ensure a constant flow of communication with caregivers through the use of discussions, newsletters, brochures, email, or other ways to keep them informed
- In the absence of funds, seek out donations or sponsorship to help fund some of your community initiatives (e.g., breakfast programs)
- Encourage play at home and in early learning and care settings in your community
- Ensure your community provides safe spaces and opportunities for play (Florida Head Start State Collaboration Office, 2002; Maryland State Department of Education, 2002; Office of Educational Research and Improvement, 2002).

Professionals can encourage families to promote healthy child development that supports readiness to learn in all children from birth on by using not the three "Rs" of "reading writing and 'rythmetic" but the five "Rs" of early playful learning.

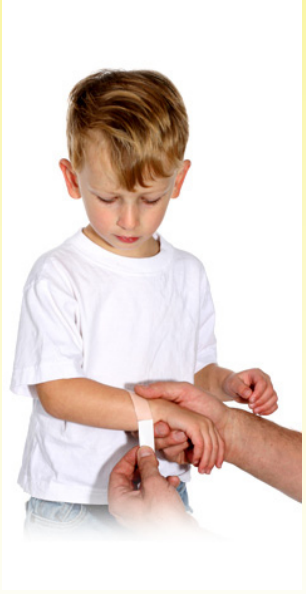
- Reading together
- Rhyming, playing, singing and physical closeness
- Routines and regular times for eating, playing and sleeping
- Rewarding children with praise for any success
- Reciprocal, nurturing relationships.
- (High, 2008).

Section 5 Safety and Well-Being

On Track

Unintentional Injury

Supporting healthy child development includes encouraging children's natural curiosity and emerging skills. As children explore their environment and try new skills they often do not recognize hazards in their environment or other factors that may compromise their safety and well-being. They also do not have the ability or autonomy to remove dangerous conditions from their environment. The child's caregiver and professionals who care for him need to keep the child safe. Keeping a child safe may be as simple as supervising him on the playground or providing information on safe infant sleep to parents. It can also include involving child protection services when those, whose role it is to protect the child, fail to provide that protection, putting the child's safety and well-being at risk.



Supporting children's safety and well-being is done in a number of ways:

- Preventing unintentional injury
- Preventing or recognizing maltreatment
- Reporting maltreatment

Preventing Injury

Unintentional injury is the most common cause of death in children over the age of one. Most deaths are the result of motor vehicle accidents, but death from fire, drowning, choking, suffocation and poisoning also occur (Farchi et al., 2006; Grenier & Leduc, 2008). Unintentional injuries also lead to bumps and bruises, burns, scalds, broken bones, head injuries and more.

- It is more common for injuries to happen when
  - Adults are
    - Distracted
    - Very busy
    - Temporarily absent
    - Involved in situations that cause some confusion or unplanned changes in routine
  - Children are
    - Hungry
    - Tired
    - Distracted
    - Excited
    - Away from their regular routine

- Injury prevention should therefore be done in a systematic approach that should include:
  - Providing a safe environment
  - Supervising children
  - Having appropriate policies and guidelines in place
  - Having safety rules for children
  - Communicating with the family

Safe Environment

The spaces where children live, play and learn need to be designed with the child in mind. Children need space to be physically active, and to be quiet. Watching for hazards, keeping children contained in one area, having surfaces, furniture, play equipment and toys in good working order are also important. The space should also be appropriate for the developmental stage of the child. This can be a challenge with siblings of different ages, or in a small, home-based child care setting with children of different ages. Children outgrow equipment such as infant swings or stationary activity centres very quickly. Always follow the weight and height guidelines and instructions for use. The same rules apply to cribs, cradles, playpens and bassinettes. It is also important to check the Health Canada website (www.hc-sc.gc.ca) regularly for consumer product safety and any recalls (Grenier and Leduc, 2008).

- A safe environment includes:
  - The physical environment
  - Products used
  - Storage and handling of equipment, food and drink
  - Knowledge of each child's developmental stage, ability and temperament
- To make the physical environment safe consider

- The space
- The play surface
- The furniture or equipment in the space

Professionals need to put themselves at a child's level and assess their environment for any conditions that can be hazardous. Professionals also need to advocate for that same vigilance at home and provide resources for parents make a safer home environment.

Supervision

Even the safest space does not reduce the need for adequate adult supervision. Adults must always remain vigilant and anticipate the child's needs, actions and level of development. Active supervision means that the adult stays close, especially when the child is exploring new equipment, play structures or trying new skills. The adult should scan the environment for any potential hazards and remove them, if possible, and make sure the children are not creating risks to their own safety or the safety of other children.

Policies and Procedures

Early learning and child care settings have strict regulations around safety. Policies and guidelines set out by the licensing authority, the Day Nurseries Act, the Canadian Childcare Federation, or other organizations, provide consistency for all staff and children. Most settings will have preventive policies and procedures that each professional should know and follow. You can also promote or develop policies and procedures that will ensure children's safety in your setting.

Safety Rules

As soon as children respond to their name and become more mobile, they can be taught some basic safety rules. Grenier and Leduc (2008) list the key ingredients of good safety rules in Well-Beings: A Guide to Health in Childcare.

- "A good safety rule …
  - Is simple, clear and age-appropriate
  - Is consistent

- Is reasonable
- Is reinforced
- Is shared with all caregivers
- Is positive
- Is not scary
- Has consequences" (p. 65)

Communicating with the family

Children spend much of their time at home and in the care and presence of their family. Communicating with the family and providing the child's primary caregiver with good resources on safety is therefore imperative.

- Caregivers need safety information on safe practices such as:
  - Infant sleep environment
  - Vehicle and traffic
  - Water
  - Sun
  - Equipment and toys
  - Household and environmental products
  - Food and drink

Safety Practices

The following practices have been found to increase children's safety:

	Safety Practices to Prevent:
• Falls/ Cuts	• Infant or child is not left unattended on above ground surfaces (e.g., change tables, climbers) • Safety gates are installed and used at stairs inside home or on decks • Infant walker/baby exerciser or similar equipment on wheels is not used • Baby jumpers have been properly secured to a door frame and are used only under supervision • Child is always supervised near or on balcony, staircase, or playground • Protective rail is used on beds for children • The top level of a bunk bed is only used with children 6 years of age or older • Child plays on playgrounds with impact-absorbing materials to soften falls • Child wears a safety helmet during bike riding, rollerblading, skateboarding or similar activities • Safety devices are installed on windows, patio and balcony doors • Sharp instruments (e.g., scissors, knives) are not within child's reach
• Motor Vehicle or Traffic Accidents	• Car seats and booster seats are installed properly and used properly according to age, height and weight of the child • Child plays in safe areas away from parked cars or road • Child is taught how to "stop, look and listen"
• Drowning	• Swimming pools or hot tubs are fenced in and can only be accessed through a locked gate • A supervising adult is within arms length of the child while near any water that is deeper than 5 cm (2 inches) (e.g., pools, bathtubs, ponds) • Baby bath seats or rings are not used

Section 5 Safety and Well-Being

	Safety Practices to Prevent:
Burning/Scalding	◆ Home water temperature is set to 49 degree Celsius or less ◆ Bath water is tested before putting child in bathtub (should be 49 degrees Celsius or less) ◆ Cold water faucets are turned on before hot water faucets when washing hands ◆ Hot liquids and foods are kept away from a child especially while carrying the child ◆ Pot handles are turned towards centre of stove; hot soup is one of the leading causes of childhood scalding injury in the United States (WHO, 2008) ◆ Smoke and carbon dioxide alarms are used throughout the house or apartment ◆ Fire extinguisher is present in the kitchen and caregivers know how to use it ◆ Barrier is used around fireplace or wood burning stove ◆ Matches or lighters and other flammable substances are not within a child's reach
Sunburns	◆ Protective clothing such as wide brimmed hats are used when children are outdoors ◆ Playing in the sun is avoided during peak sun hours (10am - 2pm) ◆ Sunscreen is applied to children over 6 months 30 minutes before such exposure and reapplied every 2 - 3 hours ◆ Spaces where children play are designed with structures providing shade
Suffocation/ Choking/ Strangulation	◆ Small objects such as food (e.g., hard candy, nuts, popcorn, grapes, hotdog pieces), beads, coins, small parts of toys, are kept away from infants or toddlers under 3 years of age ◆ Cribs are placed away from windows, blinds, curtain cords, straps, lamps, electrical plugs, and extension cords ◆ Child is not wearing pacifier, jewelry, cord, string or skipping rope around neck ◆ Child does not play on playground equipment wearing scarves or clothing with cords or drawstrings
Poisoning/ Electrocution	◆ Child-resistant caps/packaging are used on medications and household poisons and kept out of reach ◆ Cupboards containing poisonous items such as household cleaning products, medications, pesticides are locked with childproof locks ◆ Toxic or poisonous plants are not within child's reach or not kept in or around the home until the child understands the danger ◆ Electrical outlets are covered with plastic safety covers

	Safety Practices to Prevent:
Sudden Infant Death Syndrome (SIDS)/ Sudden Unexpected Death in Infancy (SUDI) (applies to infants from birth to 12 months)	• Infant is placed on his back for night time sleep and all naps • Infant is placed in a crib with only a tightly fitted sheet and light blanket or sleep sac • Infant is not placed to sleep on waterbeds, futons, couches, loveseats, chairs, car seats, makeshift beds or adult beds • Infant sleeps in the parents' room for the first 6 months • Infant is not overheated • Bumper pads, duvets, pillows, heavy blankets and soft toys are not used in the crib • Infant is put to sleep in a smoke free environment • Infant does not share a sleep surface with others
Crib and Equipment Safety	• Cribs made before September 1986 are not used because they do not meet current Canadian safety regulations • The crib is not modified • Children younger than two years of age sleep in a crib • Equipment is used according to manufacturer's instructions • Equipment is used according to age limitations • Equipment is checked for recalls
Environmental Toxins and Pollutants	• Home is free from second-hand and third-hand smoke (toxic chemicals released by smoking that are trapped in hair, skin, fabric, carpet, furniture, and toys) • Child uses good quality toys without lead • Lead-free paint is used in the home • Home is kept clean (dust in older homes may contain lead) and free from allergens and moulds • Mercury thermometer is not used • Breastmilk, formula or food is not heated in plastic bottles or containers containing Bisphenol A • Cold tap water is used for drinking water or to reconstitute drinks including formula (hot tap water contains more lead) • In homes older than 1990, water is run for 2 minutes every morning before using it to make formula, other drinks or baby food • Vinyl toys are not used for young children (chemicals can be absorbed through chewing and sucking) • Children's art materials (e.g., markers, paints) are made of non-toxic materials

	Safety Practices to Prevent:
Environmental Toxins and Pollutants	• Outdoor footwear is removed inside (e.g., metals, pesticides, and animal droppings can be tracked into the home on outdoor footwear) • Children's playground equipment or picnic tables are made from cedar, redwood or metal, not pressure treated wood (may contain arsenic) • Children are kept away from paints, glues, new carpets and similar things that may give off chemical gases • Pesticides or harsh cleaning chemicals are not used near children • Children are kept indoors on days when the air quality is poor • Additional information can also be obtained at: • http://www.toronto.ca/health/hphe/children.htm http://beststart.org/resources/env_action/pdf/AppB_auditform.pdf

(Bridgman-Acker, 2009; Canadian Paediatric Society, 2004; Grenier & Leduc, 2008; Health Canada, 2008; Hunt & Hauck, 2006; Nansel et al., 2008; Safe Kids Canada, no date; Schnitzer, 2006; WHO, 2008)

Definition

Child Maltreatment

Child maltreatment is a complex and pervasive issue which impacts children globally. The harmful effects of child maltreatment are evident through its various forms – child abuse and neglect, children witnessing violence or coercive treatment, and unintentional injuries related to child maltreatment (Schnitzer & Ewigman, 2008). The serious emotional, psychological, or physical harm that a child experiences as a result of child maltreatment can negatively impact a child's future life trajectory. The scars of child maltreatment can last a lifetime.

Abuse occurs when an adult intentionally inflicts harm upon a child. Sadly, parents are responsible for more than 80% of all abusive acts, with relatives accounting for another 7% (Berk & Roberts, 2009). Although neglect is often included under the child abuse umbrella, it differs from other forms of abuse. Abuse includes the presence of harmful acts upon children (e.g., injury, rape), whereas neglect is the absence of an expected set of conditions in which children thrive (English et al., 2005).

Any cases of abuse are unacceptable. Many cases go unreported, indicating that the actual rates of child abuse are in fact much higher than estimated (Berk & Roberts, 2009; Lambie, 2005). It is estimated that 100 Canadian children die each year as a result of abuse (Berk & Roberts, 2009). In addition, most forms of abuse are interrelated, so children who experience one form of abuse will likely experience other types of abuse (Berk & Roberts, 2009). As a result, many of the same indicators of neglect and abuse in children are found across the four main categories of abuse. Rates of abuse by gender indicate that boys and girls suffer from similar amounts of physical abuse, while girls suffer sexual abuse four times more often than boys (Lambie, 2005). Considering that young children often have difficulty disclosing abuse (Brilleslijper-Kater et al., 2004), it is critical that professionals know the signs of child maltreatment and consult their local child protection agency, when abuse and/or neglect are suspected.

How are Neglect and Abuse Defined?

Different types of abuse, including exposure to abuse in the home are described by Cunningham and Baker (2007). For this section the following indicators have been used to define neglect and abuse:

- **Neglect** is the most commonly reported form of abuse (Berk & Roberts, 2009), but has received the least amount of attention (English et al., 2005; Lewin & Herron, 2007). It is often grouped into subtypes:

  - Failure to provide for a child's basic needs (e.g., food, clothing, shelter, education, medical care, supervision/safety);
  - Abandonment;
  - Failure to provide for the child's emotional well-being;
  - Failure to seek treatment or follow a recommended intervention can also be a form of neglect.

- **Emotional Abuse** includes acts that could cause serious mental or behavioural disorders, including social isolation, repeated unreasonable demands, ridicule, humiliation, intimidation, or terrorizing. Exposure to domestic violence has sometimes been included as a separate category (Trocmé et al., 2003), although it is generally considered to be a form of emotional abuse.
- **Physical Abuse** is classified as assaults, such as kicking, biting, shaking, punching, beating, throwing, choking, burning or stabbing, that inflict physical injury.
- **Sexual Abuse** is classified as fondling, intercourse, digital or object penetration, sex talk, exhibitionism, commercial exploitation through prostitution or production of pornography, and other forms of sexual exploitation, and unnatural sexual practices. (Berk & Roberts, 2009; Department of Justice Canada, 2005; English et al., 2005; Lambie, 2005; Trocmé et al., 2005)

Consequences of Child Maltreatment

The short- and long-term consequences of child maltreatment vary considerably, with childhood death as the most serious outcome. Child maltreatment can also affect all areas of a child's development. Although not exhaustive, the following list provides some of the outcomes of child maltreatment:

- Permanent disability
- Brain damage
- Delays in development
- Behavioural problems; aggression; psychiatric problems; post-traumatic stress symptoms; increased risk of suicide
- Poor academic achievement; learning disorders; attention problems
- Difficulties with social relationships
- Reproductive health problems; sexually transmitted diseases including HIV/AIDS
- Anxiety, depression; low self-esteem

- Anger, hostility, general mistrust of adults
- Failure to thrive
- Low birth weight
- Substance use
- Teen pregnancy
- Sexual revictimization
- Criminal behaviour including violent crime
- School truancy

(Cicchetti & Toth, 2006; Shonk & Cicchetti, 2001, Wolfe et al., 2001 as cited in Berk & Roberts, 2009; Dubowitz et al., 2005; English et al., 2005; Fusco & Fantuzzo, 2009; McGowan et al., 2009; Prevent Child Abuse America, 2003; Sechrist, 2000 as cited in Lambie, 2005)

Recognition

Maltreatment has not only far reaching and devastating effects, it also results in a generational cycle of abuse, violence and neglect. Preventing maltreatment is a critical intervention that can stop the cycle of abuse and hurt. Known risk factors, related to child maltreatment, need to be addressed in order to succeed in prevention efforts.

Risk Factors

The following table identifies the range of risk factors that can contribute to child maltreatment, including family, community, and cultural factors.

	Risk Factors Related to Child Maltreatment
Parents/caregivers	Psychological disturbance; cognitive impairment; physical or mental health issues; alcohol and drug use; history of maltreatment as a child; belief in harsh, physical discipline; desire to satisfy unmet emotional needs through the child; unreasonable expectations for child behaviour; young age (most under 30); low educational level
Child	Premature or very sick baby; difficult temperament; inattentiveness and overactivity; developmental problems
Family	Low income; poverty; homelessness; marital instability; social isolation/ lack of social supports; domestic violence; frequent moves; large families with closely spaced children; overcrowded living conditions; disorganized household; lack of steady employment; other signs of high life stress; criminal activity
Community	High rates of violence and social isolation; few parks, child care centres, preschool programs, recreation centres, religious or cultural centres to serve as family supports
Culture	Approval of physical force and violence as ways to solve problems

(Lambie, 2005; Trocmé et al., 2005; Wekerle & Wolfe, 2003; Whipple, 2006, as cited in Berk & Roberts, 2009)

- Professionals have an important opportunity to intervene and stop the cycle of maltreatment. They can:
  - Ensure children, adolescents and adults receive appropriate treatments for physical and mental illness
  - Identify and address developmental concerns early
  - Encourage individuals, families and communities to develop strong social support networks
  - Ensure education re positive parenting and discipline is universally available
  - Ensure literacy programs for adults are available
  - Lobby for and support poverty reduction initiatives
  - Promote treatment and cessation programs for substance use
  - Promote and refer to culturally appropriate family support programs

Neglect

Possible Indicators of Neglect

PHYSICAL INDICATORS IN CHILDREN
◆ Poor hygiene; unkempt; dirty or unbathed state; body odour; early childhood tooth decay; dirty clothes
◆ Unattended physical problems or medical needs; lack of routine medical and/or dental care
◆ Temporary abandonment by caregiver (e.g., alone in a car seat)
◆ Consistent lack of supervision
◆ Consistent hunger; distended stomach
◆ Inadequate clothing; inappropriate clothing for the weather
◆ Chronic diaper rash; infected sores or unattended skin disorders
◆ Infants or young children may display abnormal growth patterns; stunted growth; thin limbs or weight loss; sunken cheeks; dehydration; paleness; lethargy; poor appetite; unresponsiveness to stimulation
◆ Delays in development (e.g., motor, language, social skills); not meeting developmental milestones; failure to thrive; clumsiness
BEHAVIOURAL INDICATORS IN CHILDREN
◆ Poor social skills and peer relations
◆ Falls asleep frequently outside of naptime; regularly appears fatigued
◆ Frequently absent from program(s)
◆ Begs or steals food; forages and hoards food; frequently “forgets” a lunch
◆ Self-destructive behaviour
◆ Delinquent behaviour
◆ Attention problems
◆ Negative view of self and others
◆ Little or indiscriminate crying
◆ Craves an enormous amount of attention or shows an inordinate amount of affection
◆ Anxiety, depression
◆ Listless
◆ Withdrawn; difficulty interpreting the emotions of others
◆ Lack of persistence, perseverance and enthusiasm
◆ Demonstrates lack of attachment to caregiver; may demonstrate indiscriminate attachment to other adults
◆ Little fear of strangers

BEHAVIOURAL INDICATORS IN CHILDREN
◆ Independence and self-care beyond the norm; has a lot of responsibility at home; left to care for other children; assumes parental role
◆ Unimaginative play
◆ Discloses neglect
BEHAVIOURS OBSERVED IN AN ADULT WHO NEGLECT CHILDREN OR CONDITIONS IN THEIR HOMES
◆ Fails to provide for the child's basic needs (e.g., food, shelter, education, clothing)
◆ Fails to ensure that the child receives medical treatment for illness or injury, or basic health care
◆ Excessive use of punishment
◆ May indicate that the child was the result of an unwanted pregnancy; may indicate that the child continues to be unwanted
◆ Frequent negativity about the child; highly critical
◆ May have unrealistic expectations of the child
◆ Caregiver puts own needs first
◆ Family history of neglect and poor parenting
◆ Overwhelmed with own personal problems and needs; may indicate that the child is hard to care for/hard to feed; describes the child as demanding
◆ Maintains a chaotic home life, with little evidence of regular routines (e.g., consistently brings the child to care very early, picks up the child very late)
◆ Has little involvement in the child's life: appears apathetic toward child's daily events; fails to keep appointments regarding the child; fails to use services offered; unresponsive when approached with concerns
◆ May show ignoring or rejecting behaviour towards the child
◆ Substance use while parenting; substance use during pregnancy
◆ May experience domestic violence
◆ May have acute mental health needs
◆ May lack support network
◆ Lack of provision for child's safety; unsafe environment; evidence of human or animal excrement; little food available
◆ Fails to provide adequate supervision: may be frequently unaware of, or has no concern for the child's whereabouts; leaves the child alone, unattended, in a dangerous place, or in the care of others who are unsuitable or who cannot look after the child safely

(Children's Aid Society of Ottawa, 2005; English et al., 2005; Grenier & Leduc, 2008; Lambie, 2005; Lewin & Herron, 2007; Powell, 2003; Rimer & Prager, 1998; Scannapieco & Connell-Carrick, 2005; Stocker & Dehner, 2001; Trocmé et al., 2005)

Emotional Abuse

Possible Indicators of Emotional Abuse

Although neither conclusive nor exhaustive, the presence of one or more of the following indicators should alert professionals to the possibility of emotional abuse. However, these indicators should not be taken out of context, nor used individually to make unfounded generalizations. Pay close attention to the duration, consistency, and pervasiveness of each indicator. If unsure about whether or not certain behaviours constitute emotional abuse, consult with child protection staff.

PHYSICAL INDICATORS IN CHILDREN
◆ The child does not develop as expected; speech disorders; delays in physical or emotional development
◆ Frequent complaints of nausea, headaches, or stomach aches without any obvious reason
◆ Asthma, or severe allergies
◆ Child fails to thrive
◆ Wetting or soiling that is non-medical in origin
◆ Immature or overly mature behaviour
◆ May have “unusual” appearance (e.g., bizarre haircuts, dress, decorations)
◆ Dressed differently from other children in the family
BEHAVIOURAL INDICATORS IN CHILDREN
◆ Extremely passive or undemanding; extreme withdrawal; anxiety; sadness; ADD/ADHD; stress
◆ Extreme attention-seeking behaviours; extremely demanding, aggressive, angry
◆ Low self-esteem; severe depression; self-destructive behaviours (e.g., suicide threats or attempts, substance abuse); antisocial or destructive behaviour
◆ Regressive behaviours and/or habit disorders (e.g., toileting problems, thumb-sucking, rocking, biting, head-banging)
◆ Sleep disturbances
◆ Overly compliant; too well mannered; too neat or clean
◆ Overly self-critical; high self-expectations that result in frustration and failure, or avoidance of activities for fear of failure
◆ Unrealistic goals to gain adult approval
◆ Fearful of returning home or being left alone
◆ Lack of self-confidence
◆ Poor academic performance
◆ Irregular attendance at school or program

BEHAVIOURAL INDICATORS IN CHILDREN
◆ Displays extreme inhibition in play
◆ Runs away from home
◆ Has a lot of adult responsibility
◆ Poor peer relationships; lack of emotional connection with others
◆ Cruel to animals
◆ Discloses abuse
BEHAVIOURS OBSERVED IN ADULTS WHO ABUSE CHILDREN
◆ Consistently degrades, criticizes, insults, ridicules, intimidates, humiliates or belittles the child, verbalizes negative feelings about the child to the child and others
◆ Compares the child to someone who is disliked or hated
◆ Terrorizes the child (e.g., threatens the child with physical harm or death, threatens someone or something the child loves; forces the child to watch physical harm being inflicted on a loved one)
◆ Isolates the child; does not allow the child to have contact with others, both inside and outside the family (e.g., locks the child in a closet or room)
◆ Consistently rejects or ignores the child; actively refuses to help the child or acknowledge the child's requests, needs or interests
◆ Blames the child for problems, difficulties, disappointments
◆ Displays violent behaviours; constant yelling; swearing
◆ May be inflexible and harsh; exhibits inconsistent behaviour
◆ Treats and/or describes the child as different from other children and siblings (e.g., does not provide food, clothing and care for child as well as for the other children in the family)
◆ Corrupts the child, teaches or reinforces criminal behaviour; provides antisocial role modeling; exploits the child for own gain
◆ Withholds physical and verbal affection from the child; withholds love, support, and guidance
◆ Makes excessive demands of the child; has unrealistic child expectations
◆ Exposes the child to sexualized/violent media (e.g., DVDs, TV)
◆ Communicates to the child that he is worthless, that his needs don't count, and that no one likes or loves him
◆ Substance use

(Case, 2007; Children's Aid Society of Ottawa, 2005; Christensen, 1999; Lambie, 2005; McKibbin & Walton, 2008; Muscari, 2004; Palmatier, 1997; Powell, 2003; Reardon & Noblet, 2008; Rimer & Prager, 1998; Trocmé et al., 2005)

Possible Exposure to Domestic Violence and Other Forms of Abuse

In recent years, the number of cases of exposure to domestic violence has risen dramatically in Canada (Trocmé et al., 2005). Although domestic violence may result from angry and violent outbursts, ultimately, it is "about control, not anger" (Nies & McEwen, 2001, p. 604). When domestic violence occurs in the home, the well-being and development of children are often negatively impacted. Children who have been exposed to domestic violence suffer from significantly more social, emotional, and cognitive problems in comparison to their peers (Fusco & Fantuzzo, 2009). In some cases, studies have shown that "almost 75% of all children exposed to domestic violence were also involved in the violence" (Fusco & Fantuzzo, 2009, p. 254). As a result of exposure to domestic violence, boys who are exposed to abuse of their mothers are more likely to abuse their partner as adults, while girls who grow up in that type of environment are more likely to accept abusive relationships as adults (Grenier & Leduc, 2008).

Children's exposure to abuse in the home should always be taken seriously. Children may be affected differently, but children who live with conflict and abuse are actively involved by assessing their own roles, worrying about consequences, engaging in problem-solving and attempting to protect themselves, siblings or the caregiver (Cunningham & Baker, 2007).

Children who have witnessed abuse and coercive treatment in the home often display the same types of physical and behavioural indicators as children who are emotionally abused (see Possible Indicators of Emotional Abuse table). Furthermore, children can suffer from serious unintended injuries during violent episodes in the home, either in an effort to protect a family member or when objects have been thrown. Some children also experience post-traumatic stress symptoms as a result of witnessing family violence (Fusco & Fantuzzo, 2009).

Adults who engage in domestic violence also share the same types of behaviours as adults who emotionally abuse children (see Possible Indicators of Emotional Abuse table). This may include: engagement in ridicule, intimidation, humiliation, degradation, insults, verbal criticism, blame; violent behaviours; threats; terrorization of family members; isolation of family members; jealousy and possessiveness (Jenkins & Davidson, 2001); control of partner's activities (Reyes, Rudman, & Hewitt, 2002), etc. In addition, risk factors that have been related to higher rates of domestic violence include poverty, substance use, and single female-headed households (Fusco & Fantuzzo, 2009).

Section 5 Safety and Well-Being

The victim of domestic violence is often the child's primary female caregiver, usually his mother. Victims often feel powerless to change their abuser's emotionally, physically, or financially controlling behaviours. Professionals can help victims, by recognizing the abuse, and offering an opportunity for disclosure and interventions. Professionals need to watch for a variety of behavioural indicators that victims may display. These may include:

- Injuries that do not appear accidental
- Explanations for injury that are vague or do not match the injury
- Embarrassment, shame, attempts to hide injuries
- Reserved, quiet, or frightened demeanor in abuser's presence
- Tense, jittery, no eye contact, defers to partner in answering questions
- Complaints of "bad nerves", sleep or appetite disturbances
- Mention of partner's temper; talks about avoiding troubles
- Misses appointments; does not follow up on medications or plans
- History of repeated injuries
- History of visits to emergency rooms, mental health clinics
- History of depression, anxiety, suicide attempts
- Multiple injuries in various stages of healing
- Apparent fearfulness, edginess, increased startle response
- Isolated with little access to money, resources, friends, family, job, transportation
- Alcohol or drug use

(Jenkins & Davidson, 2001; Reyes, Rudman, & Hewitt, 2002)

Physical Abuse

Possible Indicators of Physical Abuse

Although neither conclusive nor exhaustive, the presence of one or more of the following indicators should alert professionals to the possibility of physical abuse. However, these indicators should not be taken out of context nor used individually to make unfounded generalizations. Pay close attention to the duration, consistency, and pervasiveness of each indicator. If usure about whether or not certain behaviours constitute physical abuse, consult with child protection staff.

PHYSICAL INDICATORS IN CHILDREN
◆ Presence of several, recurring injuries over time; unexplained injuries that are in various stages of healing
◆ Fractures, dislocations, multiple fractures all at once or over time; pain in the limbs, especially with movement; tenderness
◆ Distorted facial appearance with swelling, bleeding, bruising
◆ Limping or other abnormal use of limbs, without a reasonable explanation (e.g., lacks full range of movement in limb)
◆ Fractures of the ribs: painful breathing; difficulty raising arms
◆ Signs of possible head injuries (skull fractures included): swelling and pain; nausea or vomiting; patches of hair missing; irritability; lethargy; seizures; limpness; difficulty breathing; persistent crying; dizziness; unequal pupil size; bleeding from scalp wounds or nose
◆ Fractures in children younger than 12 months of age have been linked to abuse 40% - 56% of the time
◆ Facial injuries in infants and preschool children
◆ Cuts, scrapes, and welts inconsistent with normal play (e.g., bruises on cheeks; neck; back of arms and thighs); injuries inconsistent with the child's age and developmental phase
◆ Frequent hospital visits
◆ Unexplained injuries on questionable sites (e.g., on stomach, buttocks, ears, back of head, upper back, pubic area); bruises on children younger than 9 months of age are considered suspicious
◆ Bruising patterns, clustered bruising, or welts (e.g., from a wooden spoon, hand/finger print marks, belt)
◆ Burns from a cigarette; patterned burns (e.g., iron, electric burner); burns suggesting that something was used to restrain a child (e.g., rope burns on the wrists, ankles, neck); scalds
◆ Human bite marks
◆ Evidence of recent female genital mutilation (e.g., difficulty voiding, chronic infections, "waddling")
◆ Internal injuries
◆ Fractured or missing front teeth

BEHAVIOURAL INDICATORS IN CHILDREN
◆ The story of what happened is inconsistent with the injury; refuses or is afraid to talk about injuries; denies injury; cannot recall or describe how injuries occurred
◆ Disruptive; destructive; nervous or hyperactive; violent towards others
◆ Exhibit depression or anxiety
◆ May show extremes in behaviour: extremely aggressive or passive, unhappy or withdrawn; extremely compliant/eager to please or extremely noncompliant
◆ Tries to hurt himself (e.g., self-mutilation)
◆ Expresses little or no emotion when hurt
◆ Wary or afraid of adults generally, or of a particular gender or individual
◆ Does not want to be touched; may cringe or flinch with physical contact
◆ May display over-vigilance, a frozen watchfulness, or vacant stare
◆ Academic or behavioural problems
◆ Afraid to go home; runs away from home
◆ Is frequently absent with no explanation, or shows signs of healing injury on return
◆ Tries to take care of the caregiver
◆ May be dressed inappropriately to cover injuries
◆ Poor peer relationships
◆ Evidence of developmental lags, especially in language and motor skills
BEHAVIOURS OBSERVED IN ADULTS WHO ABUSE CHILDREN
◆ May provide inconsistent explanations as to how the child was injured
◆ May delay seeking medical attention for injuries or illnesses
◆ Gives harsh, impulsive or unusual punishments
◆ Shows lack of self-control with low frustration tolerance; extreme anger; impatience
◆ Socially isolated; little support or parenting relief
◆ May have little knowledge of child development and/or have unrealistic expectations of the child
◆ May often express having difficulties coping with the child or makes disparaging remarks; describes child as different, bad, or the cause of own difficulties
◆ May demonstrate little or no genuine affection, physically or emotionally for the child
◆ May state that the child is accident-prone or clumsy
◆ May appear unconcerned, indifferent, or hostile to child and injury

(Children's Aid Society of Ottawa, 2005; Grenier & Leduc, 2008; Lambie, 2005; Powell, 2003; Rimer & Prager, 1998; Trocmé et al., 2005; Ziegler, Sammut, & Piper, 2005)

Shaken Baby Syndrome

- Another form of abuse that is caused by physical trauma to a child is shaken baby syndrome (SBS), now also called Abusive Head Trauma (AHT). This terminology includes a broader rage of injuries such as:
  - Shaking
  - Blunt impact
  - A combination of blunt impact and shaking (Christian & Block, 2009)
- Shaken baby syndrome is the result of violent shaking of an infant or small child (Reynolds, 2008), while AHT includes shaking and injuries caused by hitting the child hard or with an instrument, or causing him to hit his head. Continuous infant crying is often the trigger for the shaking. With an infant's larger head and weaker neck muscles, even five seconds of vigorous shaking can cause injury. However, due to the lack of external signs of injury (Mraz, 2009), abusive head trauma is often difficult to diagnose. AHT occurs most frequently in infants younger than six months of age, although it has been recorded in children up to five years of age (Reynolds, 2008; Smith, 2003). Sadly, approximately one-third of children who are victims of AHT will die (WHO, 2002), and less than a third of infants who survive will develop normally (Reynolds, 2008). Other outcomes of AHT can include:
  - Permanent visual impairment
  - Seizures
  - Permanent brain damage
  - Developmental delays
  - Learning disabilities
  - Severe motor dysfunction
  - Paralysis
  - Epilepsy

Men carry out this type of abuse twice as often as women (Reynolds, 2008). As in any form of suspected child abuse, further investigation and consultation with child protection agencies may be necessary.

In the following table, a list of indicators of AHT is provided. If several of these indicators are noted, immediate attention by a primary health care provider or emergency doctor is required.

Indicators of Abusive Head Trauma (Shaken Baby Syndrome)	
◆ History of poor feeding	◆ Blue skin
◆ Vomiting	◆ Mild anemia
◆ Lethargy or irritability	◆ Inability of eyes to focus or to track objects
◆ Hypothermia	◆ Skeletal injury – old and new fractures are often found
◆ Failure to thrive	◆ Massive intracranial bleeding – most common cause of death in shaken infants
◆ Increased sleeping and difficulty arousing	◆ Bulging fontanelle (soft spot)
◆ Inability to lift head	◆ Coma
◆ Inability to suck, swallow, smile or vocalize	◆ Bradycardia (slow heart rate)
◆ Seizures	◆ Complete cardiovascular collapse
◆ Difficulty breathing	◆ Sometimes bruising in shape of hand imprints on infant's trunk or extremities
◆ Retinal bleeding – occurs in 50 – 100% of cases	
◆ Bulging eyes	

(Reynolds, 2008; Smith, 2003)

Sexual Abuse

Children's Sexual Behaviour in Context

To accurately identify childhood sexual abuse, it is helpful to first understand developmentally appropriate sexual behaviours in young children. Surprisingly, there is little research that has been conducted on children's normal sexual development and experience (Schoentjes, Deboutte, & Friedrich, 1999). Furthermore, what little research is available, is also dated (Volbert, 2001). It is challenging to pinpoint normal sexual development, considering that a number of factors can influence a child's sexual behaviour. These include:

- Age of child
- Maternal level of education
- Family nudity
- Family attitudes toward sexuality (Schoentjes, Deboutte, & Friedrich, 1999)
- Culture (Volbert, 2001).

In the following table, developmentally appropriate sexual behaviours that have been documented in young children are outlined.

Developmentally Appropriate Sexual Behaviours in Children Younger Than 6 Years of Age	
• Asks questions about sexuality • Plays doctor games • Touches mother's breast • Likes to be nude • Likes to walk in underclothes • Has erections • Touches own genitals; masturbates • Is aware of genital differences between sexes • able to label genitalia; often uses nontechnical terms to describe • Scratches anal and/or crotch area • Looks at people when they are nude • Cuddles	• Children aged 2 – 7 years typically do not associate genitalia with any sexual function – only with pregnancy/birth • Curious about how babies are born • Sits with crotch or underwear exposed • May undress in public • Kisses adults not in the family • Kisses other children not in the family • Purposely displays genitals to peers (typically up to age 4) • Fascinated by excretion; curiosity about bathroom behaviours • By age 4, shows an increased need for privacy, especially in the bathroom

(Brilleslijper-Keter, Friedrich, & Corwin, 2004; Brittain, 2005; Schoentjes, Deboutte, & Friedrich, 1999; Stoudemire, 1998; Volbert, 2001)

Possible Indicators of Sexual Abuse

Although neither conclusive nor exhaustive, the presence of one or more of the following indicators should alert professionals to the possibility of sexual abuse. However, these indicators should not be taken out of context nor used individually to make unfounded generalizations. Pay close attention to the duration, consistency, and pervasiveness of each indicator. If unsure about whether or not certain behaviours constitute sexual abuse, consult with child protection staff.

(Berk & Roberts, 2009; Brilleslijper-Kater et al., 2004; Brittain, 2005; Brown, Brack, & Mullis, 2008; Children's Aid Society of Ottawa, 2005; Department of Justice Canada, 2005; Felman & Nikitas, 1995; Glicken, 2006)

PHYSICAL INDICATORS IN CHILDREN
◆ Unusual or excessive itching or pain in the throat, genital, or anal area
◆ Vaginal discharge; genital odour
◆ Torn, bloody, or stained (e.g., signs of semen) underclothing
◆ Pain on urination, elimination, sitting down, walking or swallowing
◆ Blood in urine or stool
◆ Injury to the breasts, genital or anal areas: redness; bruising; lacerations; tears; swelling; bleeding; infection
◆ Poor personal hygiene or excessive bathing
◆ Abdominal pain
◆ Constipation
◆ Sexually transmitted disease
◆ Frequent urinary tract or yeast infections
◆ Foreign objects in vagina or rectum
BEHAVIOURAL INDICATORS IN CHILDREN
◆ Displays sexual behaviour and knowledge that is beyond the child's age and stage of development
◆ Detailed and sophisticated understanding of sexual behaviour; age-inappropriate explicit drawings, descriptions
◆ Age-inappropriate sexual behaviour with dolls, toys, self, pets or others; provocative behaviour with adults; intrusive sexual behaviour with same-age children; expresses sexual aggression towards younger children; compulsive sexualized talk; excessive masturbation
◆ Atypical play behaviours (e.g., repeated reenactments of the trauma, aggressive play, sexualized play)
◆ Frequently asks to go to the bathroom; recurring physical complaints with no physical basis
◆ Nightmares, night terrors, and sleep disturbances

BEHAVIOURAL INDICATORS IN CHILDREN
◆ Loss of appetite; sudden change in weight (either gain or loss)
◆ Clinging or very demanding of affection or attention; fear of abandonment if caregiver leaves momentarily
◆ Reluctance, fear or refusal to go to a parent, relative, friend for no apparent reason; mistrust of others; fearfulness
◆ Hyperactive or anxious; preoccupied; excessive worry about siblings; excessive crying
◆ Low self-esteem; depression; withdrawal; strong feelings of shame or guilt
◆ Sudden change in behaviour (e.g., outgoing child becomes withdrawn) or progress
◆ Regressive behaviour (e.g., bed-wetting, thumb-sucking, speech loss)
◆ Resists being undressed, or when undressing, shows apprehension or fear
◆ Afraid to go home; runs away
◆ Poor relationships with peers; social isolation
◆ Aggressive behaviour; self-injurious behaviours
◆ Lags in development
◆ Puts mouth on other child/adult sex parts; puts tongue in mouth when kissing
◆ Puts objects in vagina or rectum
◆ Repeatedly plays with or smears feces; purposely urinates in inappropriate places (e.g., on furniture)
◆ Touches animal sex parts
◆ Discloses sexual abuse
BEHAVIOURS OR CONDITIONS OBSERVED IN ADULTS WHO ABUSE CHILDREN
◆ Relationship with the child may be inappropriate, sexualized or spousal in nature
◆ States that the child is sexual or provocative
◆ Shows physical contact or affection for the child that appears sexual in nature
◆ Permits or encourages the child to engage in sexual behaviour
◆ Is frequently alone with the child and is socially isolated
◆ May be jealous of the child's relationships with peers or adults
◆ Discourages or disallows child to have unsupervised contact with peers
◆ May use substances to lower inhibitions against sexually abusive behaviour
◆ May have an addiction to drugs, alcohol, or other substances
◆ Treats one child significantly differently to other children in the family
◆ May be unusually overprotective, over-invested in the child (e.g., clings to the child for comfort)
◆ Abuser is usually a male who is familiar to the child (e.g., father, step-father, boyfriend)
◆ May use internet or mobile phones to expose children to pornography

Lambie, 2005; Paradise, 2002; Powell, 2003; Reece, 2000; Rimer & Prager, 1998; Scannapieco & Connell-Carrick, 2005; Schoentjes, Deboutte, & Friedrich, 1999; Trocmé et al., 2005; WHO, 2002)

Reporting and Supporting

Reporting Maltreatment

As professionals working directly with young children and families, situations may arise in which child abuse and/or neglect are suspected. According to the Child and Family Services Act (1990), any professional who works with children and who has reasonable grounds to suspect that a child has suffered harm or is at risk of harm, must report their suspicions immediately to a child protection agency. According to the UN Convention on the Rights of the Child (1989), a child is defined as any human being under the age of 18 years.

To support children's well-being, professionals have a legal and ethical obligation to consult with or report any suspicions of maltreatment to a Children's Aid Society. This includes indicators of neglect, sexual abuse, physical abuse, and emotional abuse, including a child's exposure to domestic violence (MCYS, 2005). In situations where the signs of abuse may not be straightforward, or where certain cultural practices conflict with Canadian law (e.g., female genital mutilation), consultation with a local child protection agency is recommended. Emergency services are available 24 hours/day, seven days a week at all child protection organizations.

The ongoing duty to report is also an important consideration for professionals. Even if a report has already been made to a child protection agency regarding a particular child, another report must be filed if additional reasonable grounds for concern arise.

Reporting Child Abuse and Neglect: It's Your Duty

Supporting Children Who Have Been or May be Maltreated

Professionals can support maltreated children in a number of ways. By closely monitoring a child's ongoing progress, and overall health and well-being, professionals can often detect any unusual changes in the child's behaviour or development. A home visiting program such as Healthy Babies Healthy Children can provide this ongoing monitoring and may be available for at risk families with children up to the age of six years. When serious concerns arise, professionals can help with referrals to the appropriate services or supports.

For children who have already suffered the damaging effects of maltreatment, professional therapy such as play therapy or therapeutic day care may be required (WHO, 2002). Rimer and Prager (1998) note that maltreated children benefit from stable, supportive, and nurturing environments with predictable adults. In order to support the healing process, they

also suggest that a maltreated child may need help to develop:

- Positive self-image and self-esteem
- Trust
- Ability to identify and express emotions
- Communication skills
- Skills to identifying and solve problem situations
- Conflict resolution skills
- Overcoming developmental lags

Supporting Adults Who Maltreat or Who Are at Risk of Maltreating Children

It is important for all professionals who work with children and families to have some form of training to help them identify the signs of abuse in children and families. This training can also provide them with the tools to effectively teach about the prevention of maltreatment (Brown, Brack, & Mullis 2008). There are a number of support programs and services available to caregivers or other adults who maltreat or who may be at risk of maltreating children. Some of these options may include:

- Long-term therapy
- Parent support groups or networks (e.g., Parents Anonymous)
- Parent education programs – often provided in centres; can enhance caregivers' parenting skills, understanding of child development, and positive discipline strategies
- New parent support programs (includes information about prenatal care, effective discipline strategies, addressing children's developmental needs, stress management techniques)
- Home visitation programs – caregivers are visited in their homes, and support, information and appropriate community referrals are provided to prevent child maltreatment
- Therapeutic day programs for adults abused as children
- Abuse prevention training programs (e.g., sexual abuse prevention programs)
- Social programs to support families
- Financial planning and occupational skills training
- Media campaigns to raise awareness of caregivers
- Interventions with multiple components (e.g., child care, parenting skills training, family support)
(Berk & Roberts, 2009; Lambie, 2005; Mikton & Butchart, 2009; WHO, 2002)

Section 6 Supporting Parents and Professionals

Supporting All Children

This section will answer commonly asked questions from professionals, and provide some additional resources for both professionals and parents. We cannot underestimate the profound effects of parents and the home environment for the children in our care. If we want to improve a child's developmental trajectory we must engage and support the parents. The information below will give you tools and resources to support parents which will ultimately benefit the child.

Supporting Self-regulation

Q Why is self-regulation so important?

Self-regulation is a learned process that is evident in every developmental domain. When we think of self-regulation we often think of emotional or cognitive self-regulation. But here is another example:

- A child gains bladder control and is able to regulate when she attends to her bathroom needs through increasing physical development. Although physical maturation is the predominant ability in bladder control, social, emotional, cognitive and language functions are also involved, so she can recognize her need and ask to go, even in an unfamiliar environment.
- The process of self-regulation is well described in an article by Blair and Diamond (2008). It is foremost a function of the pre-frontal cortex in the brain where executive functions (e.g., decision making, problem solving) are made. Self-regulation has several functions:
  - Control of inhibitions
  - Working memory
  - Mental flexibility
- Control of inhibition means the child is able to resist temptations or habits, suppress disruptive emotions and control distractions. This allows the child to pay attention, control behaviour and allow positive emotions and cognitive skills such as motivation, curiosity and interest to flourish.
- Working memory allows the child to hold information in her mind while working with it. This skill can be observed in dramatic play where the child has to act in character while responding to the changes in plot.
- Mental flexibility is the ability to adjust to change.

Section 6 Supporting Parents and Professionals

- It had been demonstrated that these skills are critical for learning and success in school. Success in school is not so much achieved through memorization of curricular content but through:
  - Perseverance at tasks
  - Skills to focus and sustain attention
  - Ability to hold information in mind and relate one idea to another
  - Motivation to learn and explore
  - Good self-esteem

A child who exhibits good self-regulation, receives praise more often, enjoys school more and puts more effort into her school work. At the same time, a child with poor self-regulation finds it more difficult to pay attention in school, has difficulty meeting demands and expectations, has less fun in school and puts less effort into her work. Over time, teachers expect less self-control and poorer work habits. Finally, the child sees herself as a poor student, holds a negative view of herself and has less self-confidence and lower self-esteem. These children may only exhibit a small difference in learning readiness in the early years, but through a positive or negative feedback loop, the gap widens and their trajectories can be expected to diverge more and more each year (Blair and Diamond, 2008; Thompson, 2009).

Q How I can support the family to promote self-regulation?

A child's development occurs foremost through the reciprocal interactions with a trusted adult. Usually parents set the foundation for good self-regulation by providing an environment that is warm, nurturing and encourages trust. Parents and later, service providers model the process of self-regulation and provide opportunities to discuss and practice the process. Disruptions in the parent-child relationship through stress from factors such as poverty, poor mental or physical health or maltreatment can adversely affect the development of self-regulation.

- To promote a child's self-regulation, professionals can:
  - Promote access to programs and services to support parents and caregivers who are challenged by poverty, physical or mental illness, divorce, separation or abuse

- Promote the availability of evidence-based parenting programs, resources or strategies (e.g., Watch, Wait and Wonder www.watchwaitandwonder.com) that promote attachment, parent-child interaction and healthy child development in your community
- Promote preschool programs where children learn in a fun and age-appropriate environment
- Promote the use of resources and strategies (e.g., Tools of the Mind www.mscd.edu/extendedcampus/toolsofthemind/) to support the development of self-regulation in preschool and kindergarten
- Promptly address parent concerns or observations that indicate a delay in the development of the child's self-regulation.

Cultural Sensitivity

Q How can I increase my understanding of the child?

Newcomers to Canada may experience tremendous stress and isolation in their attempts to adjust to a new culture, language, and environment. The National Association for the Education of Young Children recommends that professionals need to "recognize the feeling of loneliness, fear, and abandonment children may feel when they are thrust into settings that isolate them from their home community and language" (1995, p. 2). Issues such as unemployment, underemployment, language barriers, or lack of a social support system may be realities for these newcomer families.

- First of all, becoming culturally aware involves the ability to stand back and become aware of one's own cultural values, beliefs and perceptions (Quappe and Cantatore, 2005). Other components of cultural sensitivity include:

  - Valuing and recognizing the importance of one's own culture
  - Valuing diversity
  - Being willing to learn about the traditions and characteristics of other cultures (Stafford et al. as cited in Mavropoulos, 2008)

Section 6 Supporting Parents and Professionals

Here are some strategies that will increase your understanding of the family and child and increase your efforts to support her development:

- Establish a solid rapport with families from the outset, so that there is a strong level of trust between families and the service providers.
- Invite participation and involvement from all members of an extended family, including grandparents, aunts and uncles, etc.
- Show respect for the family's culture at all times. Staff in daycares or kindergarten classrooms can post pictures or display items representing different cultures. In this way, families may feel more welcomed upon entry into this setting.
- Use translators or multilingual staff for meetings or conferences with the family. If possible, have important resources translated into the family's home language.
- Try to learn a few words in the language spoken by the family to help make a connection with them. For professionals working in daycare centres or kindergarten classrooms, teach the children in your classroom a few words in the family's home language.
- When possible, ask parents to explain cultural practices that are observed and that may not be understood.
- Respect differences in personal interactions or body language (e.g., lack of eye contact is a sign of respect in certain cultures).
- If possible, enroll staff in cultural sensitivity training sessions.

Q How can I discuss cultural concerns with the family?

Parenting and feeding practices, sleeping arrangements, and attitudes towards education, play, or work may differ from the accepted norms here in Canada or your own beliefs. Sometimes cultural practices may even conflict with Canadian law (e.g., female genital mutilation), and may require direct consultation with child protection services (see section 5 Maltreatment). Many practices do no harm and may in fact benefit the child.

Here are some strategies to address cultural practices:

- Ask non-judgemental questions that will help you understand the cultural practice in context
- Ask yourself what your own beliefs and practices are and if the practice contradicts these
- Ask yourself the following questions:
- Does the practice follow or contradict current evidence?
- Does the practice promote the child's well-being?
- Does the practice put the child at risk?
- Can you provide evidence-based information to the family to support your point of view?
- Always support cultural practices that do not put the child at risk, and promote evidence-informed practices in a non-judgemental way.

Observation, Screening and Assessment

Q How I can learn about a child's development?

Of all the tools currently available to learn more about a child, observation is the most developmentally appropriate one to use with young children. Children can be observed in brief snapshots which may yield only a limited amount of information. The information provided by the caregiver can give a professional a more complete picture. A better picture of the child can be captured by observing her in play over time. This is the approach most often used by early childhood educators and kindergarten teachers.

Benefits of Play Observation

- All areas of a child's development can be assessed, as play can provide a unique window into a child's developmental abilities.
- When play is observed in a natural environment, such as a classroom or playground, children are relaxed and spontaneous. Their behaviours and abilities can be observed repeatedly without their awareness that they are being evaluated.
- Observation can provide early years professionals and parents with a rich, accurate, and comprehensive source of information, as patterns or trends in children's development emerge over time.
- Observation is an inclusive way to assess all children.

Today, one of the most widely used play assessments used is the Transdisciplinary Play-Based Assessment (TPBA2), revised by Toni Linder in 2008. This resource is especially helpful when there are concerns about a child and a team of professionals is involved. It includes tips and guidelines on how to observe a child's play with a parent. Four areas of development are assessed – sensorimotor, social/emotional, language/communication, and cognition. If sessions are videotaped, they can then be analyzed by the child's parents and a team of professionals. If available, this may include an occupational or physical therapist, speech/language pathologist, educator, social worker, psychologist or psychiatrist, and vision specialist. From there, the team offers suggestions and recommendations based on the child's observed play behaviours, and a plan for next steps is created.

Section 6 Supporting Parents and Professionals

Q What is screening?

Screening is usually a non-invasive procedure done with groups of people or a population. Screening is the process of identifying characteristics known to be associated with a certain populations or age groups. In children 0 - 6 years old, the purpose of screening is to identify those who may need further support or assessment to verify the presence of developmental or health risks. It is important to ensure that the child or family who is identified by a positive screen is followed up with further assessment to confirm or exclude the suspected delay or condition. Further assessment will also specify the sources of difficulty and lead to appropriate support and intervention (Snow & Van Hemel, 2008).

Section 8 offers a number of screening tools that are used either throughout Ontario or in some areas of Ontario. The most common tool is the Nipissing District Developmental Screen (NDDS) which can be used by parents and professionals working with children. When indicated, a child needs to be referred to the appropriate professionals and programs for further screening and assessment.

Q What happens after screening?

Screening is only a first step in identifying “red flags” and informing whether a more thorough assessment is advisable. Screening helps ensure that children and families who need a full assessment receive one, and if necessary, are referred to skilled professionals who are best able to provide service and/or intervention. A list of resources associated with specific areas of development is accessible in section 7 of this guide.

It is also intended, regardless of the results of screening, that children and families are assisted in accessing appropriate community supports, resources and education.

Q What screening tests are used in Ontario?

A number of screening tools are used in Ontario. Some are tools for parents, some are tools for professionals. Some are used universally; others are used in specific situation. Screening tools assist in early identification, but no screening tool can substitute for the full assessment by a qualified professional. A list of commonly used screening tools in Ontario is provided in Section 8.

Sharing Sensitive News

Q How can I share sensitive news with parents?

As a professional working with children from 0 - 6, effective communication with families is essential. If a child consistently fails to meet specific milestones or does not follow the expected developmental sequence, or if other at-risk indicators in a child's development are noticed, parents need to be informed about these concerns so that positive next steps can be taken. Nevertheless, it is often difficult to relay these types of concerns to parents. Here are a few tips for talking to families about observed delays in a child's normal development:

- Show genuine caring and compassion when talking with families. The news that is shared with them may cause considerable anxiety and fear.
- Remind parents that they know their child best, and are their child's first and most important teacher.
- Invite parents to share anything that they've noticed in their child's development that they may have some questions about.
- Begin by sharing some of the child's strengths and positive behaviours.
- Present your concerns in a professional manner.
- Explain to parents that through observation of their child, certain patterns of development have been noted that may need to be investigated further. Cite some specific factual examples from your observation notes.
- Highlight the expected milestones for the child's particular age for comparison. Professionals may wish to share with parents the printed Children's Development by Age section of this guide, the NDDS or other relevant resources.
- Explain the range of possibilities for supporting the child (e.g., referral, assessment, treatment), and how each of these positive steps can help address the child's challenge(s).
- Explain the consequences of non-action, and how a "wait and see" approach

can lead to more serious outcomes for their child.

- Enlist the support of parents to plan a course of action for their child, and set concrete next steps. Remind parents that the final decision rests with them, and that your role is to provide information, support, and guidance.
- Provide the family with time to share their thoughts and feelings, if they are ready. Listen with patience and understanding.
- Thank parents for their support, and reassure them that you or other staff are available for any additional assistance that may be needed.
- Provide parents with available resources, brochures, website addresses, or contact numbers, so that they can do some additional investigation on their own. (TeKolste, 2009; First Signs, 2009)

Q How can I handle and support difficult, angry or upset parents?

First of all, it is important to share sensitive news with parents in private and without making the parents feel rushed. There must be time for parents to ask questions and express their feelings. Here are a few other tips that can de-escalate a difficult situation:

- Find a space that provides privacy
- Stay calm
- Focus on the positive
- Acknowledge that the parents are upset or angry
- Ask the parents what they are feeling and if they have questions
- Listen actively to what they have to say
- Offer a second meeting to allow parents to calm down and think about what you have said
- Help parents feel involved in the solution to the problem

Q What can I do if parents do not want to follow up on my recommendations?

There are many reasons why parents may not follow your recommendations. They may not trust your advice or may just simply lack transportation, time or money to carry out your recommendations. Don't take it personally, but explore the situation. Whenever possible, give parents more than one option. If the child has delays in several areas, or if you think she would benefit from multiple interventions, ask the parents what interventions they think are more critical. Parents may feel overwhelmed if they have been given a list of many recommendations.

- Here are some steps that may help to engage parents:
  - Explain the situation
  - Explain why an intervention may be warranted
  - Explain what services are available
  - Ask the parents how they see the situation and what they are able to do
  - Make a plan together with the parents or provide them with a written list of options
  - Offer to have a follow-up meeting to assess progress

Suspecting Child Maltreatment

Q When do I need to call child protection services?

As professionals working with children and families, you have a legal responsibility and duty to report, if you have "reasonable grounds to suspect" any type of child maltreatment. This can include physical harm, neglect, emotional harm, sexual abuse or exploitation, including pornography (Child and Family Services Act, 1990). Please call your local Child Protection Services immediately if you have a concern and need further direction or information with these types of situations. To find your local child protection agency check the Ontario Association of Children's Aid Societies at www.oacas.org. Once contacted, the child protection agency will make a risk assessment, while other involved professionals continue to support the child and family.

Reporting Child Abuse and Neglect: It's Your Duty

Children's Programs and Services

Q Where can I send this child for stimulation and further assessment?

Professionals working with children should make families aware of the range of both universal and targeted programs that are available to them. Universal child development programs are open to all families in Ontario and support developmental stimulation for all children. Targeted programs are designed for families with children who are at risk or have specific specialized needs.

- Some universal programs and services include:
  - Kindergarten
  - Licensed child care
  - Play groups
  - Prenatal or parenting programs
  - Healthy Babies Healthy Children
  - Ontario Early Year's Centres
  - Family Resource Centres
- Targeted programs and services can include:
  - Paediatric services
  - Children's treatment centres
  - Children's mental health centres
  - Preschool speech and language programs
  - Infant hearing program
  - Blind - low vision early intervention program
  - Nutrition programs
  - Resource consultants
  - Infant development programs

  (Expert Panel on the l8-Month Well Baby Visit, 2005).

Children in Special Situations

Q How can I encourage and include a child with special needs?

Here are ways to support the integration of children with special needs. Some of these strategies include:

- Adapt the environment or schedule to meet the child's needs. This may include: the use of picture symbols or cues for directions; larger spaces at activity centres to accommodate wheelchairs or other assistive devices; materials placed on low shelving for easy access, etc.
- Incorporate various assistive techniques to support children's play (e.g., model how to use play materials; provide physical assistance such as steadying a child's hand while a toy is being used; use peers as a support, etc.).
- Teach other children in the setting how to communicate using some basic sign language, so that children with hearing impairments can play with other children.
- Talk to other professionals (e.g., physiotherapist, occupational therapist, speech/language pathologist, etc.) who can help plan the play environment and play activities for children with special needs or provide that information to parents.
- There is a wide range of materials that can support the play activities of children with special needs. Some of these materials include:
  - Therapy balls
  - Play materials with textured handles or non-slip surfaces to facilitate a more secure grip
  - Beeping or ringing balls
  - Large toy pieces or handles for an easier grasp
  - Different textured materials or play materials with lights, sounds, or vibrations to promote sensory stimulation
  - Adaptive bicycles, swings, or rockers for outdoor play
  - Game boards or books with raised, textured surfaces
  - Assistive technology and devices
  - Switches and controls manoeuvred by the head, hand, or eyebrow, and much more.

By incorporating some of these suggestions, early years professionals can ensure that children of all ages and abilities can engage in play and other activities to promote learning and development.

Section 6 Supporting Parents and Professionals

Q How can I support children with emotional or mental health problems?

Children with emotional and mental health problems benefit from early interventions. There are many programs that promote healthy emotional development and address early problems. They usually involve the parent(s), the child and a facilitator in individual or group settings. Some of these are:

Healthy Babies Healthy Children Family Home Visitor program

- Parenting programs that have shown some good results such as:
  - Make the Connection www.firstthreeyears.org
  - Watch, Wait and Wonder www.watchwaitandwonder.com
  - For Goodness Sake www.ascy.ca/fgs_intro.htm
  - Triple P Parenting www.triplep.net
- Programs that enhance preschool or school curriculum such as:
  - Seeds of Empathy www.seedsofempathy.org
  - Roots of Empathy www.rootsofempathy.org
  - Tools of the Mind www.mscd.edu/extendedcampus/toolsofthemind

Children's mental health centres are available in many communities across Ontario. Children's Mental Health Ontario (CMHO) goal is to improve the mental health and well-being of children, youth and their families in Ontario. You can find the closest centre through the website at: www.kidsmentalhealth.ca. Some programs require a referral from the child's physician; others may take self -referrals.

Children, who may have experienced trauma (e.g., death, divorce, family violence, abuse, war), can benefit from Rainbows Canada programs and camps www.rainbows.ca.

If a child is showing difficulties in coping, the services provided by a play therapist may be beneficial. For more information check www.cacpt.com. Through play, the therapist provides a safe environment for children to express their feelings and work through their problems. The therapist plays with the child using a variety of play materials such as blocks, modeling dough, figurines, sand, board games, dolls, and puppets. Over time, the therapist works with the child to resolve issues in this natural, healing process.

Section 6 Supporting Parents and Professionals

Q How can I support the transition to school for a child with special needs or difficulties?

If a child has been diagnosed with a delay or disability, whenever possible, it is helpful for the school to know before the child starts kindergarten or school. The school has a responsibility to adapt to the child's identified needs and to put resources in place to help the child adjust to school and learn alongside her peers.

- When getting ready to register the child for school the parent or primary caregiver should:
  - Collect all information about the student including any reports and assessment from professionals and child care and early learning settings.
  - Provide copies of these when registering the child for school.

A written diagnosis and request from a physician, registered therapist or psychologist is necessary for the school to allocate the necessary resources. In the case of physical impairments, adjustments may have to be made to the physical layout of the classroom. If a learning disability has been identified, strategies to help the child learn within the context of her disability will be made available to the teacher. A teacher's assistant may be required to assist the child.

- The school should:
  - Follow internal Board procedures to assess what support the child will require.
  - Call a case conference prior to the child starting school. The case conference could be set up by the school or the preschool the child is currently attending.
  - The case conference should include:
    - The parents or primary caregivers
    - The class room or resource teacher
    - The child's primary health care provider
    - The child's preschool or child care provider.
- Having a plan is key to a good transition for the child. The plan should provide:
  - An opportunity for a school and classroom visit
  - A meeting with other agencies, parents and school board staff
  - Parents can provide the teacher with a booklet "All About Me" in which they describe the child and provide any helpful information.

- Information about the school at the child's level that can be reviewed at home with the child in preparation for her first day at school.

Special Needs
www.children.gov.on.ca/htdocs/English/topics/specialneeds/index.aspx

Providing Support While Waiting

Q How can I support the family while the child is waiting for assessment and treatment?

Unfortunately, as waiting lists seem to be a reality in many communities, parents may need some additional ideas for ways to enhance specific areas of their child's development. There are many ways to stimulate the development of the child as a whole or focus on one or more domains. Most communities have some initiatives to benefit children and their parents:

- Early infant/child intervention programs through child care settings
- Healthy Babies Healthy Children is a universal program in Ontario that can provide intervention or link families to the appropriate early intervention assessment and services
- Libraries with children's programs and books
- Toy-lending libraries
- Parks, outdoor green spaces
- Play groups
- Informal drop-in programs
- Ontario Early Years Centres (OEYCs)
- Parenting and Family Literacy Centres
- Best Start Hubs
- Local community centres – public swimming pools, team sports, clubs, crafts, special events - programs at local community centres may also be subsidized for families with low income
- Camps – some offer subsidized fees
- Family Resource Centres
- Music, art or drama programs

In addition, the Nipissing District Developmental Screens provide parents with a number of

activities they can do with their child. Many of the websites listed throughout this guide also offer tips and activities for parents.

Q How can I find credible information about developmental delays or difficulties?

There is a wealth of information for early childhood professionals listed online. However, sources of information found online can potentially be dated, incomplete, or incorrect. Anyone searching for further information should critically evaluate the source of that information to ensure that they are receiving the most accurate content available on a particular topic. Whether searching websites linked directly from this document or through independent searching, users should be vigilant. The following questions are important considerations when critically evaluating online resources:

1. Authorship/Source
   - ◆ Is the author of the particular content clear?
     - – A clearly stated author creates a degree of accountability for the content in a particular content area. Authorship can also provide the user with an idea of the author's credentials (i.e. academic, professional, etc.?)
   - ◆ What is the source of the information?
     - – Does the site represent an organization, academic institution, government body, etc.? Information from these sources tends to be more carefully monitored and the user can link back to the organization's main website. TIP: look for an "About Us" or "History" section in an effort to establish the source's authority and credibility.
2. Accurate/Current
   - ◆ Can the facts listed by this site be verified elsewhere?
     - – Are the site's sources of information peer-reviewed? Cross-referencing information from various distinct sources can increase the likelihood that this information is accurate.
   - ◆ Is the information current?
     - – Many websites list when a page was last updated, in addition to the date on which it was created. Check the website's links – sites with links that successfully direct the user to current sites tend to be current themselves.

3. Objectivity
    - ◆ Does the website appear to accentuate a particular viewpoint or bias?
        - This can be difficult to detect at first glance, but can be detected by the use of provocative or inflammatory language, frequent statement of opinion rather than fact, etc.

Adapted from Greenwood & Steyn (2009) and UC Berkeley Library (2009).

Section 7 Local Information

Professionals can best support each child's healthy development by using and referring to the services in each local community. Many of these are universal and can be accessed by caregivers with their children. In many services, all children can receive stimulation in playful early learning environments. Others may require a referral from a professional (see section 1 - The On Track Guide) and should be accessed when early identification of delays or risks are made or suspected. As noted in section 1 a "wait and see" approach is not an acceptable alternative, as a delay in support can translate into increasingly profound delays in a child's development. Early identification and early intervention leads to more positive outcomes for children, such as less need for special education services, improved academic achievement, lower rates of grade retention, and higher rates of school completion.

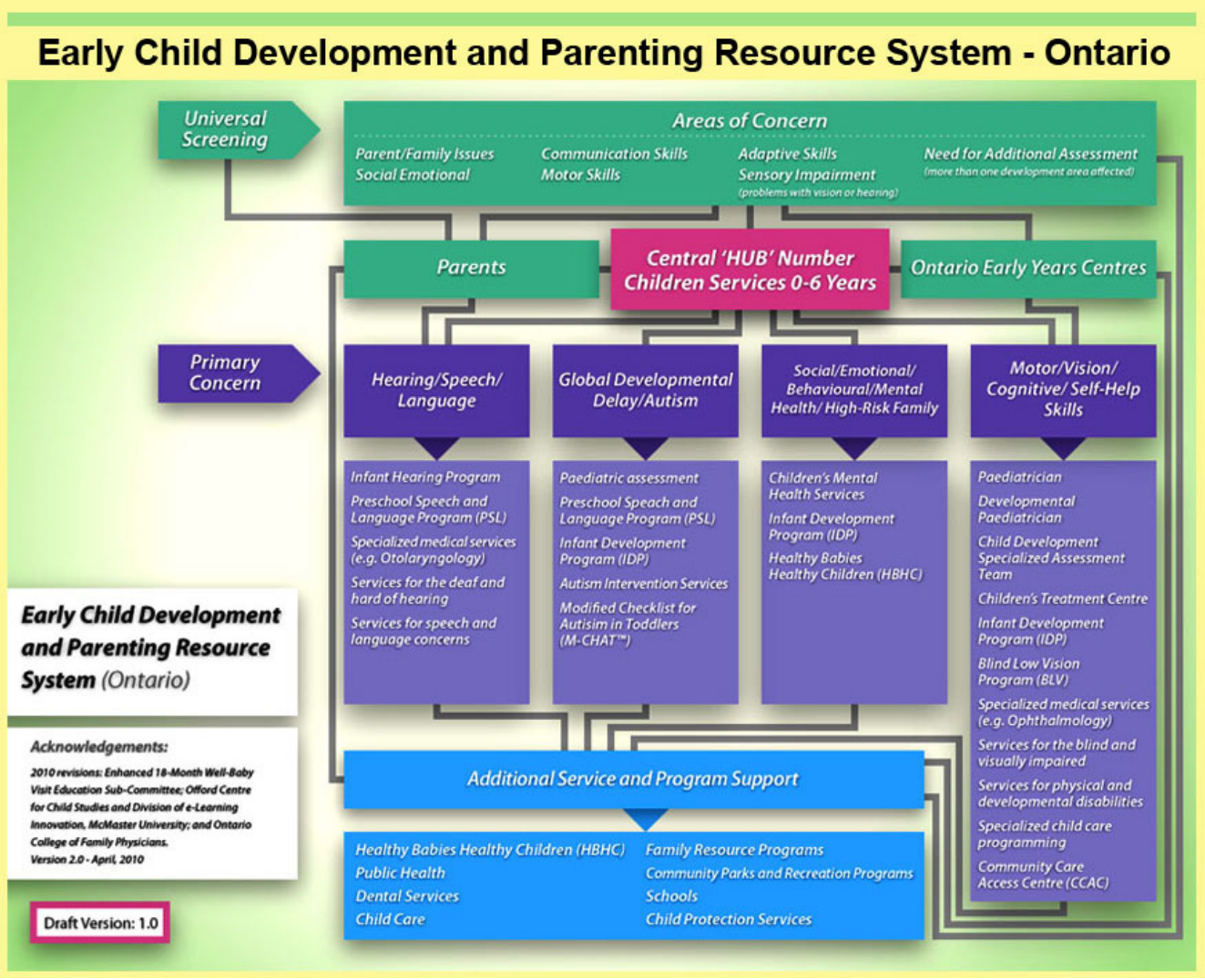
This section includes links to key local contacts and services. Due to the fact that changes take place over time, we cannot guarantee that all numbers and links will continue to operate. Contact information will be updated as feasible. If you need to make a referral and the link is no longer operational, please contact your local public health agency.

To find the contact information for your local health department or unit check www.health.gov.on.ca/english/public/contact/phu/phu_mn.html . If you are aware of changes in contact information, please contact us.

Template for Local Contacts

This template shows the children's services that provide either universal or specialized services to children. Local contact information can be inserted into the spaces prior to printing the template.

18-months Flow Chart



Some communities in Ontario have an online link for local contacts and services, while others do not. If your community does not have an 18 months flow chart, use the above template to create one.

Template Referral Form

Some communities in Ontario have developed referral forms to assist with referring a child to another agency.

- The purpose of these forms is to:
  - Assist professionals to decide which agency the child and family should be referred to
  - Assist with the process of collaboration between agencies
  - Assist with the communication between the referring agency and the receiving agency

Each community can adapt this form by entering the appropriate local services and contact information.

The form can then be printed as required.

Section 7 Local Information

In the table below, most children's services are shared through a link to a local website or a link to a PDF containing the local information. Some communities key contact information is on one webpage and additional information on a different link. You can also look for local services at

www.children.gov.on.ca/htdocs/English/topics/earlychildhood/index.aspx

To access local contact information go to

www.beststart.org/OnTrack_English/7-localcontacts.html.

Screening Tools and Programs used in Ontario

Things to consider before screening

Before using a screening tool, a professional must consider:

- Are you qualified to administer this screen?
- Do you know how to follow up after screening, should a concern be identified?
- What level of confidentiality will be used when screening? How will this level of confidentiality be ensured?
- Where and when will the screening take place?
- Are there any cultural implications to consider when applying the screening? Please see "Cultural Sensitivity When Working with Families" in section 2 and section 6 of this guide.
- Do you know how to discuss sensitive issues with families related to using the screening tool and reporting the results? Please refer to "How to talk with parents about sensitive issues" in section 6 of this guide.
- Is the screening tool valid, reliable and accurate?
- Is it free of bias and is it non-discriminatory?
- Is it easy to administer?
- Is it cost-effective

Regardless of the results of screening or assessment, children and families should be assisted in accessing appropriate community supports, resources and information.

Some of the tools listed in the table are restricted to use by professionals who have specific training and qualifications.

Screening Tools Used In Ontario

Tool	Focus	Age Range	General Description
AIMS - Alberta Infant Motor Scale Available in English	Motor Development	Infants between 4 and 18 months	Identification of motor delays in four positions: supine, prone, sitting and standing
ASQ - Ages and Stages Questionnaire® Available in English, French, some ages available in Korean	Communication Gross Motor Fine Motor Problem-Solving Personal Social Skills	4 months - 60 months	The ASQ can be use for two purposes: ◆ as a level screening tool to identify infants and children that may require further assessment ◆ as a monitoring tool to gauge the development of children who are at risk for developmental disabilities or delays
Blind -Low Vision Early Intervention Program	Vision	Birth to Grade 1	The purpose is to identify children who are not meeting developmental milestones that mark early vision development and refer them for further assessment by a physician or licensed optometrist before their first birthday. If any vision concerns are present the child should be seen as soon as possible.
	www.children.gov.on.ca/htdocs/English/topics/earlychildhood/blindnesslowvision/index.aspx		
CHAT - Checklist for Autism in Toddlers	Autistic Spectrum Disorders	18 - 24 months	To detect children at risk for social communication disorders and autistic spectrum disorders.
	www.autismcanada.org/pdfs/chatscreeningtool.pdf		
M-CHAT - Modified Checklist for Autism in Toddlers Available in English, Spanish	Language and Communication	6 months to 4 years	A checklist developed by Toronto Public Health Speech and Language Services. Primary caregivers can use this checklist to help them decide if their child needs help with speech and language.
	www.tpsls.on.ca/psl/checklist.htm		
Dental Screening	Dental and Oral Health	6 months to 18 years	Dental screening is a visual inspection by a dental hygienist to see if an obvious dental condition exists and to identify children at risk for Early Childhood Tooth Decay.

Tool	Focus	Age Range	General Description
Dental Screening Tool Available in English	Dental and Oral Health	18 - 36 months	Early identification of children at risk for or having dental caries. To help monitor a child's dental development. It also provides dental care and hygiene tips.
Infant Hearing Program	Hearing Uses DPOAE - Automated Distortion Product Otoacoustic Emissions or AABR - Automated Auditory Brainstem Response	Birth to 4 months	To identify significant hearing loss in neonatal and infant population. Children who score "refer" on the second newborn screen are sent to audiology (at no charge) for diagnostics. Children identified as having risk factors for hearing loss are monitored up to 30 months.
	www.children.gov.on.ca/htdocs/English/topics/earlychildhood/hearing/index.aspx		
E.R.I.K. - Early Referral Identification Kit Available in English	Speech, language and early literacy (including motor speech, articulation, stuttering and voice disorders or delays) Fine and gross motor skills Cognitive skills Social skills Feeding skills Sensory development	6 months to 4 years	A developmental screening tool to promote early identification of children at risk for developmental delays. If a child is identified a referral to Early Intervention Services, Preschool Speech and Language Program and other services is warranted.
	www.beyond-words.org		
EPDS - Edinburgh Post Partum Depression Scale	Post Partum Mood Disorders (PPMD) and/or depression in pregnancy	Prenatal and postnatal mothers, fathers, adoptive parents, and parents of toddlers	Widely used scale to screen and identify women experiencing postpartum depression and anxiety as well as depression during pregnancy
	www.lifewithnewbaby.ca/resources/EPDS_checklist_eng.pdf		

Tool	Focus	Age Range	General Description
NDDS - Nipissing District Developmental Screen Available in English, French and some other languages	Cognitive skills Communication, speech and language Fine and gross motor skills Hearing Social/emotional skills Self-help skills Vision	1 months - 6 years	NDDS is a universal, developmental, parent-completed checklist designed that covers vision, hearing, and communication, gross and fine motor, cognitive, social/emotional, and self-help. The tool assists parents, health care and child care professionals with a convenient and easy-to-use method of recording the development and progress of infants and children within certain age groupings. The screens coincide with immunization schedules as well as key developmental stages up to age six and are the preferred parent tool for use at the enhanced 18-months well baby visit. Age appropriate activities accompany the screens and are designed to promote overall development.
	www.ndds.ca		
Ontario Newborn Screening Program Fact sheets available in English, French and nine other languages	Health Using the Newborn Screening Test	1 - 7 days	Ontario Newborn Screening Program (ONSP) offers screening for serious diseases to all babies born in Ontario. Early identification of these diseases allows treatment that may prevent growth problems, health problems, mental retardation, and sudden infant death. Currently the tool screens for 25 different diseases. Please see the website for detailed information.
	www.newbornscreening.on.ca		
NutriSTEP® - Nutrition Screening Tool for Every Preschooler Available in English, French some other languages	Nutrition Feeding and Swallowing	3 - 5 years	To identify preschool children at nutritional risk. Topics include: food and nutrient intake; physical growth; developmental and physical capabilities; physical activity; family food and eating preferences; parental concerns; nutrition knowledge, beliefs and practices; food security and the feeding environment. Parents of children identified as at risk should to talk a registered dietitian or their child's doctor
	www.nutristep.ca		

Tool	Focus	Age Range	General Description
Parkyn Tool Healthy Babies Healthy Children (HBHC) postpartum screening tool Available in English	Developmental factors Congenital or acquired health challenges, family health and social factors	Postpartum women and infants	As part of HBHC program, newborns and their families are screened for risk factors associated with poor child developmental outcomes. The families and newborns at risk can be followed up by a public health nurse for further assessment. The purpose of the screen is to identify families who may benefit from more comprehensive home visiting services.
REEL-3 - Receptive, Expressive, Emergent Language Test - Third Edition Available in English	Language	Birth to 3 years	Screens receptive language (the child's language comprehension) and expressive language (the child's verbal communication).
Rourke Baby Record Available in English and French	Health and Development	Birth to 5 years	Is a screening tool used by family physicians and paediatricians to assess a child's development. It has been used since 1979 and was most recently revised in 2009. It provides evidence based growth and development parameters and supports education of the child's care providers through the physician.
	www.rourkebabyrecord.ca		
RUCS - Routine Universal Comprehensive Screening Research Available in English	Women Abuse	All females	Using the universal comprehensive screening approach avoids stigmatization of abused women. RUCS is effective in achieving early identification and intervention.
Another language screening tool is the Language Use Inventory (LUI).			

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- **Active Healthy Kids Canada**
  www.activehealthykids.ca
- **The Association for the Study of Play (TASP)**
  www.tasplay.org
- **Association of Early Childhood Educators Ontario**
  www.aeceo.ca
- **Best Start Resource Centre**
  www.beststart.org/resources/index.html
- **Breastfeeding Committee of Canada**
  www.breastfeedingcanada.ca
- **Canadian Academy of Audiology**
  www.canadianaudiology.ca
- **Canadian Association of Pediatric Health Centres**
  www.caphe.ca
- **Canadian Association of Family Resource Programs**
  www.frp.ca
- **Canadian Association of Speech-Language Pathologists and Audiologists**
  www.caslpa.ca
- **Canadian Child Care Federation**
  www.cccf-fcsge.ca
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  www.cda-adc.ca
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  www.cich.ca
- **Canadian National Institute for the Blind**
  www.cnib.ca

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- **Centre for Addiction and Mental Health**
  www.camh.net
- **Centre of Excellence for Early Childhood Development**
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- **Child Trauma Academy**
  www.ChildTrauma.org
- **Child Welfare League of Canada**
  www.cwlc.ca
- **Children's Mental Health Centres**
  www.kidsmentalhealth.ca
- **Child Resource and Research Unit**
  www.childcarecanada.org
- **College of Dental Hygienists of Ontario**
  www.cdho.org
- **Community Living Toronto - Connectability**
  www.connectability.ca/connectability/pages/index.html
- **Council for Early Child Development**
  www.councilecd.ca
- **Department of Justice Canada**
  www.justice.gc.ca
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  www.dietitians.ca
- **Eat Right Ontario**
  www.eatrightontario.ca
- **Education Resources Information Centre (ERIC database)**
  www.eric.ed.gov
- **Food Allergy & Anaphylaxis Network**
  www.foodallergy.org
- **The Hanen Centre**
  www.hanen.org

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  www.hc-sc.gc.ca
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- **Eating Well with Canada's Food Guide**
  www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/index-eng.php
- **Nutrition for Healthy Term Babies**
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- **Hincks-Dellcrest Centre**
  www.hincksdellcrest.org
- **Infant Mental Health Promotion**
  www.sickkids.on.ca/imp
- **International Reading Association**
  www.reading.org
- **Lifesaving Society**
  www.lifesavingsociety.com
- **Motherisk**
  www.motherisk.org
- **Multiple Births Canada**
  www.multiplebirthscanada.org
- **National Association for the Education of Young Children**
  www.naeyc.org
- **National Collaborating Centre for the Determinants of Health**
  www.nccdh.ca
- **National Center on Shaken Baby Syndrome**
  www.dontshake.org
- **National Resource Center on Child Abuse and Neglect (NRCCAN)**
  www.casanet.org/library/abuse/nrccan.htm
- **Nutrition Resource Centre**
  www.nutritionrc.ca
- **OISE/Ontario Neurotrauma Foundation (ONF) project on Shaken Baby Syndrome prevention**
  www.oise.utoronto.ca/research/ONF-SBSPrevention/

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  www.oacas.org
- **Ontario Breastfeeding Committee**
  www.breastfeedingontario.org
- **Ontario Federation of Indian Friendship Centres**
  www.ofifc.ca
- **Ontario Injury Prevention Resource Centre at**
  www.oninjuryresources.ca/home
- **Ontario Ministry for Children and Youth Services**
  - **Aboriginal Children**
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  - **Healthy Babies Healthy Children**
    www.children.gov.on.ca/htdocs/English/topics/earlychildhood/health/index.aspx
  - **Blindness and Low Vision**
    www.children.gov.on.ca/htdocs/English/topics/earlychildhood/blindnesslowvision/index.aspx
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- **Ontario Ministry of Health Promotion and Sport - Dental - Children in Need of Treatment**
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- **Ontario Poison Centre**
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- **Ontario's Road Safety Resource**
  www.ontarioroadsafety.ca
- **OPHEA**
  www.ophea.net
- **Parents Anonymous**
  www.parentsanonymous.org
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  www.pbso.ca/
- **Playing for Keeps**
  www.playingforkeeps.org
- **Provincial Centre of Excellence for Child and Youth Mental Health**
  www.onthepoint.ca
- **Public Health Agency of Canada**
  - **Family Violence Initiative/National Clearinghouse on Family Violence**
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    www.phac-aspc.gc.ca/dca-dea/programs-mes/
  - **Social determinants of health**
    www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php
- **Public Health Units Info line**
  www.health.gov.on.ca/english/public/contact/phu/phu_mn.html
- **Reading is Fundamental**
  www.rif.org
- **Reading Rockets**
  www.readingrockets.org
- **Right to Play (formerly Olympic Aid)**
  www.righttoplay.com
- **Rainbows Canada - Rainbows Peer Support Program**
  www.rainbows.ca/helpforfamily.aspx

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  www.sedl.org/reading
- **SIDS Canada**
  www.sidscanada.org/backtosleep.html
- **Speech Delay**
  www.speechdelay.com
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  www.vifamily.ca

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  www.children.gov.ca
- **Ministry of Education**
  www.edu.gov.ca
- **Motherisk**
  www.motherisk.org
- **NutriStep**
  www.nutristep.ca
- **Ontario Early Years Centres**
  www.ontarioearlyyears.ca
- **Oral Health**
  www.utoronto.ca/dentistrty/newresources/kids
- **Parenting**
  www.growinghealthykids.org

Section 10 Contact us

On Track

The Best Start Resource Centre is a key program of Health Nexus (Ontario's longstanding health promotion organization), and is funded by the Government of Ontario. It is a resource centre that supports service providers to implement effective health promotion strategies for expectant and new parents, newborns, and young children through consultation, knowledge exchange, resource development, networking and training in English and French.

For more information about the On Track guide, please contact the Best Start Resource Centre. We can be reached at:

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