

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.



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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.

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- ◆ 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.

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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.



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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

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- ◆ 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.)

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- ◆ 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.

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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 Health Dentistry (OAPHD), 2003)

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- ◆ 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)

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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

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◆ 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 & Mohammed, 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



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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.

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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>.

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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 through 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.

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- ◆ 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

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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:

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- ◆ 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.

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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)

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- 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:

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- ◆ 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.

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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.

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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

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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		Emotional	
<ul style="list-style-type: none">♦ Look at caregiver♦ Study caregiver’s face♦ Smile in response to caregiver♦ Imitate some facial expressions		<ul style="list-style-type: none">♦ Calm down when comforted by caregiver♦ Enjoy being touched and cuddled	
Language		Cognitive	
<ul style="list-style-type: none">♦ Have different cries♦ (e.g., tired, hungry)♦ Have a variety of sounds♦ (e.g., coos, gurgles)♦ Laugh out loud		<ul style="list-style-type: none">♦ Recognize and calm down to familiar gentle voice♦ Watch faces intently	
Motor			
Gross Motor		Fine Motor	
<ul style="list-style-type: none">♦ 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)		<ul style="list-style-type: none">♦ Open and shut hands	
Perceptual (sensory)			
Hearing		Vision	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ Breastfeed exclusively ♦ Take 400 IU of Vitamin D per day ♦ If not breastfeeding, take ♦ iron-fortified formula ♦ Take no other fluids or solids 	<ul style="list-style-type: none"> ♦ 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	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ Cry differently for different needs♦ Show comfort and discomfort	
Language		Cognitive	
<ul style="list-style-type: none">♦ 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)		<ul style="list-style-type: none">♦ 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	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ 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	
<ul style="list-style-type: none">♦ View “by two months of age”		<ul style="list-style-type: none">♦ 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)	

Section 3 Children's Development

By Six Months of Age

Expect the child to:

Social	Emotional
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ Engage in self-soothing behaviours to control emotions (e.g., sucking fingers) ♦ Express pleasure and displeasure ♦ Distinguishes emotions by tone of voice
Language	Cognitive
<ul style="list-style-type: none"> ♦ 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) 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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	Fine Motor
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Vision
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Taste and Smell
<ul style="list-style-type: none"> ♦ Explore most objects with his mouth ♦ Enjoy touch ♦ (e.g., being held, stroked, tickled) 	<ul style="list-style-type: none"> ♦ Prefer a salty taste to plain water ♦ Readily change taste preferences through experience
Nutrition/Feeding	
Nutrition	Feeding
<ul style="list-style-type: none"> ♦ View "by two months of age" ♦ Begin to try iron-rich foods such as iron-fortified infant cereal or pureed meats 	<ul style="list-style-type: none"> ♦ 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

Section 3 Children's Development

By Nine Months of Age

Expect the child to:

Social		Emotional	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ Respond to expressions of emotion from other people♦ Reach to be picked up and held	
Language		Cognitive	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ 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	
<ul style="list-style-type: none">♦ 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		<ul style="list-style-type: none">♦ 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	Vision
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ Notice small items the size of breadcrumbs ♦ Show interest in pictures ♦ Recognize partially hidden objects ♦ Have developed depth perception
Touch	Taste and Smell
<ul style="list-style-type: none"> ♦ View “by six months of age” 	<ul style="list-style-type: none"> ♦ View “by six months of age”
Nutrition/Feeding	
Nutrition	Feeding
<ul style="list-style-type: none"> ♦ Continue frequent and on demand breastfeeding ♦ Take complementary iron-rich foods ♦ 2 - 3 times per day ♦ Take pureed, mashed or very soft foods 	<ul style="list-style-type: none"> ♦ 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	Emotional
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Cognitive
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Fine Motor
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Vision
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Taste and Smell
<ul style="list-style-type: none"> ♦ Explore a variety of textures with hands and sometimes with mouth 	<ul style="list-style-type: none"> ♦ Willing to try a variety of new tastes ♦ Show likes and dislikes of tastes and smells
Nutrition/Feeding	
Nutrition	Feeding
<ul style="list-style-type: none"> ♦ Take complementary iron-rich foods ♦ Take bite-sized pieces of table food ♦ May drink whole milk 	<ul style="list-style-type: none"> ♦ 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

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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

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- 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

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- 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.

Section 3 Children's Development

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
<ul style="list-style-type: none"> ♦ Respond to own name when called ♦ Repeat an action that made you laugh ♦ Stop an action when you say “no” ♦ Imitate during play 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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

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Motor	
Gross Motor	Fine Motor
<ul style="list-style-type: none"> ♦ Crawl up stairs/steps ♦ Walk sideways holding onto furniture ♦ Try to squat to pick up a toy from the floor ♦ Get from a sitting to a crawling or prone position ♦ Stand alone easily without support ♦ Walk holding onto an adults hand and may be able to take a few steps without support 	<ul style="list-style-type: none"> ♦ Use two hands when playing with toys ♦ Remove socks and try to undo shoes ♦ Stack two blocks ♦ Poke things with index finger ♦ Scribble with crayon ♦ Push a toy
Perceptual (sensory)	
Hearing	Vision
<ul style="list-style-type: none"> ♦ View "by 12 months of age" 	<ul style="list-style-type: none"> ♦ View "by 12 months of age"
Nutrition/Feeding	
Nutrition	Feeding
<ul style="list-style-type: none"> ♦ Eat many foods his family is eating ♦ Have 3 - 4 nutritious meals and 1-2 snacks ♦ Continue to breastfeed 	<ul style="list-style-type: none"> ♦ Eat many foods his family is eating ♦ Have 3 - 4 nutritious meals and 1-2 snacks ♦ Continue to breastfeed

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By 18 Months of Age

Expect the child to:

Social	Emotional
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Fine Motor
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Vision
<ul style="list-style-type: none"> ♦ Respond to music by trying to dance, ♦ sway, clap or vocalize ♦ Look for source of sound in all directions 	<ul style="list-style-type: none"> ♦ 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	Feeding
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ View "by 18 months of age" 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ View as by "18 months of age" ♦ Take number of Food Guide Servings as recommended by Canada's Food Guide 	<ul style="list-style-type: none"> ♦ 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

Section 3 Children's Development

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.

Section 3 Children's Development

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
<ul style="list-style-type: none"> ♦ 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) 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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) 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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) 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ Use a fork at mealtimes (use of utensils varies by culture) ♦ Self-feed well using fingers, spoon or fork ♦ Finish most meals

Section 3 Children's Development

By 5 Years of Age

Expect the child to:

Social	Emotional
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Emotional
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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	Cognitive
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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")

Section 3 Children's Development

Motor	
Gross Motor	Fine Motor
<ul style="list-style-type: none"> ♦ 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 	<ul style="list-style-type: none"> ♦ 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
<ul style="list-style-type: none"> ♦ Eat a variety of foods according to Canada's Food Guide 	<ul style="list-style-type: none"> ♦ 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

Section 3 Children's Development

- 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

Section 3 Children's Development

- 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.