



# Understanding Children: Infancy (Birth to 15 Months)

Family and Consumer Sciences

Arlene M. Fulton, Ph.D.

Child Development Specialist

Infancy is an exciting time for parents! During the next 14 months your baby will grow and change rapidly. Your infant will change from a helpless little bundle into an infant who is curious about the world. Your baby will require patience, love, and much attention as physical, emotional, social, cognitive, and language skills begin to develop.

## Trust

A sense of trust will develop when your infant is cared for in a sensitive manner. Trusting babies begin to develop the feeling that the world is a good place to live. This creation of trust will become the basis for your infant's realization of identity and abilities in later months. As the parent of a new infant, you are very important in helping your baby to develop a sense of trust toward the world and the people in it. You can best do this by responding gently and quickly when you are needed, talking to and holding your baby frequently, and offering encouragement during your infant's play activities.

## Each Child Is Different

Your infant is a unique little individual who may learn the same skills as others, but not at the same age or rate as the infant next door. What makes your infant develop skills earlier or later than other infants? This depends on many factors. Heredity can influence skill development. Good nutrition, health, and stimulation are important. Being able to move around freely and safely with your encouragement will also influence development.

Children grow in spurts, too. A new behavior, such as walking alone, may appear one day and then disappear for several more days or weeks. This is normal. A child may also regress. The birth of a new baby may result in a greater need by a 14-month-old to be held and cuddled.

## Physical Development

Most of a child's basic physical skills are usually achieved during the first year and a half of life. During these months, growth and development may take place in many important ways.

**Weight.** At birth the average weight of a full-term infant ranges from 5 to 10 pounds. By the end of the first year, the weight of the infant may have tripled.

**Height.** At birth the length of a full-term infant ranges from 18 to 22 inches. The average length of a newborn is about 20 inches. By the end of the first year, the baby's length will have increased by about 50 percent.

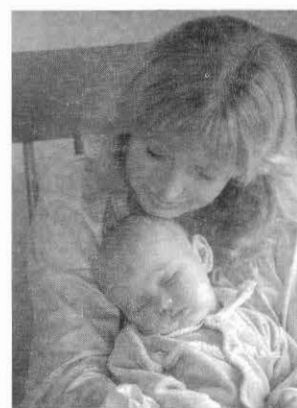
**Teeth.** At birth all 20 of the baby teeth and a few permanent teeth are developing below the gum. The first tooth, usually a lower front one, will generally make an appearance around 6 months of age. By 15 months, additional teeth will have erupted which makes chewing food easier.

**Vision.** Infants were once thought to be blind at birth. It is now known that infants are able to see light, dark, and color. Newborns can react to bright lights by shutting their eyes. A newborn sees objects best if they are between 8-12 inches away. By three months, the infant will gain ability to see detail in the environment.

**Taste.** The sense of taste is present at birth and develops quickly. By 2 weeks of age, the infant can tell the difference between sweet and bitter. By 14 months, the infant can have specific likes and dislikes related to foods and their flavors.

**Smell.** The sense of smell is present at birth. Infants can identify people by their odor. The infant begins to identify odors and to have preferences in smells (for example, a flower vs. vinegar) as the months pass.

**Hearing.** An infant can hear before birth. The sounds that were heard were voice, heartbeat, and diges-



tive noises. After an infant is born, a preference is shown for low-frequency, rhythmic sounds, such as the humming or gentle singing of a lullaby. By 3 weeks of age, infants recognize that voices go with particular people. By 5 months of age, the infant recognizes the difference between the lower voice of father and the higher voice of mother.

**Reflexes.** An infant is born with certain behaviors called reflexes. Infants have over seventy identified reflexes. Most of these reflexes will disappear between the ages of 3 and 6 months. The most important of these reflexes are associated with breathing and feeding. Sneezing, coughing, yawning, or short quick breaths can be a reflex reaction that the infant may use to increase the oxygen content in the blood or to clear breathing passages.

## Overview of Baby's Physical Development\*

By 3 months	Holds head and chest up when on stomach Begins to eat and sleep more regularly
By 6 months	Reaches out for things and grasps them Rolls over Sleeps in a favorite position Gets first teeth Sits with slight support, balances well.
By 9 months	Grasps a rattle and shakes it on purpose Crawls on hands and knees Sits unsupported Pulls self to standing position Picks something up with fingers Stands with support
By 12 months	Cruises by walking holding onto things Stands alone Scribbles when given a crayon Walks a few steps, but may prefer crawling Creeps up stairs Throws things to practice "ungrasping"
By 15 months	Walks unaided Walks up stairs with support Can pull or push toys Can throw a ball or object

\*This overview should only be used as a general guide to your child's development. Not all children will follow these guidelines exactly.

Rooting, or moving of the head when the cheek is touched, and sucking are reflexes that the infant uses when searching for food. In the early weeks after birth, crying is often seen as a reflex that alerts parents to a need that the infant may have for warmth or comfort from pain.

Throughout the infancy period, your child will be gaining skill in large and small motor areas. Your infant will at first develop greater skill in the use of the large muscles as rolling, crawling, and creeping occurs. You will note small muscle skills developing as your infant begins to grasp rattles, then, using the fingers, begins to deliberately pick up small objects. As your baby grows older, opening and closing, stacking and pushing over, or picking up and dropping objects will occur many times each day.

## Emotional Development

During the first 15 months of life, your infant will grow emotionally in different ways. Just as an infant follows a sequential pattern of physical development, an infant also follows a sequential pattern of emotional development.

Children are not small adults. They think and act differently. They are not able to maintain a consistent level of behavior that we as adults think is acceptable. They will not always be able to share or to keep from hitting someone who has made them angry. As children mature physically and intellectually, and as they learn by experiencing the effects of their behavior, they will become capable of expressing emotions appropriately. They will learn through trial and error how to get along well with others.

After the first few months of infancy, a wider range of emotions will be experienced and expressed. The infant behaves according to the feelings that are felt at a particular time.

**Fears.** Infants are generally frightened by loud noises and sudden movements. By 15 months of age some infants may be afraid of dark rooms, high places, pain, animals, or strange persons, places, and objects. Fears are short-lived when parents are understanding and realize that the infant needs assurance and holding during a frightening experience.

**Anger.** Infants will show displeasure when they are



wet, hungry, or otherwise physically uncomfortable. Sometimes your infant will become upset when adult attention or company is lacking. Your infant will demonstrate anger through loud, intense crying.

**Curiosity.** An infant is curious even at a young age. This is the time when the “little explorer” seems to be getting into everything that can be reached. Your infant may examine objects by using his hands and mouth or by throwing, pounding, or stepping upon the item. Curiosity is important for over-all development of the child, even beyond just the infancy years.

**Joy.** Before 6 months, an infant is happy when physically comfortable and feeling secure. After 6 months, infants will get pleasure from exercising skills, cooing, babbling, creeping, pulling up, or walking. Regardless of the age, the infant’s joy is more joyful when an important adult, usually the parent, is near.

**Affection.** Before 5 months of age, an infant does

not have strong feelings for any one person. To show affection, an infant will gaze at an adult and smile. After 6 months, the infant will respond to a parent by reaching for the parent’s face and mouth (long before this time the infant has begun to recognize the faces of mother and father). After 12 months affection is shown by hugging and kissing, following an adult from room to room, touching, and cuddling.

**Crying.** From the first week of life infants cry because of hunger, cold, pain, being undressed, or having their sleep interrupted. Over the next several months they also cry when they are lonely or frightened. Research shows us that as babies grow older they cry less often if their mothers respond quickly and with comforting care in their early months.

**Smiling.** A baby’s smile is a basic means of communication. It is a way that babies have of endearing themselves to their parents. The smile appears early (at about one week). At one month, the smiles are directed toward people; however, it is not until 3 1/2 months that babies smile more to a familiar face than an unfamiliar one. Throughout these next months, the baby’s smile endears him to his parents and the parent’s smile offers encouragement to the child.

## Overview of a Baby’s Emotional Development\*

By 3 months	Smiles at faces Is more alert and looks around longer
By 6 months	Recognizes parents and can tell the difference between mother and father May show fear of strange adults Smiles at other children
By 9 months	Is shy with strangers Smiles at own face in mirror Shows curiosity toward environment Expresses concern when separated from parents
By 12 months	Shows emotions - affection, sympathy, jealousy Likes to be with adults Demonstrates some cooperation when being dressed
By 15 months	Is very curious Approaches other children May become angry when told “No!” Needs and expects routines

\*This overview should only be used as a general guide to your child’s development. Not all children will follow these guidelines exactly.

## Social Development

At birth, the infant is able to respond in limited ways to people. Social behavior begins when the infant can tell the difference between people and objects.

**Relationships with Adults.** At first, adults will be more important to an infant than will other children. This is understandable, as it is an adult who has responded and cared for the infant. Adults are the focus of an infant’s social attention. At 2 months of age, an infant will cry when left alone. In later months of infancy, the infant will enjoy playing near adults.

**Relationships with Agemates.** Although primarily interested in adults, the infant has a limited social interest in other children. Near the first birthday, the infant becomes friendlier, and more interested in playing close or watching other children. Infant interactions are likely to be brief and often end quickly when one grabs a toy and the other gets angry, cries, or hits.

**Play.** The infant’s favorite playmates are his principal caretakers, usually mother and father. Infants enjoy playing simple games like pat-a-cake and peek-a-boo. Talking playfully with infants will teach them about communication. Infants are fascinated with repetitive play and will want to do things again and again.

## Overview of Baby's Social Development\*

By 3 months	Turns head to a human voice Smiles in response to a smile or attention Establishes eye contact Draws attention to self when in distress
By 6 months	Can tell when an adult is happy or angry by the tone of the voice May be afraid of strangers Initiates social contacts by pulling adult's hair, grabbing at the nose, clothes, or glasses of the adult Raises arms to be picked up Responds to own name
By 9 months	Enjoys imitating adults Is often shy with strangers Likes watching people and being played with, talked to, or held Waves bye-bye Shouts for attention
By 12 months	Demonstrates affection Shows pleasure in achievement Withdraws from strangers
By 15 months	Finds sharing extremely difficult, but will develop in due time Is possessive about toys, people and objects Prefers some people over others

\*This overview should only be used as a general guide to your child's development. Not all children will follow these guidelines exactly.

**Sharing.** Sharing a parent or a toy with another individual is extremely difficult for the infant. The infant does not yet understand this concept and may look upon any toy or object as "mine," whether the infant is at home or visiting another child's home.

## Cognitive Development

Cognitive development refers to the ability to know and understand the world. It also refers to the ability to think about and remember what is happening around us. The thinking of children is different from the thinking of adults. Although adults have more information about the world than children, they also understand the world in a different fashion. The development to a more adult way of

thinking occurs in stages and will progress as the infant grows and has more experiences with his environment.

Through play, the infant has the opportunity to work with materials such as blocks, paper and crayons, sand, mud, rocks, and other objects. Through play experiences infants will learn about their world and will make discoveries through lifting, poking, mixing, touching, and exploring objects. Play and play activities will give the infant the information about the world that will be used to build new understandings. Play will help the infant to develop thinking skills.

## Language Development

Infants learn to understand language before they begin to speak it. Language is a part of nearly everything that they do. Although infants do not at first speak, they do communicate in many ways. They cry, laugh, babble, and make gestures. Babies use their voice to get your attention. Adults who respond to infants when they babble, meet their needs when they cry, or talk to them

## Overview of Baby's Cognitive Development\*

By 4 months	Much learning is accidental Repeats actions (reaching for a mobile, kicking of crib) for a reaction (movement of mobile, loud sound or shake) Responds to sounds Follows objects with eyes and head
By 8 months	Behavior becomes purposeful (dropping of rattle so someone will pick it up) Imitates movements and facial expressions of adults Waves bye-bye Plays peek-a-boo
By 12 months	Uses trial-and-error to solve problems (this represents a first attempt to solve problems by using thought) Associates meaning to some words, for example, go outside or eat or juice Searches for an absent object May wait for adults to serve him or her Imitates novel acts

\*This overview should only be used as a general guide to your child's development. Not all children will follow these guidelines exactly.

while feeding them and changing their diapers help infants to learn language. Babies who have limited experiences with hearing speech will lag behind their agemates throughout their early childhood years.

There are many variations in language development during infancy. One infant may appear to be using words and simple sentences at a younger age than his peers, while another child may show little interest in speaking until closer to 18 months of age. Children vary in their rates of development. Some of these variations in language development may be due to one or more of

### Overview of Baby's Language Development\*

By 3 months	Can determine where sounds are coming from Gurgles and coos Vocalizes more and cries less Responds to voices
By 6 months	Laughs and squeals Coos for long periods of time Makes consonant speech sounds Shows pleasure or displeasure with sounds Experiments with own sounds Vocalizes to own name
By 9 months	Babbles many sounds, may even seem to sing some sounds Says "da-da" Imitates sounds Responds to own name Watches others speak
By 12 months	Understands "no-no" May use one-word sentences to communicate Turns pages of book and can point to some objects
By 15 months	Points to wanted objects Can say family members' names Understands simple commands Imitates adult speech Points to clothes when named

\*This overview should only be used as a general guide to your child's development. Not all children will follow these guidelines exactly.

the following factors:

1. **Age and Maturation.** Generally, the older infant has had more experiences and can use language when associating an idea with a word.
2. **Sex.** Language skills often develop more quickly in girls, and at all ages during childhood, girls are generally ahead of boys in language ability.
3. **Hearing.** Hearing defects can cause delayed language development or language difficulties. Infants must be able to hear sounds and words so they can imitate language.
4. **Models.** Infants raised by persons who do not speak or who speak very little may fall behind their agemates in speech development. Care can be taken to provide the infant with an adult model who provides the language stimulation they need when parents cannot do so.
5. **Variety of Experiences.** A variety of experiences provides children both with the will to speak and with new ideas, knowledge, and perceptions about which they wish to speak.

Parents of infants should make an effort to talk with them and play with them each day, to name objects with which they are playing, to describe activities that are taking place, and to talk with them about events that will occur each day. In addition to talking with your infant, provide him/her with some cloth or thick-paged books for exploring, naming, and identifying objects.

### Parents and Infants

It's not too hard for you to meet a baby's needs. They need to be fed, protected, cuddled, and rocked. Most of all, they need love and attention. Unfortunately, much information on babies' needs describe diapers, bottles, cribs, high chairs, strollers, and maybe even life insurance. The list of material accessories is endless. Even though these items play an important role in caring



for a baby, the experiences your baby has with people are of greatest importance.

Babies are born with an inner drive to grow and to obtain food, warmth, and comfort. Your baby is totally dependent, for at least the first year, so it's up to you to meet these basic needs. Most parents are aware of this and do a very adequate job of providing for their baby.

Here are some ways that you can have fun together as a family, as well as expand your infant's experiences with his world:

**Take walks together.** As your infant gains in weight, use a stroller or begin biking together with baby in an infant bike seat. When your baby looks at an object talk to him about it.

**Bath time is a fun time for many infants.** Expand upon this by taking baby swimming on warm days. After 3 months of age, the splashing and kicking not only encourages muscle development, but can serve as a way to further develop trust between baby and parents. (Note: Babies cannot stay in pools for long periods of time as they become chilled easily. If they begin shivering or their lips are trembling, get them out of the water and wrap them in a large towel.)

**Visit the zoo, a park, a farm, the library, etc.** Talk and tell your infant about what you see. Sometime during infancy your child will begin to recognize and understand some of what you are saying.

**Spend time together.** On the floor, sofa, or bed at home, just playing with a toy or with one another, infants greatly enjoy being near a parent. They also enjoy the physical contact (holding, patting, touching, etc.) that can take place during a play period.

**Activities.** Babies and children learn through play. If you are aware of the skills your baby is developing you can provide activities that will interest him. There are many activities you can do at home.

- Fascinate your baby with your face; "peek-a-boo" is a game that he will find endlessly amusing.
- Have fun using a ball and blanket to play hide-and-seek. Hide the ball under a blanket and have your baby look for it.
- Identify body parts, say to your baby "Where's your nose?" Gently touch baby's nose and say "There is (baby's name)'s nose." "Where's baby's ears?"
- Name sounds your baby hears. Carry baby to the

window to look at the barking dog. Talk about dogs with your baby.

- Walk around the house holding your baby. Name objects around the house. Allow your baby to touch the objects.
- Roll a large ball back and forth as baby grows older. Smile and say, "catch the ball" or "roll it to me."
- Read a book with your baby. Older babies enjoy looking at pictures. Choose one with colorful pictures and thick pages. Show baby how to hold the book and turn the pages. When reading books to your baby don't worry about reading the story. Just let him point at the pictures and you can talk about them.

**Improvise!** You don't need toys for a play period. Some of the most enjoyed playthings are plastic bowls and containers with loose lids . . . do be sure that all objects are too large to be swallowed or to cause choking. Blankets and pillows are wonderful playthings, too.

So far we have talked about the importance of spending time together. Realize that infants need time to explore and play by themselves, too. They may choose to be near an adult, but stand back at times and allow the baby the opportunity to play alone. In this way, independence can be encouraged.

## References

For further information on infant development, your public library may have one or more of the following books for your use (others are available also):

- Brazelton, T. B. (1992). *Touchpoints: your child's emotional and behavioral development*. New York: Addison-Wesley Publishing Company.
- Caplan, F.; Caplan, T. (1993). *The first twelve months of life: your baby's growth month by month*. New York: Grosset & Dunlap.
- Furuno, S.; O'Reilly, K.A.; Inatsuka, T.T.; Hosaka, C.M.; Falbey, B.Z. (1993). *Helping babies learn: developmental profiles and activities for infants and toddlers*. Tucson: Communciation Skill Builder's, Inc
- Johnson, R. V., Ed. (1994). *Mayo Clinic book of pregnancy and baby's first year*. William Morrow and Company, Inc.
- Shelov, S.P. (1998). *Caring for your baby and young child birth to age five*. New York: Bantam Books.
- Stoppard, M. (1995). *Complete baby and child care*. New York: Dorling Kindersley Publishing, Inc.
- Editorial Assistance: Leslie Geabhart-Youngker, Family Relations and Child Development, Oklahoma State University.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Samuel E. Curl, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$925.75 for 4,000 copies. #4534 1199 AW.