Social and Emotional Development in the Early Years

Information Sheet for Early Childhood Development & Parent Support Providers



This information sheet is intended for providers involved in early child care and learning, parenting education and/or family support, or any provider who has regular contact with families who have young children.

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Other sources include:

- Alberta Health Services Collaborative Mental Health Care Team: http://www.albertahealthservices.ca/services.asp?pid=service&rid=2141.
- Brazelton, T.B. and Greenspan, S. The Irreducible Needs of Children: What every child must have to Grow, Learn, and Flourish. Da Capo Press; 2007.
- Circle of Security. www.circleofsecurity.org/
- FrameWorks Institute. http://www.frameworksinstitute.org/
- Sroufe LA., Egeland B., Carlson E., & Collins WA. The Development of the Person. The Minnesota Study of Risk and Adaptation from Birth to Adulthood. New York: Guilford Publications. 2005.
- ZERO TO THREE. www.zerotothree.org.

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Promoting the mental health of infants from birth to three

A growing body of scientific evidence shows that the first three years of life are critically important for the long-term emotional health and development of a person.ⁱ This information sheet provides early childhood development and parent support providers with a concise summary of evidence to support effective practice with infants and toddlers. Although much of the content is applicable to all ages, this information brief focuses on infants, meaning a child from birth to age three.

What is infant mental health?

When early childhood experts talk about the mental health of children under three, they are describing the infant's growing ability to experience, regulate and express emotions and to engage in loving relationships.ⁱⁱ All aspects of a child's development are affected by his or her emotional health because young children who are mentally healthy are free to learn and explore the environment around them. Thus the infant's cognitive and motor development, among other skills, are closely tied to the child's emotional well-being. Development is interconnected; the infant who can't rely on a consistent person to provide a soothing response when he or she is distressed, ill, hurt or lonely, can't develop properly. When the relationship between an infant and caregiver is not going well, it is harder for the infant to reach his or her full potential.ⁱⁱⁱ

What do infants need for healthy emotional development?

Infancy is a period of exuberant growth and change. The newborn brain is approximately one quarter to one third the weight of an adult brain. A significant portion of brain growth happens before the second or third birthday. While humans are born with the majority of brain cells (called neurons) present, the connections between brain cells (called synapses) that are rapidly created during this period, allowing learning and thinking to take place. Think of the wiring in a house that is necessary before electricity can flow as the 'brain architecture' that is developing.^{iv}

The active ingredient in this process is the give and take of daily social interactions with important people in the infant's life, such as parents, childcare providers, or other familiar people. Think of the 'serve and return' of a game of tennis – the infant smiles and coos, the parent responds. These interactions sculpt the developing brain by strengthening connections that are repeatedly used while unused connections are lost or replaced. In other words, the brain is sculpted on the principle of 'use it or lose it'. Emotional well being along with cognitive and language skills are based on this continuous, everyday give and take that occurs between children and parents. In order to develop properly, all children, even very young infants, need at least one continuous and caring relationship with an adult who will respond to their distress, provide them with opportunities for positive social interactions, and support them to explore their environment.^v

How do infants develop mental health problems?

It is rare that a single event, even a traumatic one, will profoundly alter the emotional well being of an infant if the child has caring adults to turn to for comfort and support. More often it is the accumulation of risk factors or repeated exposure to traumatic events, combined with an absence of emotionally nurturing care, that impedes development.^{vi}

Risk factors could include:

- child vulnerabilities such as prenatal exposure to alcohol or drugs, congenital problems or sensitive temperament
- parent risk factors such as mental illness, addictions, low cognition or poor understanding of development
- multiple adversities such as poverty, insecure housing, social isolation or family violence
- parent-child relationship issues such as attachment problems

Traumatic events for an infant could include:

- exposure to frightening caregiver behaviour
- multiple changes in caregivers
- chronic emotional deprivation

Chronic neglect, especially emotional deprivation, deprives infants and toddlers of the interpersonal experiences they need to develop language and social skills, and exposes them to chronic stress. When babies experience too much stress during sensitive periods of development the development of the brain can be affected and important social skills are impaired.^{vii}

Babies and toddlers who are repeatedly frightened by their parents, because of threatening behaviour or exposure to family violence, are also at very high risk of serious emotional problems and developmental impairments that might not be apparent for several more years. Even children who are too young to form a conscious memory of traumatic events can be affected later on.^{viii}

Research has clearly demonstrated a direct relationship between the numbers of moves a foster child makes and negative outcomes such as attachment and behaviour problems, further placement breakdowns, and mental health problems. Infants and toddlers are capable of powerful emotions such as love, joy, grief and fear. When very young children are placed with temporary caregivers for extended periods or experience even one or two placement disruptions, their physical and emotional health can be permanently affected.^{ix, x}

What are the symptoms of emotional problems in children under three?

Once infants settle into a routine (usually sometime in the first few months) they generally become more predictable and easier to 'read' – that is, they develop a predictable sleep/wake cycle and can generally give accurate cues to help their caregiver understand and respond to their needs. Even typically developing babies can go through difficult phases (For more information see www. purplecrying.info) but the caregiver can still recognize and respond to their distress. When the relationship between an infant and caregiver isn't going well, however, the infant can develop symptoms that are early warning signs of emotional distress or emerging mental health concerns. Because early childhood development and family support providers are often the first point of contact with families of infants, it is important to recognize these symptoms and know how to respond.

Each symptom listed below can have a variety of causes, for example children with specific health problems may have feeding and digestion problems, and children who have spent long periods in hospitals may be irritable and make poor eye contact. Seek guidance from a public health nurse or other health care or mental health professional if any concerns arise. Public health nurses in British Columbia can screen for social and emotional concerns and help with appropriate referrals.^{xi}

Health concerns - Chronic health problems or developmental delays; sudden unexplained regression in skills; feeding and/or digestion problems; odd eating habits; poor muscle tone or rigid, stiff muscles.

Social Lack of eye contact; infrequent social smiles and lack of shared social interest (pointing or gesturing at things); in older toddlers, lack of empathy and/or fearlessness; unusually fearful of or overly friendly with strangers.

Behaviour Failure to establish sleep/wake cycle; Repetitive or compulsive behaviours; odd or primitive self-soothing behaviour (e.g. rocking, head banging, chewing non-food items, picking at hair or skin); unusual aggressiveness with siblings, peers or family pets.

Mood Recurrent fretfulness or irritability that can't be explained by illness or 'colic' (see www.purplecrying.info for more information); no interest in play or little make-believe play by age three; little interest in others.

Sensitivity Easily upset or unusually upset by changes in routine or people; hyper-vigilant (wide-eyed, stiff muscle tone, wary); fearful; unusually sensitive to touch, light or noise; frequent nightmares.



2 What should I do if I am concerned about a parent and infant?

If the symptoms or concerns are very serious or if mistreatment is suspected, contact local child protection authorities immediately (For contact information see page 5). For most families building a trusting and supportive relationship with parents is fundamental to changing the way they interact with their children. For this reason the expression of empathy toward a parent in distress, offering practical help with problems and being a knowledgeable resource for parenting advice or referral information are important first steps. Early childhood development and family support providers can offer practical ideas that will help parents build a healthy relationship with their offspring.

The next section offers practical tips for all parents along with community referral suggestions for assessment or intervention when problems arise.

Building healthy parent/infant relationships.

Help parents understand that their primary job is to form a close emotional tie with their infant by being a reliable source of comfort to their infant, keeping the infant safe, and supporting his or her exploration of the world. Refer to this primary theme when concrete situations create 'teachable moments'.

Use everyday informal interactions to help parents learn about typical infant development and help them establish reasonable expectations for their child from infancy.

Encourage parents to hold their infant and help them position the infant for maximum face-to-face contact; infants need physical soothing, affectionate touch and playful physical interactions that are matched to their abilities.

Help parents to read their infant's cues and respond to their infant's lead. Some cues that can be pointed out to parents are:

- I need a rest cues (turning away, loss of eye contact)
- **Distress cues** (hiccupping, frowning, crying, pulling away)
- I like that! (smiling, giggling, gazing, reaching, cooing)
- I need you (reaching for parent, following parent, distressed facial expression such as trembling lip)

Slow down intrusive parents by encouraging them to watch and wait before they respond. Support passive parents by speaking for the infant (example, saying: "I love it when you hold me like that mommy" etc.). Early childhood development and family support providers can encourage parents to give a soothing response with concrete ideas such as swaddling, rocking, using a soft voice, and so on. Be confident in telling parents that they cannot spoil their infant. In fact, research is clearly showing that more responsive parents have infants who cry less frequently than parents who ignore their infant's distress.^{xiii}

The parent is the 'best toy in the room.' Encourage parents to get face-to-face on the floor with their infant. This not only encourages motor skills, it teaches parents how to play with their infant.

Help parents label emotions and talk out loud about feelings. Parents can learn to give an empathetic response to difficult feelings with coaching. Even when parents have to curtail problem behaviour in children they can learn to do so with empathy. When children learn to express their feelings and are confident of a soothing response, they have less need to act out behaviourally.

Nobody is perfect. Perfection in parenting is impossible to achieve and isn't even recommended.

Gentle hands/kind voice: At the heart of a healthy parent-child relationship is trust and confidence that the parent will be a reliable source of comfort and will help the child feel safe and secure.

3 Where can I find local resources to help?

Services for infants and families:

- Health professionals including: family physicians, pediatricians, psychiatrists, public health nurses, speech and language therapists, occupational therapists, physiotherapists and social workers
- Early Intervention Programs: www.mcf.gov.bc.ca/spec_needs/eits.htm
- BC Children's Infant Psychiatry Clinic: phone 604 875-2010 or www.bcchildrens.ca
- Child & Youth Mental Health Services (Ministry of Child and Family Development or MCFD): http://www.mcf.gov.bc.ca/mental_health/pdf/office_services.pdf.
- MCFD Child Welfare Worker: local MCFD office is listed in the blue pages of the phone book; after hours, phone the Helpline for Children at 310-1234 (no area code is needed) or visit www.mcf.gov.bc.ca/getting_help/help.htm.
- Infant Development Programs: www.mcf.gov.bc.ca/spec_needs/idp/htm
- Aboriginal Infant Development Programs: www.mcf.gov.bc.ca/spec_needs/aidp.htm
- HealthLink BC: Dial 811 or visit www.healthlinkbc.ca

Services for adults:

- Crisis Line Association of BC's Mental Health Support and Information Calls: 310-6789
 (no area code needed) or www.crisislines.bc.ca
- The Crisis Centre: 1-800-SUICIDE (784-2433) or www.crisiscentre.bc.ca
- Alcohol and Drug Information and Referral Service: 1-800-663-1441 or (604) 660-9382 (Lower Mainland)
- Pacific Postpartum Support Society: (604) 255-7999 or www.postpartum.org
- BC Reproductive Mental Health Program:
 www.bcwomens.ca/Services/HealthServices/ReproductiveMentalHealth/default.htm

Check your local Health Authority for other services for infants, families and adults:

- Interior Health Authority: http://www.interiorhealth.ca
- Fraser Health Authority: http://www.fraserhealth.ca
- Vancouver Coastal Health Authority: http://www.vch.ca
- Vancouver Island Health Authority: http://www.viha.ca
- Northern Health Authority: http://www.northernhealth.ca
- **Provincial Health Services Authority:** http://www.phsa.ca/default.htm



Attachment:

- Appleyard K, Berlin LJ. Supporting Healthy Relationships between Young Children and Their Parents: Lessons from Attachment Theory and Research. Durham, North Carolina: Center for Child and Family Policy at Duke University; 2007: www.childandfamilypolicy.duke.edu/pdfs/pubpres/SupportingHealthyRelationships.pdf
- **Public Health Agency of Canada. Connections for Life: Attachment Toolkit:** www.phac-aspc. gc.ca/hp-ps/dca-dea/prog-ini/funding-financement/npf-fpn/family-famille-eng.php

Crying:

• National Center on Shaken Baby Syndrome. Period of Purple Crying: www.purplecrying.info

Development:

- Best Chance website (including Baby's Best Chance and Toddler's First Steps): www.bestchance.gov.bc.ca
- Centre of Excellence for Early Childhood Development: www.excellence-earlychildhood.ca/home.asp
- National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University: http://developingchild.harvard.edu/initiatives/council/
- Toronto Red Flags Guide: www.toronto.ca/health/earlychilddevelopment/pdf/redflagsguide.pdf
- ZERO TO THREE: http://main.zerotothree.org

Maltreatment:

- Assessing Emotional Neglect in Infants: http://www.cecw-cepb.ca/publications/523
- BC Handbook for Action on Child Abuse and Neglect for Service Providers: www.mcf.gov.bc.ca/child_protection/pdf/handbook_action_child_abuse.pdf
- Child Trauma Academy: www.childtrauma.org
- Emotional Trauma in Infancy: www.cecw-cepb.ca/publications/917
- National Child Traumatic Stress Network: www.nctsn.org
- Shaken Baby Syndrome: www.dontshake.org
- Supporting the Social and Emotional Needs of Infants in Foster Care: www.cecw-cepb.ca/publications/525

Mental Health:

- American Academy of Pediatrics: www.aap.org
- British Columbia Pediatric Society: www.bcpeds.ca
- Canadian Pediatric Society: www.cps.ca/english/publications/MentalHealth.htm
- Handle with Care: Strategies for Promoting the Mental Health of Young Children in Community-Based Child Care. http://www.hincksdellcrest.org/Home/Resources-And-Publications/Learning-through-Play/ Learning-through-Play.aspx
- Here to Help: www.heretohelp.bc.ca
- Infant Mental Health Promotion (SickKids): www.sickkids.ca/imp/
- Kelty Mental Health Resource Centre: 1-800-665-1822 or 604-875-2084 or www.keltymentalhealth.ca
- The F.O.R.C.E. (Families Organized for Recognition and Care Equality) Society for Kids' Mental Health: *www.forcesociety.com*

Parent Handouts:

- Circle of Security: www.circleofsecurity.org
- Collaborative Mental Health Care: www.calgaryhealthregion.ca/mh/collaborative.htm

Screening Tools:

- Ages and Stages Questionnaire/ ASQ Social Emotional:
 www.brookespublishing.com/store/books/squires-asqse/index.htm
- Edinburgh Postpartum Depression Scale (pre and postnatal screening tool for depression in mothers): www.perinatalservicesbc.ca/Edinburgh%20Perinatal%20Postnatal%20Depression%20Scale.htm
- First Words Project (free downloadable screening tools): http://firstwords.fsu.edu/
- Contact your local public health unit, Infant Development (IDP) or Aboriginal Infant Development (AIDP) program for screening services.

End Notes

- i Sroufe LA, Egeland B, Carlson E, Collins WA. The Department of the Person: The Minnesota Study of Risk and Adaptation from Birth to Adulthood. New York, NY; Guildford Publications; 2005.
- ii Hill SL, Solchany J. Mental Health Assessments for Infants and Toddlers. American Bar Association Child Law Practice Journal; Nov 2005; 24(9); 133-140.
- iii National Reserach Council and Institute of Medicine. From Neurons to Neighborhoods; The Science of Early Childhood Development. Committee on Integrating the Science of Early Childhood Development. Shonkoff JP, Phillips DS, eds. Board of Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, D.C.; National Academy Press; 2000.
- iv General Brain Development; ZERO TO THREE; 2011 http://main.zerotothree.org/site/PageServer?pagename=ter_key_brainFAQ#bybirth. Accessed Aug 18, 2011.
- v Center on the Developing Child at Harvard University. Child Development Fact Sheet; 2011. www.developmentchild.harvard.edu. Accessed Aug 18, 2011.
- vi National Scientific Council on the Developing Child. Excessive Stress Distrupts the Arichitecture of the Developing Brain: Working Paper #3; 2005. www.developingchild.com. Accessed Aug 18, 2011.
- vii Wotherspoon E, Vellet S, Pririe J, O'Niell-Laberge M, Cook-Stanhope L, Wilson D. Nelglected Infants in Family Court. Family Court Review; 2010; 48(3); 505-515.
- viii National Scientific Council on the Developing Child. Persistent Fear and Anxiety Can Affect Youth Children's Learning and Development. Work Paper No. 9; 2010 http://developingchild.harvard.edu/index.php/resources/ reports_and_working_papers/working_papers/wp9/. Accessed Aug 16, 2011.
- ix American Academy of Pediatrics, Committee on Early Childhood, Adoption and Dependent Care. Developmental Issues for Young Child in Foster Care; 2000; 106(5), 1145.
- x Jones Harden, B. Infants in the Child Welfar System; A Development Framework for Policy and Practice, ZERO TO THREE Press, Washington, DC; 2007; 90.
- xi Wotherspoon E, Hawkins, E, Clinton J, Vellet S, Pririe J. Infant Emotional Trauma: Bringing the Science of Early Childhood Development into Family Court, Michigan Child Welfare Law Journal; Spring 2010.
- xii Ibid
- xiii Center on the Developing Child at Harvard University. The Foundations of Lifelong Health Are Built in Early Childhood; 2010. http://www.developingchild.harvard.edu. Accessed September 2, 2011.

- Alberta Health Services Collaborative Mental Health Care Team: http://www.albertahealthservices.ca/services.asp?pid=service&rid=2141. Accessed Sept 16, 2011.
- Ages and Stages Questionnaire/ ASQ Social Emotional: www.brookespublishing.com/store/books/squires-asqse/index.htm. Accessed Sept 16, 2011.
- Alberta Family Wellness Initiative. 2010 Early Brain & Biological Development Symposium. http://www.albertafamilywellness.org/resources/video/2010-early-brain-biological-developmentsymposium-summary Accessed Sept 16, 2011.
- American Academy of Pediatrics, Committee on Early Childhood, Adoption and Dependent Care. Developmental Issues for Young Child in Foster Care; 2000; 106(5), 1145.
- American Academy of Pediatrics: www.aap.org. Accessed Sept 16, 2011.
- Appleyard K, Berlin LJ. Supporting Healthy Relationships between Young Children and Their Parents: Lessons from Attachment Theory and Research. Durham, North Carolina: Center for Child and Family Policy at Duke University; 2007. http://childandfamilypolicy.duke.edu/pdfs/pubpres/ SupportingHealthyRelationships.pdf. Accessed Aug 12, 2011.
- Assessing Emotional Neglect in Infants: http://www.cecw-cepb.ca/publications/523. Accessed Sept 16, 2011.
- Benoit D, Infant-Parent Attachment: Definition, Types, Antecedents, Measurement and Outcome. Paediatric Child Health. 2004; 9(8): 541-5.
- Best Chance website (including Baby's Best Chance and Toddler's First Steps): www.bestchance.gov.bc.ca. Accessed Sept 16, 2011.
- Brazelton TB, Greenspan S. The Irreducible Needs of Children: What Every Child Must Have to Grow, Learn, and Flourish. Da Capo Press; 2007.
- British Columbia Handbook for Action on Child Abuse and Neglect for Service Providers: www.mcf.gov.bc.ca/child_protection/pdf/handbook_action_child_abuse.pdf. Accessed Sept 16, 2011.
- British Columbia Pediatric Society: www.bcpeds.ca. Accessed Sept 16, 2011.
- Canadian Pediatric Society: www.cps.ca/english/publications/MentalHealth.htm. Accessed Sept 16, 2011.
- Centre of Excellence for Early Childhood Development: www.excellence-earlychildhood.ca/home.asp. Accessed Sept 16, 2011.
- Center on the Developing Child at Harvard University. Child Development Fact Sheet; 2011. www.developmentchild.harvard.edu. Accessed Aug 18, 2011.
- Center on the Developing Child at Harvard University. Core Concepts in the Science of Early Childhood Development. http://developingchild.harvard.edu/index.php/resources/multimedia/ interactive_features/coreconcepts/. Accessed Aug 12, 2011.

- Center on the Developing Child at Harvard University. The Foundations of Lifelong Health Are Built in Early Childhood; 2010. http://www.developingchild.harvard.edu. Accessed Sept 2, 2011.
- Child Trauma Academy: www.childtrauma.org. Accessed Sept 16, 2011.
- Circle of Security. http://www.circleofsecurity.org/. Accessed Aug 12, 2011.
- Cooper m; Hoffman K; Marvin R & Powell B. Building a Secure Attachment with Your Baby. 2000. www.circleofsecurity.org. Accessed Aug 15, 2011
- Davey L. How to Talk About Children's Mental Health: a FrameWorks MessageMemo. Frameworks Institute; 2010. http://www.frameworksinstitute.org/toolkits/cmh/resources/pdf/CMH_MM.pdf. Accessed Aug 12, 2011.
- Edinburgh Postpartum Depression Scale (pre and postnatal screening tool for depression in mothers): www.perinatalservicesbc.ca/Edinburgh%20Perinatal%20Postnatal%20Depression%20Scale.htm. Accessed Sept 16, 2011.
- Emotional Trauma in Infancy: www.cecw-cepb.ca/publications/917. Accessed Sept 16, 2011.
- First Words Project (free downloadable screening tools): http://firstwords.fsu.edu/. Accessed Sept 16, 2011. Contact your local public health unit, Infant Development (IDP) or Aboriginal Infant Development (AIDP) program for screening services.
- The F.O.R.C.E. (Families Organized for Recognition and Care Equality) Society for Kids' MentalHealth: www.forcesociety.com. Accessed Sept. 17, 2011.
- FrameWorks Institute. Early Child Development Toolkit: the Core Story of Child Development. 2011. http://frameworksinstitute.org/toolkits/ecd/resources/pdf/ECDToolkit_core_story.pdf. Accessed Aug 15, 2011.
- Galinsky E. Mind in the Making: the Seven Essential Life Skills Every Child Needs. New York, NY: Harper Collins; 2010.
- General Brain Development; ZERO TO THREE; 2011 http://main.zerotothree.org/site/ PageServer?pagename=ter_key_brainFAQ#bybirth. Accessed Aug 18, 2011.
- Glaser D. Child abuse and neglect and the brain--a review. J Child Psychol Psychiatry. 2000;41(1):97-116.
- Gopnik A, Meltzoff A, Kuhl P. The Scientist in the Crib: What Early Learning Tells Us About the Mind, Harper Collins NY; 2000.
- Grubin D. Secret Life of the Brain, Episode 1 The baby's brain: wider than the sky. [Video]. Educational Broadcasting Corporation and David Grubin Productions, Inc; 2001. http://www.pbs.org/wnet/brain/episode1/index.html. Accessed Aug 15, 2011.
- Handle with Care: Strategies for Promoting the Mental Health of Young Children in Community-Based Child Care. http://www.cmha.ca/data/1/rec_docs/156_handle_with_care.pdf. Accessed Sept 16, 2011.
- The Hanen Centre. Six Steps to Follow the Child's Lead. http://www.hanen.org/Images-for-public-site/Links---Sample-PDFs/TTS_1-ENS.aspx. Accessed Aug 18, 2011.

Here to Help: www.heretohelp.bc.ca

Hertzman C. Sensitive Periods in Early Brain Development http://www.youtube.com/ HumanEarlyLearning#p/u/1/M89VFlk4D-s. Accessed Sept 16, 2011.

- Hertzman C. The Importance of Early Child Development. Human Early Learning Partnership; 2009. http://www.youtube.com/HumanEarlyLearning#p/u/1/M89VFIk4D-s. Accessed Aug 15, 2011.
- Hill M. The Good, the bad and the damaging: chronic stress and the concept of allostatic load. [Video]. Alberta: Presentation at 2010 Early Brain & Biological Development Symposium; 2010. http://ebbd.banffcentre.ca/mod/mplayer/view.php?id=105. Accessed Aug 15, 2011.
- Hill SL, Solchany J. Mental Health Assessments for Infants and Toddlers. American Bar Association Child Law Practice Journal; Nov 2005; 24(9); 133-140.
- How to Use Greenspan's Floorplay. http://www.ehow.com/how_2149859_use-greenspans-floortime. html. Accessed Aug 18, 2011.
- Infant Mental Health Promotion (SickKids): www.sickkids.ca/imp/Jones Harden, B.
- Infants in the Child Welfare System; A Development Framework for Policy and Practice, ZERO TO THREE Press, Washington, DC; 2007; 90.
- Kelty Mental Health Resource Centre: 1-800-665-1822 or 604-875-2084 or www.keltymentalhealth.ca
- Klaus M, Klaus P. Amazing Talents of the Newborn: a Video Guide for Healthcare Professionals and Parents. [Video]. Johnson & Johnson Pediatric Institute; 1998.
- Levitt PR. The Impact of Early Adversity on Brain Development. [Video]. Presentation at the National Symposium on Early Childhood Science and Policy; 2008. http://developingchild.harvard.edu/index. php/resources/multimedia/symposium_presentations_and_videos/impact_of_early_adversity/. Accessed Aug 15, 2011.
- Listening to Baby. [Video]. Attachment Network of Manitoba; 2007. http://www.attachmentnetwork.ca/index.php?act=viewProd&productId=2. Accessed Aug 12, 2011.
- Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.
- National Center on Shaken Baby Syndrome (NCSBS). Period of Purple Crying. http://www.purplecrying.info/ Accessed Aug 16, 2011.
- National Child Traumatic Stress Network: www.nctsn.org. Accessed Sept 16, 2011.
- National Research Council and Institute of Medicine. From Neurons to Neighborhoods; The Science of Early Childhood Development. Committee on Integrating the Science of Early Childhood Development. Shonkoff JP, Phillips DS, eds. Board of Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, D.C.; National Academy Press; 2000.
- National Scientific Council on the Developing Child. Persistent Fear and Anxiety Can Affect Young Children's Learning and Development. 2010;Working Paper No. 9. http://developingchild.harvard. edu/index.php/resources/reports_and_working_papers/working_papers/wp9/. Accessed Aug 16, 2011.
- National Scientific Council on the Developing Child. Excessive Stress Disrupts the Architecture of the Developing Brain. 2005;Working Paper No. 3. http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp3/. Accessed Aug 16, 2011.
- National Scientific Council on the Developing Child. Young Children Develop in an Environment of Relationships. 2004;Working Paper No. 1. http://developingchild.harvard.edu/index.php/resources/ reports_and_working_papers/working_papers/wp1/. Accessed Aug 16, 2011.

- National Scientific Council on the Developing Child, National Forum on Early Childhood Policy and Programs. InBrief: The Foundations of Lifelong Health. [Video]. Center on the Developing Child at Harvard University; 2010. http://developingchild.harvard.edu/index.php/resources/multimedia/ inbrief_series/ inbrief_the_foundations_of_lifelong_health/. Accessed Aug 15, 2011.
- Perry BD. Bonding and Attachment in Maltreated Children: Consequences of Emotional Neglect in Childhood. 2001. http://www.childtrauma.org/images/stories/Articles/attcar4_03_v2_r.pdf. Accessed Aug 16, 2011.
- Public Health Agency of Canada. Connections for Life: Attachment Toolkit: www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/funding-financement/npf-fpn/family-famille-eng.php. Accessed Sept 16, 2011.
- Rubin J. What Makes Us Human? 2008. http://www.pbs.org/wgbh/nova/body/what-makes-us-human. html. Accessed Aug 16, 2011. Santa Barbara Initiative for Clinical Studies and Research. Trauma, Brain and Relationship: Helping Children Heal. [Video]. Los Angeles, CA: Philanthro Films; 2003. Order from: traumabrainrelationship@gmail.com. http://healingresources.info/emotional_ trauma_online_video.htm. Accessed Aug 16, 2011.
- Shaken Baby Syndrome: www.dontshake.org. Accessed Sept 16, 2011.
- Shank SL. First Person: Impressions of Being a Baby. http://www.childdevelopmentmedia.com/ development/31326c.html. Accessed Aug 15, 2011.
- Shonkoff J. Building Blocks for a Healthy Future; http://www.albertafamilywellness.org/resources/video/buildingblocks-ii-speakers-dr-jack-shonkoff
- Shonkoff J. The Science of Child Development and the Future of Early Intervention. [Video]. Alberta: Presentation at 2008 Conference on Building Blocks for a Healthy Future; 2008. http://www.norlien. org/pages/player2.php?v=JShonkoff. Accessed Aug 16, 2011. Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. JAMA. 2009;301(21):2252-2259.
- Sroufe LA, Egeland B, Carlson E, & Collins WA. The Development of the Person. The Minnesota Study of Risk and Adaptation from Birth to Adulthood. New York: Guilford Publications. 2005.
- Supporting the Social and Emotional Needs of Infants in Foster Care: www.cecw-cepb.ca/ publications/525. Accessed Sept 16, 2011.
- Toronto Red Flags Guide: www.toronto.ca/health/earlychilddevelopment/pdf/redflagsguide.pdf
- Tronick E. Still Face Experiment. [Video]. 2009. http://www.youtube.com/watch?v=apzXGEbZht0. Accessed Aug 16, 2011.
- Wotherspoon E. Lecture One: The Core Story of Child Development. [Video]. Series: When Science Meets Practice: Supporting High Risk Infants and Toddlers. http://www.research4children.com/admin/ contentx/default.cfm?PageId=89418. Accessed Aug 15, 2011.
- Wotherspoon E, Hawkins, E, Clinton J, Vellet S, Pririe J. Infant Emotional Trauma: Bringing the Science of Early Childhood Development into Family Court, Michigan Child Welfare Law Journal; Spring 2010.
- Wotherspoon E, Vellet S, Pririe J, O'Niell-Laberge M, Cook-Stanhope L, Wilson D. Neglected Infants in Family Court. Family Court Review; 2010; 48(3); 505-515.
- ZERO TO THREE's Infant Mental Health Task Force. Definition of Infant Mental Health. Washington, DC: ZERO TO THREE: National Center for Infants, Toddlers and Families; 2002. http://www.healthychild. ucla.edu/First5CAReadiness/Conferences/materials/InfantMH.definition.pdf. Accessed Aug 16, 2011.

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