

Information

- ❖ Read this workbook and use it as a class resource. All work in this book is kept for your future reference. Do not submit these pages.
- 3 The course assignments can be found at the class website: **www.starstab.com** Once you are at this site go to “Enter your Classroom”.
- 3 Please be sure to go to the “Class Study Links” page. There you will find a variety of links set up to help you with your assignments. Many of these links are directly related to your assignments.
- ❖ All assignments are turned in by e-mail to: **infant@starstab.com** As you finish one assignment go directly on to the next one.
- 3 Remember; “No News is Good News” as you will only be notified if your assignments are incorrect or incomplete. So continue on at your own pace.



What Is Development?

Development



follows a pattern of stages. Human development progresses through similar stages in about the same order. For example, babies learn to sit up before they learn to walk.



occurs at a different rate for different people. Each person is an individual and will progress through the stages of development at a different rate. For example, one child may learn to read at six years of age, while another may not read until he/she is seven.



follows a sequence so that skills build on earlier learning. For instance, before a child can speak in sentences, he/she must first learn words. Development follows a step-by-step sequence.



is interrelated. Each different area of development is related to other areas because they are connected in various ways in the brain. Physical, social, emotional, and intellectual development occur continually and are affected by each other.



continues throughout life. Sometimes it happens very quickly, and sometimes it progresses more slowly. It happens the quickest in the first two years of life. It does not stop at a certain age.

Center-Based Module 1

Child Growth & Development: Ages and Stages



STARS Training HANDOUT #2
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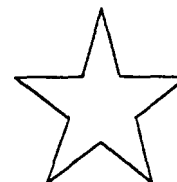
Growth and Development Chart

INFANT DEVELOPMENT 0-3 MONTHS

| PHYSICAL | INTELLECTUAL | EMOTIONAL-SOCIAL | LANGUAGE | ACTIVITIES |
|---|--|---|--|---|
| <p>Males more vulnerable than females</p> <p>Average birthweight for females is 7 lbs., males is 7.5 lbs.</p> <p>Average length at birth ranges from 18 to 21 inches</p> <p>Head is one-fourth total body length</p> <p>Motor skills are reflexive</p> <p>Explores by looking, grasping, swatting, mouthing</p> <p>Grasps objects when placed in hand</p> <p>Follows objects with eyes</p> <p>Brings fists together</p> <p>Begins to roll over</p> <p>Raises head while lying on back</p> <p>Makes crawling movements with legs</p> | <p>Knows the difference between family and others</p> <p>Recognizes bottle</p> <p>Repeats actions which cause toys to move or make noise</p> | <p>Smiles at reflection in the mirror</p> <p>Smiles in different ways to express different needs</p> <p>Establishes a trust relationship with primary caretakers</p> | <p>copies tongue movements</p> <p>socializes with delight</p> <p>responses vary according to needs</p> | <p>likes lots of touching</p> <p>likes faces</p> <p>enjoys black and white pictures and objects</p> <p>needs adults to look at and be responsive</p> <p>likes being talked to and sung to</p> |

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Child Growth & Development: Ages and Stages



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Growth and Development Chart

INFANT DEVELOPMENT 3-6 MONTHS

| PHYSICAL | INTELLECTUAL | EMOTIONAL-SOCIAL | LANGUAGE | ACTIVITIES |
|--|---|--|--------------------------------------|---|
| Doubles birthweight | Knows the difference between family and others | Smiles at reflection in the mirror | Babbles to self and familiar persons | Injoys singing and clapping games |
| Grows one-half inch per month | Recognizes bottle | Laughs and makes noises to show pleasure | Copies mouth and tongue movements | Reacts adults to look at and respond to with words or baby sounds |
| Teeth begin to appear | Repeats actions which cause toys to move or make noise | Cries in different ways to express different needs | | Looks at picture books |
| True eye color is established | Looks for and uncovers a partially hidden toy | Smiles and hugs to show affection | | Looks at reflection in the mirror |
| Balances head | Full attachment to mother | Plays simple games (peek-a-boo) | | |
| Reaches with both hands | Delights in repeatedly throwing objects over side of crib or high chair | Friendly to strangers | | |
| Rolls over | Plays pat-a-cake, peek-a-boo, waves good-bye | Establishes a trust relationship with primary caretakers | | |
| Pulls to a sitting position and sits alone for a short while | | Becomes upset if toys are taken away | | |
| Puts fingers and objects in mouth to explore | | | | |
| Holds onto bottle while being fed | | | | |
| Follows moving object with eyes | | | | |
| Holds, sucks, bites | | | | |

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Child Growth & Development: Ages and Stages



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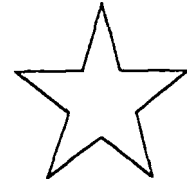
Growth and Development Chart

INFANT DEVELOPMENT 6-9 MONTHS

| PHYSICAL | INTELLECTUAL | EMOTIONAL-SOCIAL | LANGUAGE | ACTIVITIES |
|---|---|--|--|--|
| Rolls over from 'back to stomach | Repeats action to perfect it | Reaches out toward and pats reflection in mirror | Babbles to self and familiar persons | Enjoys singing and talking games |
| Rolls along on stomach, crawls | Uncovers a hidden toy | Pushes away something not wanted | Begins to say 'dada' and "mama" | Plays give and take games |
| Rolls self up, stands holding on | Shakes or moves an object to make noise | Participates in games such as peek-a-boo | Copies mouth and lip movements | Stacks blocks |
| May sit alone | Wants to taste and touch objects | Begins to initiate play with adults | Imitates sounds and gestures more accurately | Needs adults to look at and respond with words or sounds to baby |
| Holds two objects, reaches and grasps objects | Alert up to two hours | Is aware of strangers | Responds to own name | Looks at picture books |
| Transfers objects between hands | Begins to irritate adults' language with babbling | May tease, show sense of humor | | Looks at reflection in the mirror |
| able to hit two objects together on us own | | Expresses frustration, anger | | |
| | | Shouts for attention | | |

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Child Growth & Development: Ages and Stages



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Growth and Development Chart

INFANT DEVELOPMENT 9-12 MONTHS

| PHYSICAL | INTELLECTUAL | EMOTIONAL-SOCIAL | LANGUAGE | ACTIVITIES |
|---|--|--|---|---|
| Birthweight has tripled | Explores nearby areas more thoroughly | Exhibits fear of strangers | Shakes head for no and may nod for yes | Likes action games and songs |
| Birth length has increased by 10 to 12 inches | Tries to name a few familiar people ("mama", "dada") | Plays pat-a-cake | Says "dada" and "mama" | Likes hearing toys, objects, pictures, people named |
| Sits alone | Dumps objects out of box | May cling to a familiar person if a stranger is present | Babbles or jabbers deliberately to get social interaction started | Plays give and take games |
| Rolls over and crawls | Looks at pictures in a book | Shouts for attention | Continues to imitate sounds | Enjoys crawling and chasing games |
| Stands alone | Remembers games played before | May show hurt feelings when scolded | Imitates sounds that things make ("choo-choo") | Explores safe places in house or yard |
| Creeps on hands and knees | Can find an object placed under another object | Shows emotions (happy, sad, hurt, angry) | Stops doing something when told "no" | |
| Crawls up and down stairs | Plays pat-a-cake | Expresses frustration and anger | | |
| Balks holding on to furniture or adult | Follows simple instructions | Sociable and outgoing | | |
| Likes to carry objects | Both eyes work together | Begins to be assertive by resisting caretaker's requests | | |
| Eats messily with spoon | | | | |
| Feeds self small pieces of finger food | | | | |
| Opens drawers and cupboards | | | | |
| Picks up small objects | | | | |

Center-Based Module 1

Child Growth & Development: Ages and Stages



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Growth and Development Chart

INFANT DEVELOPMENT 12-18 MONTHS

| PHYSICAL | INTELLECTUAL | EMOTIONAL-SOCIAL | LANGUAGE | ACTIVITIES |
|--|--|--|--|--|
| Growth slows second year | Understands simple, one-step directions | Watches children play, but plays alone | Uses 5 to 50 words | Plays with water-- pouring from one container to another |
| Walks with good balance | Connects the order of events such as eating, clean-up, nap | Tries to spend more time with others | Uses "mama" and "dada" correctly | Can do manipulative activities-- stringing beads |
| Can sit down from a standing position | Correctly uses the name of familiar people and objects | Helps pick up and put away toys | Puts simple words together | Sings songs and plays singing games |
| May have six to ten new teeth | Looks for something in more than one place | Recognizes self in mirror | Uses one word to indicate needs, such as "up" for, "Please pick me up." | Likes pull or push toys |
| Body shape changes: abdomen protrudes, still top heavy | Finds new ways to get things done | Shows a sense of humor | Imitates words | Stacks blocks and boxes |
| Crawls skillfully and quickly | Points to a familiar object when named | Shows a preference for a toy | Labels objects | Likes to read stories and look at books together |
| Likes to climb & pull things off shelves | Likes to explore and investigate environment | Demonstrates anger by crying or fighting | Understands much more than she can express | Rolls a ball |
| Begins to throw objects | Wants to be independent | May become negative , refusing new food, naps | | Rides in a wagon |
| Walks up and down stairs with help | Is curious & gets into everything | May be possessive-- 'mine' | | Climbs on solid object such as steps, furniture |
| Pulls clothes off | Seldom puts things in mouth | Finds sharing difficult | | |
| Uses a spoon with less mess | Enjoys object- hiding activities, books | Does not know limits | | |
| Drinks from a cup with help | | | | |
| Has fully developed grasp and release | | | | |
| Can stack a tower of two blocks | | | | |
| Enjoys using crayons or markers to scribble | | | | |



Guideposts for Development

| Stage | Helpful Behaviors | When to Seek Help |
|--|---|---|
| <p><i>Birth to 3 months</i></p> <p>Most energy is given to the essential activities of breathing, eating, and sleeping. As baby gets into a routine of eating and sleeping and gains some motor control such as holding her head up and turning it from side to side, she becomes more sociable. Maturation and the practice of sucking leads to the ability to smile. Baby will first begin reaching and grasping, and she will then begin exploring. Overall, her senses are mature (except for vision). She has some control of arms, hands, and head. She can make noises. She has an idea about events being associated with each other. She experiences pleasure.</p> | <p>Do not overstimulate. Pastel colored sheets, a few toys, low lights, and low noise are recommended. Cuddle and carry baby when she is in distress. Talk to baby when she is alert.</p> | <p>By the end of three months, if baby does not lift head at all, does not respond to social overtures, makes no facial expressions, is largely inattentive to objects, or does not respond to any sounds, seek help.</p> |
| <p><i>4 to 7 months</i></p> <p>Ababy seeks social interaction. Mental abilities are growing. Baby is busy doing, thinking, feeling. Vision is nearly fully developed leading to better exploration and recognition, including recognizing people. He shows some preference for caregiver(He can sit unassisted. He is receptive to social games. Baby has better communication and is able to coordinate sounds and gestures to signal desires. Generally he is contented with new abilities to use his body to explore, but has more wants than physical ability, leading to some discontent. He is generally able to be soothed by caregiver(Teething begins and can lead to some discontent.</p> | <p>Talk, and if baby talks back, listen. Give simple colorful toys that fit in his hand. Vary shapes and textures. Introduce simple picture books. Use a mobile that makes a sound when touched. Do not leave baby alone on beds, couches, or chairs.</p> | <p>By the end of seven months, if he never smiles or otherwise shows pleasure, has no sleep pattern, is totally inattentive to toys and people, doesn't seem to know where sound comes from, and does not engage in experimental play, seek help.</p> |

Source: *Baby Steps: The "Whys" of Your Child's Behavior in the First Two Years* by Kopp © 1994 by W. H. Freeman and Company. Used with permission.



Unit 5: Enhancing Child Development



Student Resources

Guideposts for Development (continued)

| Stage | Helpful Behaviors | When to Seek Help |
|---|---|---|
| <p><i>8 to 12 months</i></p> <p> Increasingly the baby's mental abilities are growing. Two milestones occur: walking and pincer grasp (being able to grasp an object using fingers and thumb). Baby understands a few words and may say first words. She can put eye contact, smiling, and gesturing together into social play (e.g., pat-a-cake). She becomes attached to caregiver(s). She imitates and initiates interaction by using body gestures. She has some problem-solving ability, memory without cues, and more focused attention. She has feelings of fear and jealousy which can lead to separation anxieties. She can read other's feelings and sometimes mirrors the mood of others. She can seek assistance, get assistance, and accept assistance. Although exploration is significant, there are also slow periods when development is quiet.</p> | <p>Play games (pat-a-cake, peek-a-boo, hou big is baby), find safe places for baby to practice crawling and creeping, hang a play box in the crib, introduce simple story books, and child-proof the environment.</p> | <p>If she doesn't grasp, cannot sit, does not recognize significant people, is inattentive to gestures, is totally uninterested in games, makes no sounds, or is difficult to calm when distressed.</p> |
| <p><i>12 to 23 months</i></p> <p>Baby is beginning to understand his own body, developing a self-awareness and not liking interruptions. There are increasing social demands for baby to cooperate and conform. He can walk, climb, run, jump, bend, squat, stretch, and handle objects easily. His milestones are thinking in terms of ideas (image of something not present), playing pretend, using two/three word sentences, and showing that he can do things on his own. His wants and needs are not the same as social wants and needs, and he is realizing he can't control things totally. His spoken language lags behind comprehension which can be frustrating. He shows concern for others. He doesn't like change. Toward the end of this time he is interested in age mates.</p> | <p>Provide defined play space, consistent rules, and regular sleep routines. Be flexible, patient, low key, and concede sometimes. Child-proof the environment. Read to him as often as possible.</p> | <p>If by the end of 18 months he is not interested in toys, can't stand, doesn't remember routines, understands no words, can't distinguish a circle from a square, doesn't combine toys, doesn't comply with any rules, or shows no maternal attachment, seek help. If by the end of 24 months he doesn't walk, doesn't group things perceptually, doesn't plan, doesn't learn by imitating, shows no functional play, doesn't use jargon, or doesn't show pleasure in accomplishment.</p> |



Unit 3: Postpartum/Neonatal Care



Student Resources

Newborns Are Special

You may be surprised by how different your newborn looks compared to older babies. Your baby's appearance is affected by the birth process. Newborns are totally dependent on their caregivers for all their needs, so knowing their characteristics will help you care for your baby.

Head

Baby's head is one quarter of total body size. It may be lopsided for a few days. Watch out for "soft spots" on **baby's** head that allow room for rapid brain growth.

Eyelids and Cheeks

Usually puffy and swollen for the first day. Newborns have dark blue eyes that gradually change to their permanent color by three months. Newborns may look cross-eyed as they gain eye muscle coordination in the first few weeks.

Face and Neck

There may be some minor blemishes. Small pink birthmarks will gradually fade by age two. The nose will be flattened by the birth process and slightly "turned-up." The neck is very short and weak. Support the baby carefully for the first three months especially.

Body

Both girls' and boys' breasts are swollen and may secrete a small amount of thin discharge for a few days. The umbilical cord stump is prominent and will shrivel and fall off in 5 to 4 days. Genitals are swollen for the first week because of the mother's hormones affecting the infant before birth. Hands and feet may be bluish and cold for several days before circulation is well established.

Skin

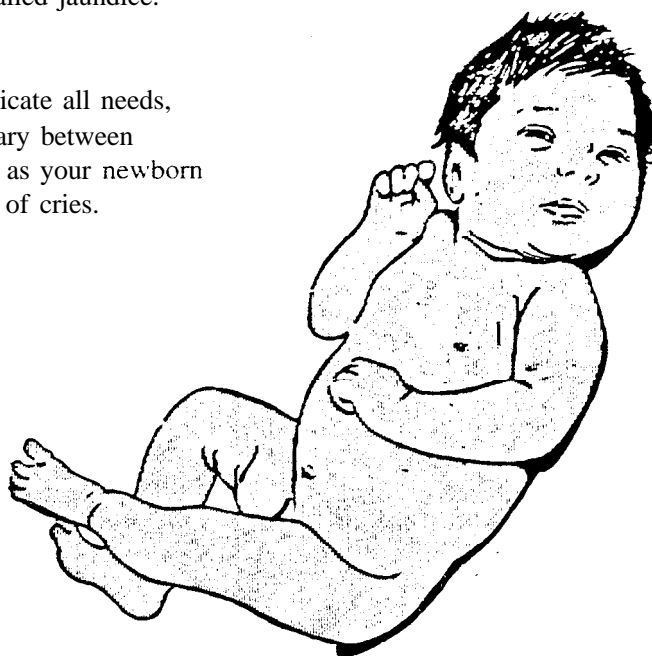
Is sensitive and soft with fine downy hair. Many infants develop a "newborn rash" as their skin adjusts to life outside mother's body. If skin has a yellowish tone, consult your health care provider. This may be caused by a very common condition called jaundice.

Crying

This is the only way for baby to communicate all needs, but amount and intensity of crying will vary between children. At first all cries sound alike, but as your newborn gets older, you will notice different kinds of cries. Remember, newborns cry no tears.

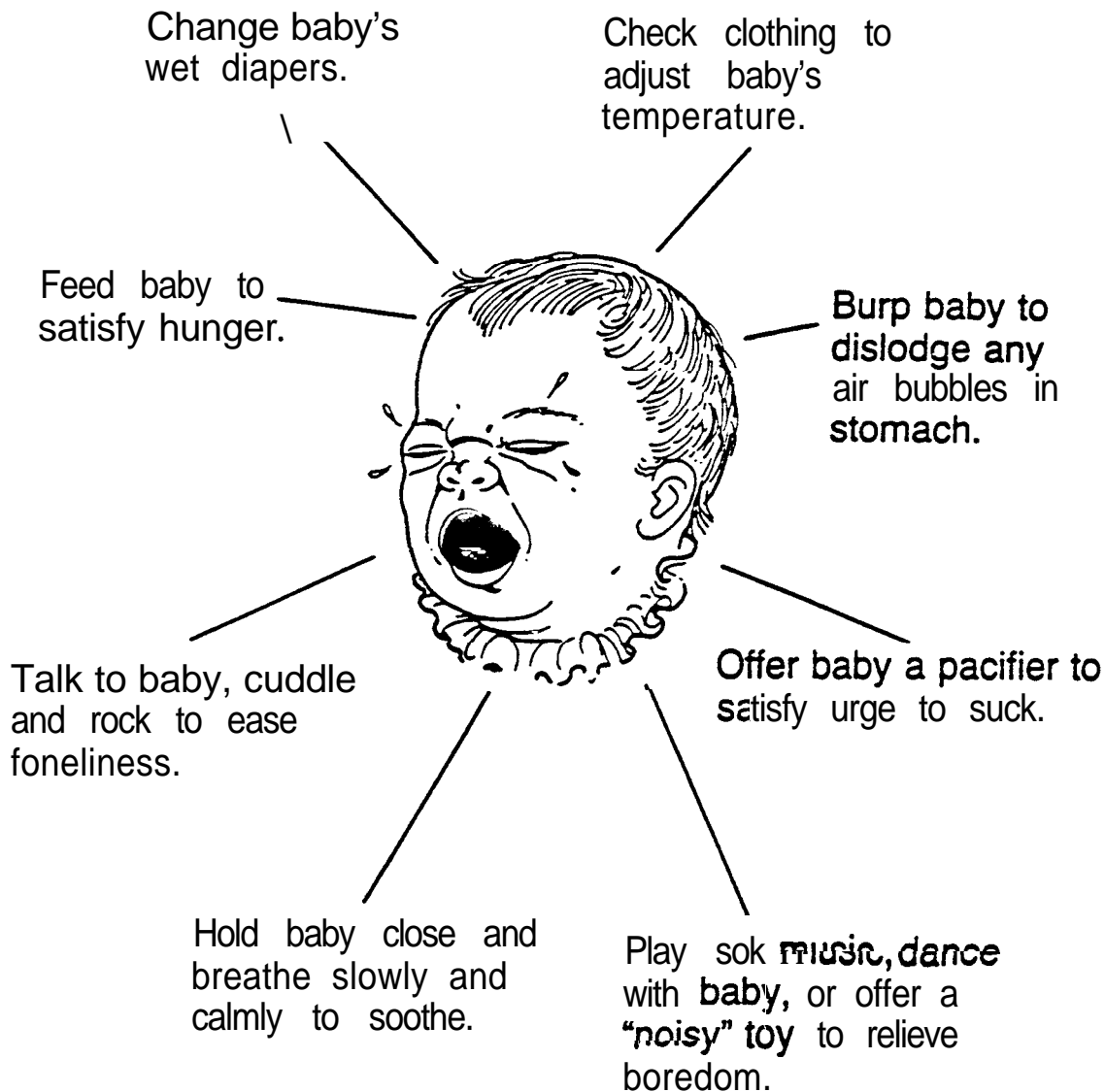
Bowel Movements and Urine

First bowel movements are greenish-black, tar-like stools. In a few days, they, will become yellow-brown in breast-fed infants, darker brown for formula-fed infants. Urine is pale yellow. An infant may need 6 to 8 diaper changes each **day**.





What to Do When a Baby Cries



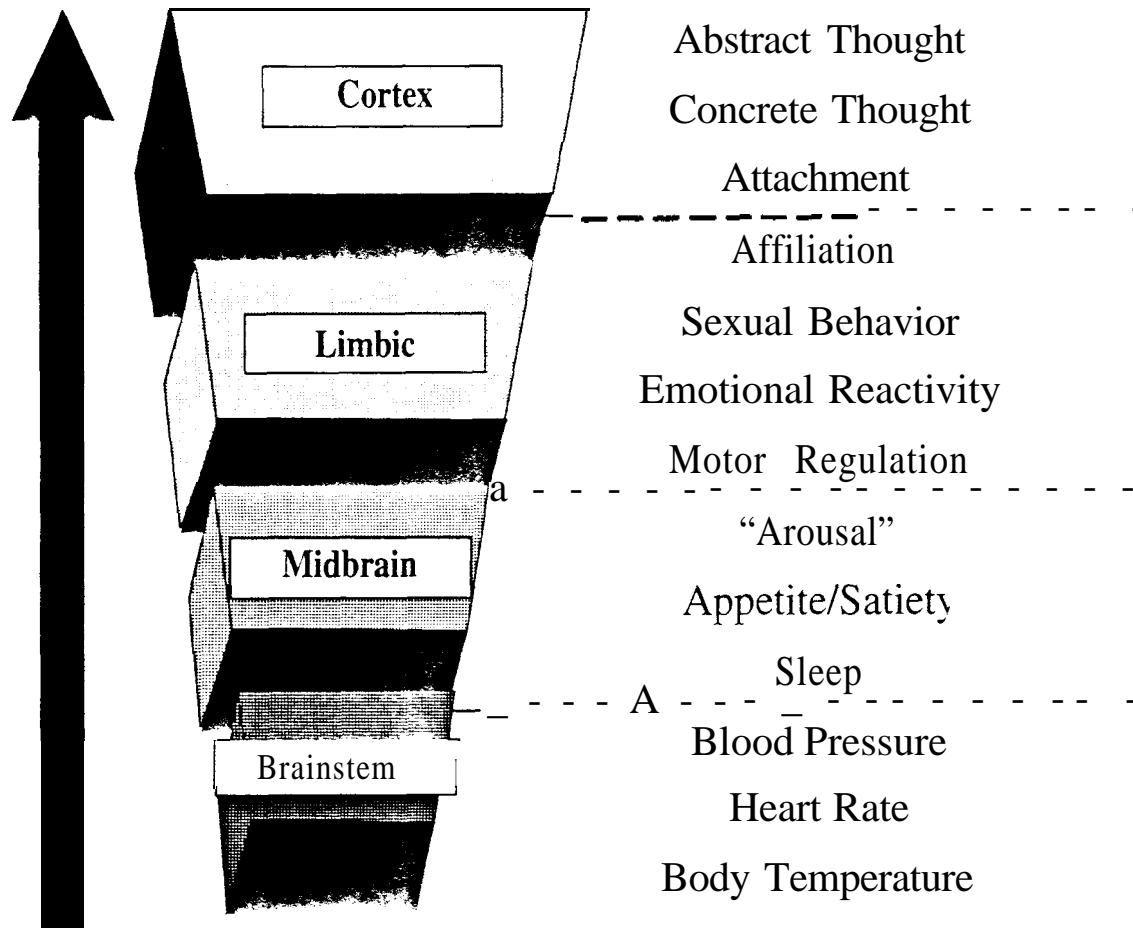
Remember, **NEVER** shake the baby!

If all needs are met, lay baby in crib and leave for a few minutes. Check on baby, to reassure him or her. Gradually lengthen the time between your checks on the baby. The older the baby, the longer you can wait to check on him or her. Use resources to help you determine the length of time to wait before checking on the baby.

Source: *Caring for Infants and Young Children* by Kathy Sammis. Copyright © 1989 by J. Weston Walch, Publisher. Used with permission.



Brain Functions



The human brain is organized from the most simple (for example, the fewest cells are in the brainstem) to the most complex (for example, the most cells are in the cortex). These areas organize during development and change in the mature brain in a "use-dependent" fashion.

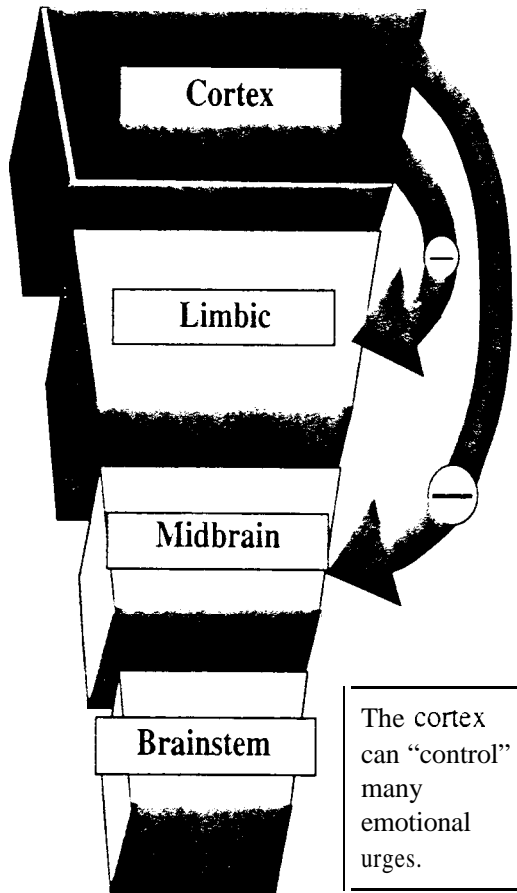
Adapted from: B. Perry. (1996). *Incubated in Terror: Neurodevelopmental Factors in the "Cycle of Violence."* Houston, TX: CIVITAS Child Trauma Programs. Baylor College of Medicine, 1996.



Brain Development

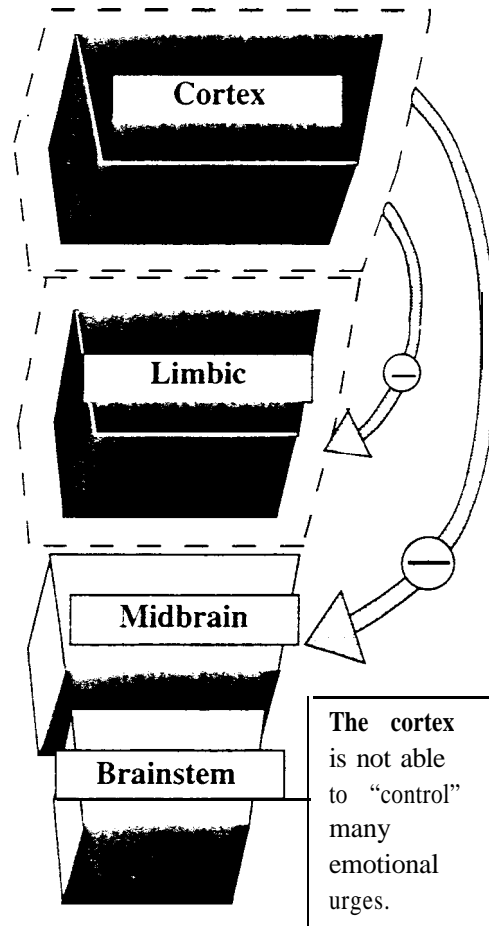
Mature Brain

The thinking part of the brain (cortex) is usually in charge.



Immature Brain

The thinking part of the brain (cortex) is often not in charge.



People with mature brains are usually able to tolerate frustration, resist impulsive actions, and calm themselves down enough so they don't quickly show anger or violence

People with immature brains are more likely to get frustrated easily, act impulsively, and quickly show anger or become violent

Young children have more impulsive and aggressive actions because the cortex part of the brain is not yet highly developed. Teenagers and adults whose brains did not develop in a healthy way can also act more impulsively, be more aggressive, and become violent very quickly.

Adapted from: B. Perry. (1996). *Incubated in Terror: Neurodevelopmental Factors in the 'Cycle of Violence.'* Houston, TX: CIVITAS Child Trauma Programs, Baylor College of Medicine, 1996.



Brain development proceeds throughout life, but the vast majority of the critical structural organization takes place in childhood. According to Perry (1996), the brain develops

- 1) sequentially, from the brainstem, to the midbrain, to the limbic region, to the cortex,
- 2) optimally and most efficiently during critical periods of sensitivity, and
- 3) in a “use dependent” way.

As the more complex areas of the brain organize, they are able to moderate and “control” the “reactive” lower portions of the brain, which helps explain why a six-year-old child is generally more capable of controlling the urge to scream, kick, or bite another person than a three-year-old child. Each area of the brain develops, organizes, and becomes fully functioning at different stages during childhood. The brainstem controls the autonomic system, such as body temperature, heart rate, and blood pressure. The brainstem is mostly organized by one month of age. The midbrain, which controls sleep, appetite/satiety, and “arousal,” is mostly organized by 1 year of age. The limbic region, which controls emotional reactivity, sexual behavior, and affiliation, is mostly organized by age 3. The cortical region of the brain controls “attachment,” concrete thought, and abstract thought. It is well established by age 3 but can be greatly impacted for many years. As shown in Figure 1, the earlier a region of the brain has passed its critical and sensitive periods, the more difficult it is later to change that region of the brain (Perry, 1996).

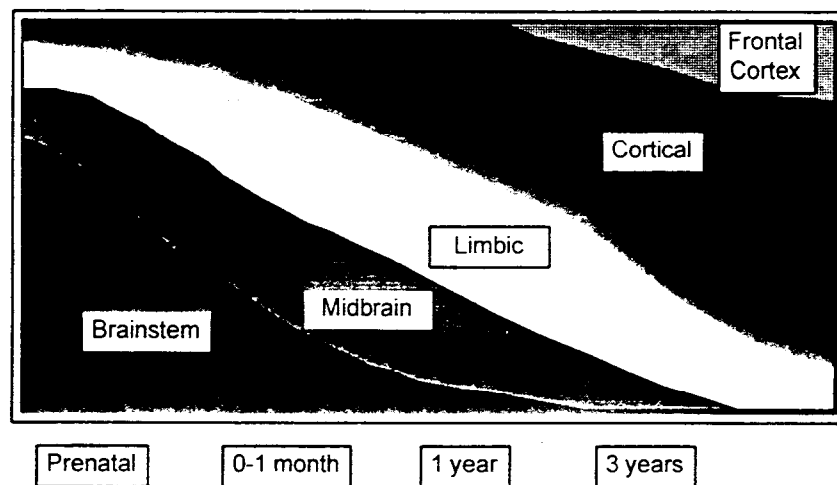


Figure 1: Critical and Sensitive Periods of Brain Development

One myth that abounds about children and their development is “Children are resilient.” Resiliency means that the brain is elastic, and that it returns to its original state. However, the truth is that “children are malleable.” Malleable means that the brain develops according to how it is used. When children are nurtured, protected, and guided in healthy ways, their brains have the potential to develop optimally. When children are inadequately nurtured, protected, and guided, their brains have less-than-optimal development. Some children are even traumatized. The brains of traumatized children develop as if the entire world is chaotic, unpredictable, violent, frightening, and devoid of nurturance (Perry, 1996). These children can have great difficulties, including attachment disorders, learning disabilities, attention disorders, dissociative disorders, lack of impulse control, lack of “conscience,” being very sullen and withdrawn, or acting in violent ways.