



# Infancy

0-11 Months



*Children are our future.  
They will not have a bright future unless they receive  
the preventive health care they need.*

—Betty Bumpers

Every Child By Two, Immunization Advocacy Coalition

# INFANCY

**F**oundations for the health and development of the infant begin during the pre-conceptual period and continue throughout the first year of life. The strong bond the parents feel with their baby even before birth blossoms during infancy into a loving relationship. This relationship and the infant's early experiences provide the sense of basic trust the infant needs to venture on to toddler autonomy. The relationship between the parents and the health professional is also crucial during infancy.

The partnership between the family and the health professional may be most intensive in the first year, as the parents learn how to care for their infant and to trust and communicate with their health professional. The goal of health supervision during infancy is to help the parents gain knowledge and confidence in caring for the physical, intellectual, and emotional needs of their infant, and to encourage their personal growth as parents and the family's development as a unit. This partnership plays a significant role in determining the effectiveness of health supervision.

## Preconceptional Period

Educating prospective parents about the benefits of making healthy choices before conception can significantly improve pregnancy outcomes for both mother and infant. Studies have shown that women of childbearing age can substantially reduce the risk of certain congenital disabilities, including spina bifida and other neural tube defects, by consuming adequate amounts of folic acid before and during pregnancy.<sup>1</sup> Women who are considering pregnancy

should also be warned about the dangers of using substances such as alcohol, drugs, and tobacco. Fetal alcohol syndrome, the most common known cause of mental retardation in the United States, is completely preventable. Smoking contributes to low birthweight, a significant risk factor in infant mortality. Women who smoke should be encouraged to quit before pregnancy. Eating healthy foods and engaging in physical activity before pregnancy will benefit both the mother and her baby during pregnancy and delivery by helping to maintain an ideal maternal weight and to improve heart and lung functions and muscle tone.

Health professionals who offer preconceptional guidance to older adolescent girls, young adult women, and families during health supervision can contribute considerably to the development of healthy adults, healthy pregnancies, and healthy infants.

## Prenatal Period

If preconceptional guidance is the foundation of a healthy pregnancy, prenatal care is the cornerstone. Proven very effective in improving the health of both mother and baby, prenatal care has emerged as the major factor in the prevention of infant death and disease.<sup>2</sup> National data continue to show that women who receive early prenatal care generally have better birth outcomes than those who do not.<sup>3</sup>

Education is particularly powerful during the prenatal period, which is an ideal time to advise prospective parents on many lifelong health issues such as the importance of a healthy diet and

physical activity, and the avoidance of alcohol, drug, and tobacco use. It is also a critical time to reinforce the importance of prenatal care visits, appropriate weight gain during pregnancy, preparation for childbirth, and the presence of the father or other family member during delivery.

### Initial Visit

During the last trimester of pregnancy, parents-to-be should schedule an initial visit with the health professional who will be caring for their baby after birth. Establishing a relationship between the health professional and the family during this time, when families need and welcome support, can be especially productive. Pregnancy is a time of initial family adaptation, which may predict later parental coping. The health professional can gather basic information about the family and their concerns, provide key information about what to expect during the newborn period, answer questions, provide reassurance, and begin to establish a trusting partnership that will continue to develop during health supervision.

The initial visit is the opportune time to discuss immediate postpartum issues, such as the importance of holding and cuddling the baby, rooming-in, breastfeeding,<sup>4</sup> sibling preparation, use of an appropriate car safety seat for the baby, risks and benefits associated with early hospital discharge, and planning for care of both mother and baby after birth. The process of meeting health supervision goals—a trusting relationship between the health professional and the family, promotion of health and well-being, education, disease prevention, and early detection—begins prenatally.

### Birth

Most newborns are born healthy, but some infants are born early, with low birthweight, or with disabilities. Long-term outcomes for all infants are improved when health professionals highlight the unique characteristics of the infant and facilitate opportunities for early physical contact through breastfeeding, rooming-in, and holding and cuddling the infant. Anticipatory guidance should include information on the vulnerability of infants to infectious disease, sudden infant death syndrome,<sup>5</sup> and shaken baby syndrome.

### Self-Regulation

Born with unstable physical functions such as temperature control, breathing, and swallowing, the infant develops smoother functioning over time. Randomly alternating periods of sleep and alertness, easily influenced by the environment, develop into a regular diurnal pattern of waking and sleeping. During the first year, the infant develops ways of coping with his strong feelings, learns to console himself, and expands his ability to choose and focus on an activity for several minutes. There may be large individual differences in self-regulatory abilities; infants born with low birthweight, those born small for gestational age, and those born to mothers with diabetes or to mothers who abuse substances are at particular risk for problems with regulation.

Health professionals can teach parents how to help their infant learn self-regulation. A major component of infant health supervision consists of counseling regarding temperament, colic, temper tantrums, and sleep disturbances. These are important anticipatory guidance issues, especially for parents of sensitive or difficult infants. The

“goodness of fit” between parent and infant can influence the interaction between parent and infant. Helping parents to understand their infant’s temperament can help them respond more effectively to their infant.

### Physical Development

The most dramatic growth of the child’s life—physical, cognitive, social, and emotional—occurs during infancy. By 1 year of age, the infant has tripled his birthweight, added almost 50 percent to his length, and achieved most of his brain growth. Studies on early brain development confirm the importance of early experiences in the formation of brain cell connections;<sup>6</sup> these early experiences, including parent-child interactions, have a significant impact on a child’s emotional development and learning abilities.

Feeding is central to the parent-child relationship. Some infants are difficult to feed, and feeding does not always come naturally to parents. Working out these difficulties is complicated; parents often measure their own competence by their ability to feed their child and promote growth. Health supervision should encourage parents in their efforts to feed their baby, especially since most newly breastfeeding mothers require encouragement and support to breastfeed successfully.

From birth to the end of the first year, major changes occur in the infant’s gross motor skills. As tone, strength, and coordination improve sequentially from head to heel, the infant attains head control, rolls, sits, crawls, pulls to stand, cruises, and may even walk by 1 year of age. Abnormal gross motor milestones or patterns of muscle use should be detected and evaluated, and early intervention should be considered.



Hand-eye coordination and fine motor skills also change dramatically during infancy. These progress from reflexive grasping to voluntary grasp and release, midline play, transferring the object from one hand to the other, shaping of the hand to the object, inferior then superior pincer grasps, and use of the fingers to point, self-feed, and even mark with a crayon by 1 year of age. Babies need opportunities to play with toys and food to advance these important fine motor skills.

In infancy, the primary teeth erupt at highly variable ages during the first year. The teeth should be protected before as well as after their eruption; the most effective way to ensure protection is through fluoridation of the community’s drinking water. Oral hygiene begins with cleaning the infant’s teeth, eliminating bottles in bed, and avoiding frequent exposure to foods that can lead to early childhood caries (baby bottle tooth decay). Recent studies have also shown that maintaining good parental oral health prenatally and during

infancy can reduce the infant's risk of infection from bacteria that cause early childhood caries.<sup>7</sup>

Concepts related to the prevention of illness and injury should be reinforced frequently by the health professional. Since most infants experience at least one minor illness in the first year, parents have the opportunity to learn about signs of illness and how to deal with them.

### Cognitive/Linguistic Development

Newborns have color vision and can see in three dimensions and track visually. Close up, they even show a preference for the pattern of human faces. Visual acuity progresses rapidly to adult levels by the time infants are 12 months of age. At birth, newborns already hear as well as adults do, but they may have difficulty showing their responses. The hearing of all newborns should be tested as part of health supervision, and hearing and vision should be screened regularly and whenever caregivers express concern.

Infants can distinguish their mother's voice by 3 months of age and can understand a tone of voice or words with gestures by the time they are 1 year old. They copy facial expressions from birth, use the emotional expressions of others to interpret events, and both understand and use gestures by 8 months. By 8 weeks babies coo, and by 1 year they babble and usually speak a few single words. There is a large normal range for the acquisition of these prelinguistic skills, with progress beyond babbling dependent on the language stimulation a child receives. Health professionals have the opportunity to educate parents about the importance of language stimulation, including singing songs to infants and children, reading to them, and talking with them.

Developmental surveillance, questions, and observations are important for assessment. Formal assessment is indicated if there are signs of developmental delay.

### Social/Emotional Development

Through the endless repetition of having their parents respond to their needs (e.g., being fed when hungry or comforted when crying), babies come to trust and love their parents. By 3 months of age, infants interact distinctly with different people. By 8 months, their emotions are influenced by signals from others, and they show anxiety with strangers. Their social awareness advances from a tendency to cry when they hear crying to attempts to offer food, initiate games, and even take turns by 1 year of age. As autonomy emerges, babies may begin to bite, pinch, and grab to get what they want. Health professionals should tell parents to anticipate these infant behaviors and advise on appropriate (firm but gentle) response.

The interaction between parent and infant is central to the infant's physical, cognitive, social, and emotional development, as well as to his self-regulation abilities. The infant brings his strengths to this interaction, in terms of temperament style, physical attractiveness, health, and vigor. The ability of the parents to respond well is determined by their life stresses, their past experiences with children, their knowledge, and their own experiences of being nurtured in childhood. Their perceptions of the infant can also color the interaction. These perceptions derive from their own expectations, needs, and desires, as well as from the projection of other people's characteristics onto the child.

The infant's emotions may be affected by the emotional health of the caregiver. Depression is

common in many mothers of infants and can seriously impair the baby’s emotional and even physical well-being. Parental substance abuse can have similar effects. Health supervision for the child must therefore include monitoring the emotional health of the parents or primary caregivers.

### Family and Community

A mother’s feeling of comfort with working outside the home or being at home, as well as the father’s emotional support of the mother, can have a positive effect on an infant’s emotional development. Fathers are important caregivers and educators for their infants. Their participation in infant care is enhanced if they are present at delivery, have early infant contact, and learn about their newborn’s abilities. Emotional support between the parents has a strong effect on adaptation to parenting.

Because more than half of U.S. infants’ mothers work full-time outside the home, the responsibility for providing infant developmental stimulation is often shared by others. Quality child care can be as



nurturing as parental care, but it requires responsive, loving caregiving by a few consistent adults. Advising parents in their choice of child care options is an important role for health professionals.

Families of children with special health care needs often look to health professionals and human services agencies for assistance and guidance. Helping these families identify community resources and making the appropriate referrals are essential in developing a network of support and care.

Adolescent mothers may have particular difficulty adapting to parenting. They may move in and out of the home and share care with their mother or other family members. Young mothers often lack parenting skills as well as resources such as transportation to health care appointments. They may need more health supervision visits to meet their new responsibilities. Parenting classes may be especially helpful to these young mothers.

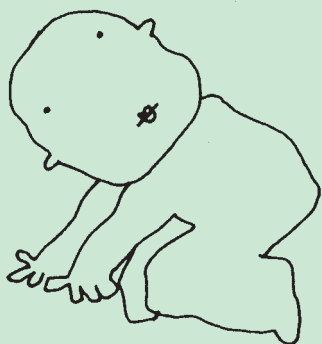
Other issues for families include cultural, ethnic, educational, or religious differences. Community problems may include violence, inadequate housing, poverty, and unemployment. The effect of these problems on infants, other than through direct physical harm or malnutrition, depends on the adequacy of parental coping.

Friends, relatives, and community organizations can support parents by providing advice, encouragement, praise, and respite. Adequately supported parents are better able to be responsive, gentle, and consistent with their infants. Health supervision should include assessing the parents’ support system and, if necessary, linking them with a social support network.

## INFANCY DEVELOPMENTAL CHART

Health professionals should assess the achievements of the infant and provide guidance to the family on anticipated tasks. The effects are demonstrated by health supervision outcomes.

Achievements During Infancy	Tasks for the Family	Health Supervision Outcomes
<ul style="list-style-type: none"> <li>■ Good physical health and growth</li> <li>■ Regular sleep pattern</li> <li>■ Self-quieting behavior</li> <li>■ Sense of trust</li> <li>■ Family adaptation to infant</li> <li>■ Attachment between infant and parents</li> <li>■ Healthy sibling interactions</li> </ul>	<ul style="list-style-type: none"> <li>■ Meet infant’s nutritional needs</li> <li>■ Establish regular eating and sleeping schedule</li> <li>■ Prevent early childhood caries (baby bottle tooth decay)</li> <li>■ Prevent injuries and abuse</li> <li>■ Obtain appropriate immunizations</li> <li>■ Promote normal development</li> <li>■ Promote warm, nurturing parent-infant relationship</li> <li>■ Promote responsiveness and social competence</li> <li>■ Encourage vocal interactions with parents, siblings, and others</li> <li>■ Encourage play with toys, siblings, parents, and others</li> <li>■ Encourage safe exploration of the environment</li> </ul>	<ul style="list-style-type: none"> <li>■ Formation of partnership (“therapeutic alliance”) between health professional and parents</li> <li>■ Preparation of parents for new role</li> <li>■ Optimal nutrition</li> <li>■ Satisfactory growth and development</li> <li>■ Injury prevention</li> <li>■ Immunizations</li> <li>■ Promotion of developmental potential</li> <li>■ Prevention of behavioral problems</li> <li>■ Promotion of family strengths</li> <li>■ Enhancement of parental effectiveness</li> </ul>





## FAMILY PREPARATION FOR INFANCY HEALTH SUPERVISION

Health professionals can help families prepare for health supervision visits.

This preparation supports a partnership in which the health professional and the family share responsibility.

- Be prepared to give updates on the following at your next visit:

- Illnesses and infectious diseases
- Injuries
- Visits to other health professionals or facilities
- Use of the emergency department
- Hospitalizations or surgeries
- Immunizations
- Food and drug allergies
- Eating habits
- Medications
- Supplementary fluoride and vitamins
- Chronic health conditions



- Be prepared to provide the following information about your family:

- Health of each significant family member
- Occupation of parent(s)
- A three-generation family health and social history, including congenital disabilities and genetic disorders
- Depression or other mental health problems in the immediate or extended family
- Alcoholism or other substance abuse (including use of tobacco) in the immediate or extended family
- Family transitions (e.g., birth, death, marriage, divorce, loss of income, move, frequently absent parent, incarceration, change in child care arrangements)

- Home environment/pets/neighborhood
- Exposure to hazardous conditions or substances (e.g., tuberculosis, lead, asbestos, nitrates, carbon monoxide)
- Exposure to violence
- Plans for future pregnancies or prevention of pregnancy
- Medical information about your baby if you are not the biological parent (i.e., if you are an adoptive or foster parent)

- Prepare and bring in questions, concerns, and observations about issues such as
  - Your baby's development (sleep and eating patterns, bowel movements, activity level, achievements, overall temperament, self-comforting techniques such as thumbsucking or use of a pacifier)
  - Your assessment of your own well-being and support from friends and family
  - Your attitudes about discipline
- Talk with the infant's other caregivers and with other family members about any issues they might want you to raise with the health professional.
- Bring in the Individualized Family Service Plan (IFSP) if the infant has special needs, and discuss coordination of care.
- Complete and bring in any special questionnaires or self-evaluation forms provided by the health professional (e.g., questionnaires about practices that promote family health and safety).
- When you get home, update your baby's health and immunization records.

## STRENGTHS DURING INFANCY

Health professionals should remind families of their strengths during the health supervision visit.  
Strengths and issues for infant, family, and community are interrelated and interdependent.

Infant	Family	Community
<ul style="list-style-type: none"> <li>■ Is welcomed at birth by parents</li> <li>■ Has good physical health and nutrition</li> <li>■ Grows normally</li> <li>■ Has normal eating, bowel, sleep patterns</li> <li>■ Has positive, cheerful, friendly temperament</li> <li>■ Feels parents' unconditional love</li> <li>■ Responds to parents and others</li> <li>■ Is attached to parents and trusts them</li> <li>■ Smiles, vocalizes</li> <li>■ Is adaptable</li> <li>■ Has self-comforting behaviors</li> <li>■ Explores environment actively</li> <li>■ Plays with toys</li> <li>■ Achieves developmental milestones</li> </ul>	<ul style="list-style-type: none"> <li>■ Meets infant's basic needs (food, shelter, clothing, health care)</li> <li>■ Provides strong, nurturing family</li> <li>■ Provides a safe, childproof environment (smoke alarms, infant safety seat)</li> <li>■ Enjoys and develops loving relationship with infant</li> <li>■ Responds to infant's developmental needs</li> <li>■ Responds to and encourages infant's interactive behaviors</li> <li>■ Offers emotional support and comfort when needed</li> <li>■ Encourages safe exploration</li> <li>■ Sets appropriate limits</li> <li>■ Parents are physically and mentally healthy</li> <li>■ Parents have a strong relationship with each other and opportunities to nurture their relationship</li> <li>■ Parents share care of infant</li> <li>■ Siblings are interested in and involved with infant in age-appropriate ways</li> <li>■ Has support of extended family and others</li> </ul>	<ul style="list-style-type: none"> <li>■ Provides support to new parents (parenting classes, support groups)</li> <li>■ Provides educational opportunities for parents</li> <li>■ Provides support for families with special needs (WIC, early intervention programs, community outreach)</li> <li>■ Provides outreach to identify uninsured or underinsured children and facilitates enrollment in health insurance programs and access to care</li> <li>■ Provides affordable, quality child care</li> <li>■ Provides an environment free of hazards</li> <li>■ Ensures that neighborhoods are safe</li> <li>■ Provides affordable housing and public transportation</li> <li>■ Develops integrated systems of health care</li> <li>■ Fluoridates drinking water</li> <li>■ Promotes community interactions (neighborhood watch programs, support groups, community centers)</li> <li>■ Promotes positive ethnic/cultural environment</li> </ul>

## ISSUES DURING INFANCY

Health professionals should address problems, stressors, concerns, and other issues that arise during health supervision. Strengths and issues for infant, family, and community are interrelated and interdependent.

Infant	Family	Community
<ul style="list-style-type: none"> <li>■ Preterm birth</li> <li>■ Congenital disabilities</li> <li>■ Feeding problems</li> <li>■ Food or drug allergies</li> <li>■ Sleep problems</li> <li>■ Sleeping with bottle</li> <li>■ Early childhood caries (baby bottle tooth decay)</li> <li>■ Fussing, crying, colic, irritability</li> <li>■ Infections, illnesses</li> <li>■ Constipation, diarrhea</li> <li>■ Undernutrition (failure to thrive)</li> <li>■ Iron-deficiency anemia</li> <li>■ Chronic illness</li> <li>■ Developmental delay</li> </ul>	<ul style="list-style-type: none"> <li>■ Parents or other family members with serious problems (abusive, depressed, overprotective, mentally ill, incarcerated)</li> <li>■ Severe marital problems</li> <li>■ Domestic violence (verbal, physical, or sexual abuse)</li> <li>■ Frequently absent parent</li> <li>■ Rotating “parents” (parents’ male or female partners)</li> <li>■ Inadequate child care</li> <li>■ Family health problems (illness, chronic illness, disability)</li> <li>■ Substance use (alcohol, drugs, tobacco)</li> <li>■ Financial insecurity</li> <li>■ Homelessness</li> <li>■ Family transitions (move, births, divorce, remarriage, death)</li> <li>■ Lack of knowledge about infant development</li> <li>■ Lack of parenting skills or parental self-esteem, especially in adolescent parent</li> <li>■ Inability to cope with stress of multiple roles</li> <li>■ Sleep deprivation, lack of time for self</li> <li>■ Intrusive family members</li> <li>■ Lack of social support/help with newborn and siblings</li> <li>■ Neglect or rejection of child</li> </ul>	<ul style="list-style-type: none"> <li>■ Unsafe neighborhood</li> <li>■ Inadequate housing</li> <li>■ Environmental hazards</li> <li>■ Poverty</li> <li>■ Discrimination and prejudice</li> <li>■ Community violence</li> <li>■ Few opportunities for employment</li> <li>■ Lack of affordable, quality child care</li> <li>■ Lack of programs for families with special needs (WIC, early intervention)</li> <li>■ Isolation in a rural community</li> <li>■ Lack of educational programs and social services for adolescent parents</li> <li>■ Lack of social, educational, cultural, and recreational opportunities</li> <li>■ Lack of access to immunizations and to medical and oral health services</li> <li>■ Inadequate outreach to identify uninsured and underinsured children and failure to facilitate enrollment in health insurance programs and access to care</li> <li>■ Inadequate public services (lighting, transportation, garbage removal)</li> <li>■ Inadequate fluoride in drinking water</li> </ul>



*The health supervision partnership between the family and the health professional begins before the baby is born.*

## INITIAL VISIT: BEGINNING THE PARTNERSHIP

The health supervision partnership between the family and the health professional who will be caring for the new baby begins with the initial visit shortly before the baby's birth. This visit can be a valuable first step in developing a partnership between the health professional and the parents—a partnership that will become a powerful and enduring means for promoting the health of the child and the family. The parents have been awaiting the birth of their baby for many months, but if they are first-time parents, they cannot fully understand what parenthood will mean for them. The initial health supervision visit is an important part of helping parents prepare for their new role. During this initial meeting with the health professional, parents can obtain answers to their questions, learn how to care for their baby, and receive their first anticipatory guidance.

In addition to gaining new information, parents are also learning the value of health supervision visits. As the health professional listens attentively, addresses their concerns supportively, and provides anticipatory guidance in a nurturing way, parents develop new skills and begin to trust their ability to make healthy decisions for their baby and family.

Even before the baby's birth, most parents have expectations about their child. If the baby is very active in utero, the parents might expect an active

child. They may assume their child will be blond like the mother or musical like the father. Parents sometimes have strong feelings about having a boy or girl. They may worry that an uncle's heart problems might be inherited or that the baby might face other health challenges. Talking through these expectations and concerns with the health professional allows the parents to share their excitement and sort out their concerns.

The initial visit is also a good opportunity to discuss issues related to early hospital discharge, decisions about feeding the baby and the benefits of breastfeeding,<sup>4</sup> preparations for bringing the baby home from the hospital, and support for the family at home. If the family situation permits, the health professional should encourage both parents to attend the initial health supervision visit and future visits. The health professional should reach out to the father at this time, emphasizing the importance of his role in the health and development of his child.



## HEALTH SUPERVISION: INITIAL VISIT

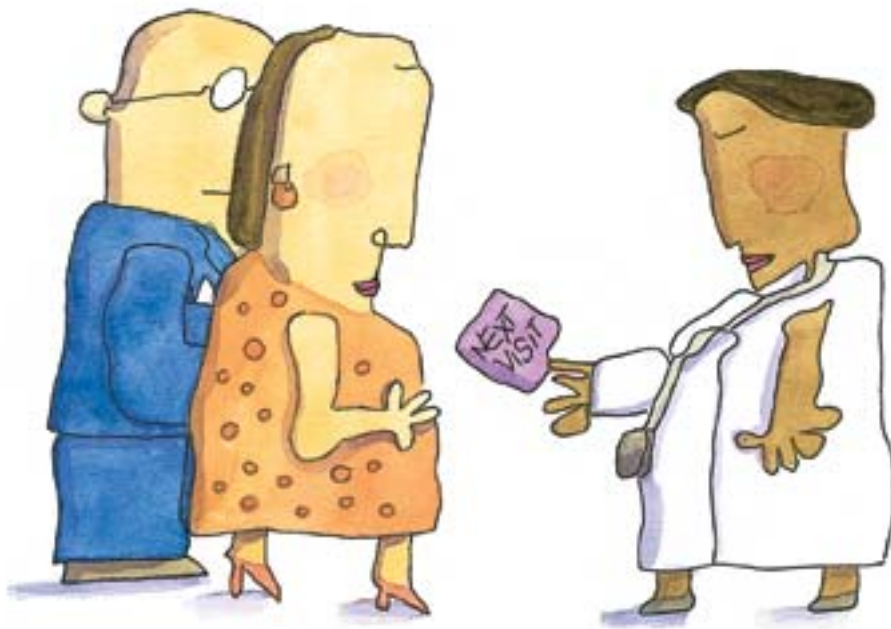
The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family.

Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)-To-Be

- What questions do you have for me today?
- How has your pregnancy progressed? What has been the most exciting aspect?
- When was your first visit for prenatal care?
- Have you had any physical or emotional problems during the pregnancy? Have you had any problems in previous pregnancies?
- How are preparations for your baby progressing? Who will help when you come home with the baby?
- Do you have other children? Have you talked with them about your pregnancy? How do they feel about the fact that a new baby is coming? Who will look after them while you are in the hospital or birthing facility?
- Many expectant parents have concerns about the baby or themselves. Do you have any concerns?
- Do you plan to breastfeed your baby? If so, do you need more information about preparing to breastfeed?
- Do you plan to use formula? How did you decide?
- What have you decided to do about circumcision if your baby is a boy?
- Was this a good time for you to be pregnant? How does your family feel about it?
- Are there any topics that you would like additional information about?
- Have you had a dental checkup during your pregnancy?
- Where do you plan to give birth to your baby? Does the facility have adequate support for the infant? Will there be special care available if needed?
- How do you think the baby will change your lives?
- Do you know how to reduce your baby's risk of exposure to lead hazards if you live in an older home or one that has been renovated recently?
- Are you aware that back sleeping is the best sleep position for your baby?
- How were things for you when you were growing up?
- Do you plan to raise your baby the way you were raised or somewhat differently? What would you change?
- Are you concerned that your baby will inherit any diseases or other characteristics that run in the family? If so, have you had genetic counseling?

- Do you smoke? Do you drink alcohol? Have you taken any drugs? Does your partner smoke, drink alcohol, or take drugs?
  - During this pregnancy, have you had any sexually transmitted diseases, exposure to the herpes virus, or an abnormal Pap smear?
  - Have you been offered an HIV test?
  - Do you plan to return to work? To school? Have you thought about child care arrangements? Do you know how to find good child care?
- Are you concerned about being able to afford food or supplies for your baby?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?  
  
Have you considered not owning a gun because of the danger to children and other family members?
  - *If there is a concern about possible abuse and the question can be asked confidentially:*  
Does your partner ever threaten or hurt you?



## ANTICIPATORY GUIDANCE FOR THE FAMILY

The initial health supervision visit offers the best opportunity to promote breastfeeding among those parents who have not yet decided on a feeding method, and to reinforce the preference for breastfeeding among parents who have already made this choice. Health professionals should encourage breastfeeding and discuss the parents' knowledge and expectations about breastfeeding. Nipple care should be addressed.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Obtain a rear-facing infant safety seat to transport your newborn home. Install it in the back seat of the car, following the vehicle owner's manual and manufacturer's instructions.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Be sure that your baby's crib is safe. The slats should be no more than 2 3/8 inches (60 mm) apart; the mattress should be firm and fit snugly into the crib. Keep the sides of the crib raised.

Put your baby to sleep on her back or side; advise your relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, comforters, quilts, pillows), soft toys, or toys with loops or string cords.

Keep the room temperature comfortable and be sure your baby doesn't get too warm while sleeping.

If you plan to use a mesh playpen or portable crib, the weave should have small openings less than 1/4 inch (6 mm). Never leave your baby in a mesh playpen or crib with the drop-side down.

Do not smoke or use drugs or alcohol.

Make your home and car nonsmoking zones.

Check your home for lead poisoning hazards (e.g., chipped lead paint, lead dust, lead water pipes, poorly glazed pottery).

Do not put your baby in an infant walker at any age. Tell family members not to give one as a gift.

Set the hot water heater thermostat lower than 120°F.

Install smoke alarms if not already in place and make sure they work properly.

Learn first aid and infant cardiopulmonary resuscitation (CPR).

Keep your prenatal appointments.

Attend childbirth classes.

#### Nutrition

If you plan to breastfeed: Talk with the health professional about breastfeeding (e.g., expectations, preparation and getting started, and additional information, resources, and support).

If you plan to bottlefeed: Ask the health professional about type of formula, preparation, feeding techniques, and equipment. Hold your baby in a semi-sitting position to feed.

Learn to recognize signs of hunger and feed your baby on demand.



## Oral Health

Obtain a dental checkup and treatment before the birth of your baby.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

If you are bottlefeeding: To avoid developing a habit that will harm your baby's teeth, do not put her to bed with a bottle containing juice, milk, or other sugary liquid. Do not prop the bottle in her mouth.

## Promotion of Constructive Family Relationships and Parental Health

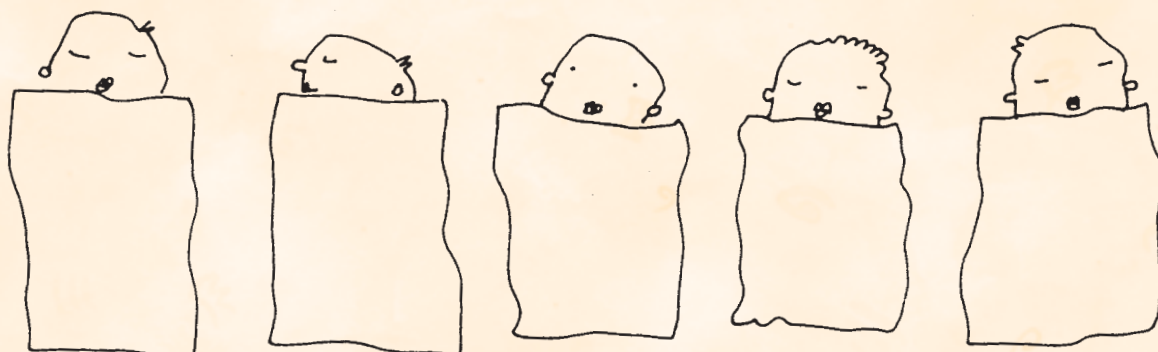
With the new baby, expect changes in your family relationships. Having a new baby in the family is often exciting and stressful. Plan on helping each other take care of the baby.

Do not worry about less important tasks for the first month or two.

Prepare older siblings for the new baby.

Anticipate that there may be times when you feel tired, overwhelmed, inadequate, or depressed. Many women feel the "baby blues" for a short period.

Develop a support system, whether with friends or family members or through community programs.



## BUILDING PARTNERSHIPS AT THE INITIAL VISIT

### WHAT ELSE SHOULD WE TALK ABOUT?

Provide information on family preparation for infancy health supervision so that families will be prepared for future health supervision visits.

Offer other materials for the parents to review at home, including literature or videotapes on child safety, childproofing the home, and breastfeeding.

Provide resources to support breastfeeding: handouts, videotapes, books, or telephone numbers of community resources such as breastfeeding information lines, lactation consultants, or La Leche League.



Discuss plans for the physical examination of the newborn and for additional screening procedures performed in the hospital.

If the family needs financial assistance to help pay for health care expenses, refer them to the state Medicaid programs or other state medical assistance and health insurance programs.

If the family is eligible for food and/or nutrition assistance programs (Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), help them enroll.

Suggest community resources that help with finding quality child care (see also Appendix M); accessing transportation or getting an infant safety seat for the car; or addressing issues such as financial concerns, inadequate housing, limited food resources, parental inexperience, or lack of social support.

Provide parents with information about parenting classes or support groups.

Discuss how the family should access health care (e.g., the health professional's medical practice or clinic hours, help available after hours, telephone advice, when to use the emergency department, how to call an ambulance).





*New parents always ask one question first:  
"Is our baby okay?"*

## NEWBORN VISIT

**N**ew parents may be overwhelmed with excitement and fatigue. Parents must cope with hospital staff coming in and out of the room and with initiating the feeding process, choosing a name, deciding whether to have a circumcision if the baby is a boy, and receiving phone calls and visits from family and friends. Ideally, the parents have met with the health professional for an initial visit, and a health supervision partnership has begun. New parents always ask one question first: “Is our baby okay?” Once they hear that their baby is healthy, the parents want to get on with the task of learning to feed their baby, establishing a good schedule, recovering their feelings of well-being, and going home to begin their new adventure.

While examining the newborn in front of the parents, the health professional who talks to and smiles at the baby will introduce the parents to the new family member in a way that promotes health and development and helps to build a health supervision partnership with the family. Answering questions and addressing concerns during this visit will reassure parents and lessen the anxiety they may be feeling about taking their baby home. Knowing that the health professional will be available after they leave the hospital will also add to the parents’ comfort and confidence as they embark on this wonderful new phase of their lives.

Parents of babies who are born preterm or with a disability experience severe stress. Caring for these parents should be as important as caring for their baby, especially when the mother is very young, has personal health concerns, or has limited coping abilities. The first step for the health professional is to explain the baby’s condition honestly and sensitively. If the infant has a long-term disability, the health professional needs to convey this information in small steps over time, according to the readiness of the parents. The birth of a baby with a disability underscores the need for the health professional to be a specialist in providing care to both the parents and their infant. There are few times when support is more necessary, sophisticated care more appropriate, and the presence of a prepared professional more compelling. A partnership between the family and the physician, nurse, and other health professionals can be forged during this time of special vulnerability and receptivity.



## HEALTH SUPERVISION: NEWBORN

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family. Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- Congratulations on your new baby! Theresa is doing well and weighs 7 pounds and 10 ounces today.
- How are you feeling? How was the delivery?
- Have things gone as you expected?
- What do you think of Theresa?
- What do your other children think about the new baby?
- What are your questions about caring for your baby?
- Do you have any questions about feeding your baby?

*If infant is breastfed:* Do you need help with any aspects of breastfeeding? Does your baby latch on to your breast and suck well?

*If infant is bottlefed:* What formula are you using? Is it iron-fortified? How will nipples, bottles, and other equipment be cleaned before and after feeding?

- Is everything set for you to take your baby home?
- Who will help you when you get home?

- When you have questions about your baby, whom do you expect to ask?
- Do you know that the best sleep position for Joel is on his back?
- Do you know what to do in an emergency?
- Do you have an infant safety seat to use in the car when you bring Joel home?
- How do you think Joel will change your lives?
- Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?

Have you considered not owning a gun because of the danger to children and other family members?



## Observation of Parent-Infant Interaction

Do the parents respond to the baby's needs? Are they comfortable when feeding, holding, or caring for the baby? Do they have visitors or any other signs of a support system? Does the baby latch on to the breast and suck well when breastfeeding?



## Physical Examination

*If possible, the health professional should examine the infant in front of the family so that they can ask questions and the health professional can comment on the physical findings.*

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be particularly noted:

- Length, weight, head circumference (as above)
- Temperature
- Heart rate
- Respiratory rate
- Skin mottling, erythema toxicum, hemangiomas, nevi, mongolian spots, birthmarks
- Pallor, jaundice, peripheral or central cyanosis
- Head shape, size, signs of trauma
- Ability of infant to fix and follow a human face
- Response to human voice, and other newborn abilities
- Ear shape, patent nares, intact palate
- Ability to suck and swallow
- Tachypnea/retractions, air movement
- Cardiac murmurs
- Breast engorgement
- Abdominal masses or distention
- Genitalia/rectum
- Femoral pulses
- Intact spine, clavicle fractures, developmental hip dysplasia, foot abnormalities
- Moro reflex, muscle tone, symmetrical movements

## Additional Screening Procedures

**Metabolic and hemoglobinopathy:** Conduct screening as required by the state.

**Vision:** Examine eyes; assess for red reflex, subconjunctival hemorrhages, puffy eyes.

**Hearing:** All newborns should receive initial hearing screening before discharge from the hospital. If this is not possible, screening should be completed within the first month of life (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Discuss possible side effects, what to do about them, and when to call the health professional.

## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Obtain a rear-facing infant safety seat to transport your newborn home. Install it in the back seat of the car, following the manufacturer's instructions and the vehicle owner's manual.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Be sure that your baby's crib is safe. The slats should be no more than 2 3/8 inches (60 mm) apart; the mattress should be firm and fit snugly into the crib. Keep the sides of the crib raised.

Put your baby to sleep on his back or side; advise your relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, comforters, quilts, pillows), soft toys, or toys with loops or string cords.

Keep the room temperature comfortable and be sure your baby doesn't get too warm while sleeping.

Keep your baby's environment free of smoke. Make your home and car nonsmoking zones.

If you use a mesh playpen or portable crib, the weave should have small openings less than 1/4 inch (6 mm). Never leave your baby in a mesh playpen or crib with the drop-side down.

Never leave your baby alone or with a young sibling or a pet.

Set the hot water heater thermostat lower than 120°F.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby.

Wash your hands frequently, especially after diaper changes and before feeding your baby.

Do not drink hot liquids or smoke while holding your baby.

Keep your baby out of direct sunlight.<sup>8</sup>

Never, never shake your baby. Be aware of the damage shaking can cause.

Contact your health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash or purplish spots
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration
- Jaundice

Know what to do in case of emergency:

- When to call the health professional
- When to go to the emergency department



## Nutrition

Review successful breastfeeding practices with the health professional: How to hold your baby and get him to latch on properly; feeding on demand 8 to 12 times a day for the first 4–6 weeks; and feeding until he seems content.

Review your care with the health professional: obtaining plenty of rest, eating healthy foods, drinking plenty of fluids, relieving breast engorgement, and caring for nipples. Receive follow-up support from the health professional by telephone, home visit, or early office visit.

Newborn breastfed babies should have six to eight wet diapers per day, as well as several mustard-colored stools per day.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D–deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

If you are bottlefeeding: Ask the health professional about type of formula, preparation, feeding techniques, and equipment. Hold your baby in a semi-sitting position to feed.

Do not warm expressed breastmilk or formula in containers or jars in a microwave oven.

## Oral Health

To avoid developing a habit that will harm your baby's teeth, do not put him to bed with a bottle containing juice, milk, or other sugary liquid. Do not prop the bottle in his mouth.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

## Infant Care

Discuss any questions or concerns you have about

- Cord care
- Circumcision care
- Skin and nail care: bathing, soaps, lotions, diaper area preparations, detergent
- Vaginal discharge or bleeding
- Crying
- Sneezing and hiccups
- Burping and spitting up
- Thumbsucking and pacifiers
- Bowel movements: change from meconium to transitional stools, stool frequency
- Sleeping arrangements, normal sleep patterns
- Amount of clothing needed, exposure to hot or cold temperatures
- Use of thermometer: A rectal temperature of 100.4°F/38.0°C is considered a fever. Use of a rectal thermometer is preferred; temperature should not be taken by mouth until 4 years of age.



### Promotion of Parent-Infant Interaction

Learn about your baby's temperament and how it affects the way he relates to the world.

Try to console your baby, but recognize that he may not always be consolable regardless of what you do. Discuss this with the health professional.

Nurture your baby by holding, cuddling, and rocking him, and by talking and singing to him.

### Promotion of Constructive Family Relationships and Parental Health

Encourage your partner to attend the health supervision visits.

Try to rest when your baby is sleeping.

Realize that there may be times when you feel tired, overwhelmed, inadequate, or depressed. Many women feel "the baby blues" for a short period.

Accept and seek support from your partner, family members, and friends.

Talk with the health professional about how to deal with unwanted advice from family and friends.

Discuss sibling reactions with the health professional.

For the mother returning to work: Begin to make plans for child care.

## BUILDING PARTNERSHIPS AT THE NEWBORN VISIT

### WHAT ELSE SHOULD WE TALK ABOUT?

Prepare the family for the next health supervision visit.

Point out the infant's strengths and appropriately commend the parents on their growing comfort with their new baby.

Provide resources to support breastfeeding: handouts, videotapes, books, or telephone numbers of community resources such as breastfeeding advice lines, lactation consultants, or La Leche League.

If the family needs financial assistance to help pay for health care expenses, refer them to the state Medicaid programs or other state medical assistance and health insurance programs.

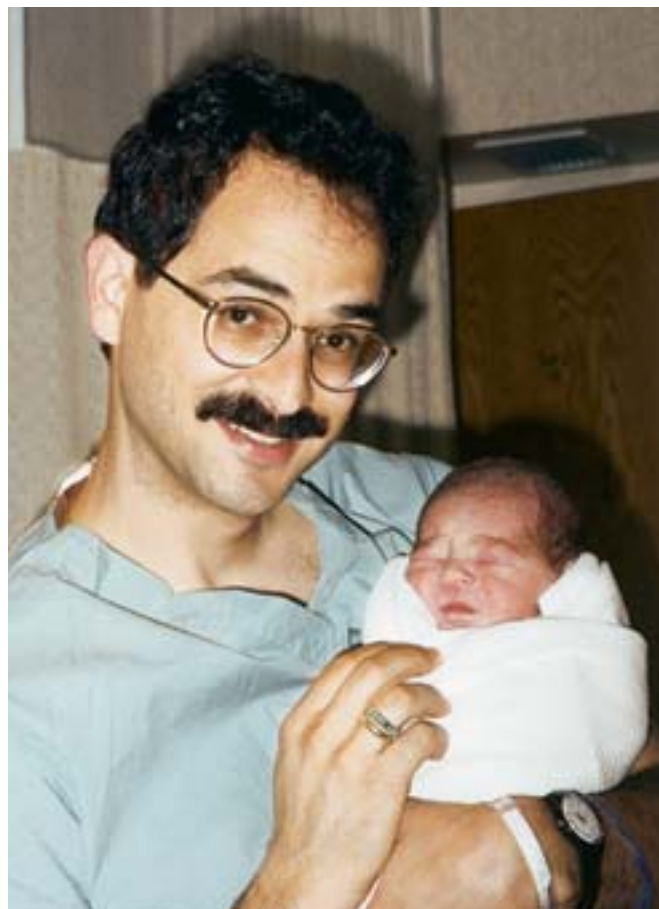
If the family is eligible for food and/or nutrition assistance programs (Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), help them enroll.

Suggest community resources that help with finding quality child care (see also Appendix M); accessing transportation or getting an infant safety seat for the car; or addressing issues such as financial concerns, inadequate housing, limited food resources, parental inexperience, or lack of social support.

Inquire about the number of rooms in the family's home, the number of people living there, and the adequacy of heating in cold weather.

Arrange a time to call or visit the family within 24 to 72 hours after discharge.

Schedule another health supervision visit within the next week.



Discuss how the family should access health care (e.g., the health professional's medical practice or clinic hours, help available after hours, telephone advice, when to use the emergency department, how to call an ambulance).



*To avoid being overwhelmed, parents need to conserve their energy and rest when their baby sleeps.*

## WITHIN THE FIRST WEEK

Since mothers typically are discharged within 24 to 48 hours after childbirth, families need more intensive health supervision than in the past. A health professional should call the mother the first day after discharge and schedule an office visit within 3 days. A home visit by a nurse (if possible) is important as well, especially if the mother intends to breastfeed her baby. If the mother is discharged more than 48 hours after childbirth, the first office visit may occur within 2 to 4 days of discharge.

The first week of a baby's life requires major adjustments by the parents, who are often exhausted and overwhelmed by caring for their new baby. Mothers are trying to heal their bodies and care for the newborn at the same time. Their initial elation may give way to frustration at the high level of the newborn's demands or to "the baby blues." At the same time, excitement about the new baby can carry parents through this adjustment period and help them cope with their lack of sleep and the constant attention to the baby's needs. Most parents will have to use trial and error to discover the behaviors that comfort their baby. Families who experience perinatal problems or give birth to babies with congenital disabilities have special needs.

To avoid being overwhelmed, parents need to conserve their energy and rest when their baby

sleeps. Letting less important tasks go at this time and accepting assistance from extended family members or friends can be very helpful. New parents need a supportive person that they trust to listen to their concerns, but they also need privacy to become a family and fashion their own solutions.

Even at this stage, parents can take advantage of their baby's limited waking time to communicate with and play with her. Parents who cuddle their infant and sing and vocalize to her will help establish the parent-infant bond.

Within approximately 10 days after birth, the baby regains the weight lost after delivery. Breastfeeding the baby every few hours in response to her cues will usually ensure that she gets enough to eat, as reflected by a steady weight gain, six or more wet diapers a day, and daily stools. Mothers who are breastfeeding should make sure that they receive the nutrition and sleep they need, so they do not overtax themselves while supplying breast milk to the baby. A health professional or lactation counselor can provide information and support to prevent or minimize sore nipples, breast infections, and improper latching-on.

If a baby who receives formula is not gaining weight or wetting her diaper 6 to 8 times per day, the parents and the health professional can discuss the quantity, frequency, and duration of feeding.

## HEALTH SUPERVISION: FIRST WEEK

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family. Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
- How is Carlotta doing?
- What are you enjoying most about her?
- Is parenthood what you expected it to be? What has surprised you?
- What questions or concerns do you have at this time?
- Who helps you with Carlotta? Are you getting enough help?
- How would you describe Carlotta's personality?
- Is she easy or difficult to console?
- Has Carlotta been fussy? What have you found that seems to work?
- How can you tell when Carlotta wants to be fed? Go to sleep?
- Do you put Carlotta to sleep on her back?
- Do you have any questions about feeding your baby?

*If infant is breastfed:* How often and for how long do you breastfeed? Do you have any concerns about breastfeeding?

*If infant is bottlefed:* How many ounces does your baby drink per feeding, and what is the total for 24 hours? Do you have any concerns about feeding?

- Is Bruce fastened securely in a rear-facing infant safety seat in the back seat every time he rides in the car?
  - Are you getting enough rest?
  - Have you been feeling tired or blue?
  - Is transportation a problem for you? Do you have enough money for food?
  - Are you planning to return to work or school? Have you begun to think about possible child care arrangements?
  - How are your other children doing? What do they think of the new baby?
  - Do you know what to do in case of an emergency?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?



## Developmental Surveillance and Milestones

- Responds to sound by blinking, crying, quieting, changing respiration, or showing a startle response
- Fixates on human face and follows with eyes
- Responds to parent's face and voice
- Has flexed posture
- Moves all extremities

## Observation of Parent-Infant Interaction

Does the parent appear depressed, tearful, angry, anxious, fatigued, overwhelmed, or uncomfortable? If both parents are present, do they share caring for and holding the infant during the visit? Do they both provide information? Do they appear able to read and respond to the infant's cues? Are they comfortable with the baby?

## Physical Examination

*The physical examination permits the health professional to detect abnormal findings and to model for the parent how to respond to the baby's cues, console the baby by talking, and show interest in the baby.*

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be particularly noted:

- Jaundice
- Pallor (e.g., pale, gray)
- Dehydration
- Irritability or lethargy
- Tachypnea
- Tachycardia
- Cardiac murmurs
- Developmental hip dysplasia
- Abdominal distention or masses

## Additional Screening Procedures

**Metabolic and hemoglobinopathy:** Conduct screening as required by the state (if not performed in the hospital).

**Vision:** Examine eyes; assess for red reflex, strabismus, dacryocystitis.

**Hearing:** All newborns should receive initial hearing screening before discharge from the hospital. If this is not possible, screening should be completed within the first month of life (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Discuss possible side effects, what to do about them, and when to call the health professional.

## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Use a rear-facing infant safety seat and fasten it securely in the back seat of the car each time.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Be sure that your baby's crib is safe. The slats should be no more than 2 3/8 inches (60 mm) apart; the mattress should be firm and fit snugly into the crib. Keep the sides of the crib raised.

Put your baby to sleep on her back or side; advise your relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, comforters, quilts, pillows), soft toys, or toys with loops or string cords.

Keep the room temperature comfortable and be sure your baby doesn't get too warm while sleeping.

Continue to keep your baby's environment free of smoke. Make your home and car nonsmoking zones.

Keep your baby out of chronically moldy, water-damaged environments.<sup>9</sup>

Never, never shake your baby. Be aware of the damage shaking can cause.

Never leave your baby alone or with a young sibling or a pet.

Set hot water heater thermostat lower than 120°F.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby.

Wash your hands frequently, especially after diaper changes and before feeding your baby.

Install smoke alarms if not already in place and make sure they work properly. Test them monthly.

Do not drink hot liquids or smoke while holding your baby.

Keep your baby out of direct sunlight.<sup>8</sup>

Contact your health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash or purplish spots
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration
- Jaundice
- Hypothermia (low temperature)
- Apnea (very long pauses in breathing)
- Respiratory distress
- Abdominal distention
- Cyanosis (blue color)



Know what to do in case of emergency:

- When to call the health professional
- When to go to the emergency department

### Nutrition

If you are breastfeeding: Be sure that breastfeeding is of appropriate frequency and duration. Eat healthy foods and drink plenty of liquids. Talk with the health professional about any problems you are having with breastfeeding.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D–deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

If you are bottlefeeding: Be sure that your baby receives a sufficient amount of iron-fortified formula at the appropriate frequency. Hold your baby in a semi-sitting position to feed her.

Do not warm expressed breastmilk or formula in containers or jars in a microwave oven.

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

### Oral Health

To avoid developing a habit that will harm your baby's teeth, do not put her to bed with a bottle containing juice, milk, or other sugary liquid. Do not prop the bottle in her mouth.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

### Infant Care

Discuss any questions or concerns you have about

- Cord care
- Circumcision care
- Skin and nail care: bathing, soaps, lotions, diaper area preparations, detergent
- Crying and colic
- Sneezing and hiccups
- Burping and spitting up
- Thumbsucking and pacifiers
- Sleeping arrangements, normal sleep patterns
- Bowel movements: Patterns may vary
- Amount of clothing needed, exposure to hot or cold temperatures
- Use of thermometer: A rectal temperature of 100.4°F/38.0°C is considered a fever. Use of a rectal thermometer is preferred; temperature should not be taken by mouth until 4 years of age.

### Promotion of Parent-Infant Interaction

Learn about your baby's temperament (e.g., active, quiet, sensitive, demanding, easily distracted) and how it affects the way he relates to the world.

Try to console your baby, but recognize that she may not always be consolable regardless of what you do. Many babies have a daily fussy period in the late afternoon or evening. Crying may increase during the next month, including a possible peak of approximately 3 hours per day at 6 weeks of age. Ask about strategies to console your baby.

Nurture your baby by holding, cuddling, and rocking her, and by talking and singing to her.

Spend time playing with and talking to your baby during her quiet, alert states.

## Promotion of Constructive Family Relationships and Parental Health

Try to rest and take time for yourself.

Realize that there may be times when you feel tired, overwhelmed, inadequate, or depressed. Many women feel “the baby blues” for a short period. Talk to your health professional if this feeling is overwhelming or lasts for a longer period of time.

Spend some individual time with your partner.

Accept support from your partner, family members, and friends.

Talk with the health professional about how to deal with unwanted advice from family and friends.

Encourage your partner to participate in the care of the baby.

Continue to provide attention to the other children in the family, appropriately engaging them in the care of the baby.

Schedule a postpartum checkup.

Discuss family planning with your partner and the health professional.

## Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food and/or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed.

Learn about and consider attending parent education classes.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.

For the mother returning to work: Discuss child care resource and referral agencies or similar community services with the health professional. Discuss ways to continue breastfeeding when you return to work.





*The health professional should remind parents about basic rules of injury prevention, such as using an infant safety seat, keeping one hand on the baby when he is on a high surface, and never leaving him alone with young children or with pets.*

## ONE MONTH VISIT

**B**y the time the infant is 1 month old, his parents have become accustomed to him, and parents and baby are attuned to each other. Now beginning to interpret their infant's cry, the parents are learning that he can be comforted in a variety of ways, such as through touch, a voice, or a smile. They know when to pick him up and when to feel confident that the crying will soon stop. They enjoy feeling close to their baby and are comfortable talking to him and holding, cuddling, and rocking him.

The infant responds to his parents' overtures. He fixes on a face or an object, following it with his eyes, and he responds to his parents' voices. He shows some ability to console himself, possibly by putting his fingers or hands in his mouth. Attentive parents learn to recognize the early indicators of their infant's individual temperament. They know how to avoid overstimulating their baby and how to calm him down. They also understand that infants vary in their need for feeding, in terms of frequency and amount.

Physically, the baby displays good muscle tone, deep tendon reflexes, and primitive reflexes. His weight, length, and head circumference continue to increase along his expected growth curve. Frequency and consistency of stools vary, and many healthy babies strain and turn red when having a

bowel movement. Constipation is signaled by a hard stool. Exclusively breastfed babies may have a variety of stool patterns.

Some babies develop the classic symptoms of colic, including pulling their legs into their abdomen. It is more common, however, for babies just to have a fussy period at the end of the day, when they cry to "sort themselves out." In spite of their new responsibilities and periods of increased stress, parents typically have gained enough self-assurance in the first month to be able to enjoy their baby. Intermittent periods of anxiety, depression, and feelings of inadequacy are normal. It will help if each parent spends time alone away from the baby, and if the parents spend time together as well as with relatives or other important supportive figures. Parents with other children should give individual attention to each sibling.

It is important that parents know to seek medical help if their baby does not "look right," has a fever or diarrhea, refuses to feed, vomits excessively, sleeps too much, or is irritable. In addition, parents should know basic rules of injury prevention, such as using an infant safety seat in the car, keeping one hand on the baby when he is on a high surface, and never leaving him alone with young children or with pets.

## HEALTH SUPERVISION: 1 MONTH

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family. Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
- How are you feeling these days?
- How is Juan doing?
- What do you enjoy most about him?
- What questions or concerns do you have at this time?
- Have there been any major changes in your family since you came home from the hospital?
- Who helps you with Juan?
- How would you describe Juan's personality?
- Is he easy or difficult to console?
- What have you found that seems to work during Juan's fussy periods?
- How can you tell when Juan wants to be fed? Go to sleep?
- Do you put Juan to sleep on his back?
- Do you have any questions about feeding your baby?

*If infant is breastfed:* How often and for how long do you breastfeed? Do you have any concerns about breastfeeding?



*If infant is bottlefed:* How many ounces does your baby drink per feeding, and what is the total for 24 hours?

- Do you think Monica hears all right? Sees all right?
  - Is Monica fastened securely in a rear-facing infant safety seat in the back seat every time she rides in the car?
  - Are you getting enough rest?
  - Have you been feeling tired or blue?
  - Have you and your partner had some time for yourselves? Are you using baby sitters?
  - How are your other children doing? Do you spend time with each of them individually?
  - What do you do when problems really get to you? Who do you turn to at times like that?
  - Is transportation a problem for you? Do you have enough money for food?
  - Are you planning to return to work or school? Have you begun to look into possible child care arrangements?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?

## Developmental Surveillance and Milestones

- Responds to sound by blinking, crying, quieting, changing respiration, or showing a startle response
- Fixates on human face and follows with eyes
- Responds to parent's face and voice
- Lifts head momentarily when in prone position
- Has flexed posture
- Moves all extremities
- Can sleep for 3 or 4 hours at a time; can stay awake for 1 hour or longer
- When crying, can be consoled most of the time by being spoken to or held

## Observation of Parent-Infant Interaction

Does the parent appear depressed, tearful, angry, anxious, fatigued, overwhelmed, or uncomfortable? If both parents are present, do they share caring for and holding the infant during the visit? Do they both provide information? Do they appear able to read and respond to the infant's cues? Are they comfortable with the baby?

## Physical Examination

*The physical examination permits the health professional to detect abnormal findings and to model for the parent how to show interest in the infant, respond to the infant's cues, and console the infant by talking.*

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be particularly noted:

- Cardiac murmurs
- Developmental hip dysplasia
- Abdominal masses
- Thrush
- Cradle cap
- Diaper dermatitis
- Evidence of possible neglect or abuse

## Additional Screening Procedures

**Vision:** Examine eyes; assess for red reflex, dacryostenosis, dacryocystitis.

**Hearing:** All newborns should receive initial hearing screening before discharge from the hospital. If this is not possible, screening should be completed within the first month of life (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Discuss possible side effects, what to do about them, and when to call the health professional.

## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Continue to use a rear-facing infant safety seat that is properly secured in the back seat of the car each time.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Continue to put your baby to sleep on his back or side; advise your relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, comforters, quilts, pillows), soft toys, or toys with loops or string cords.

Keep the room temperature comfortable and be sure your baby doesn't get too warm while sleeping.

Continue to keep your baby's environment free of smoke. Make your home and car nonsmoking zones.

Keep your baby out of chronically moldy, water-damaged environments.<sup>9</sup>

Never leave your baby alone or with a young sibling or a pet.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby.

Wash your hands frequently, especially after diaper changes and before feeding your baby.

Install smoke alarms if not already in place and make sure they work properly. Test them monthly.

Keep your baby out of direct sunlight.<sup>8</sup>

Never, never shake your baby. Be aware of the damage shaking can cause.

Do not drink hot liquids or smoke while holding your baby.

Keep toys with small parts or other small or sharp objects out of reach.

Learn first aid and infant cardiopulmonary resuscitation (CPR).

Contact your health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash or purplish spots
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration

Know what to do in case of emergency:

- When to call the health professional
- When to go to the emergency department



## Nutrition

Be sure that your baby is gaining weight.

If you are breastfeeding: Be sure that breastfeeding is of appropriate frequency and duration. Eat healthy foods and drink plenty of liquids. Talk with the health professional about any problems you are having with breastfeeding.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D–deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

If you are bottlefeeding: Be sure that your baby receives a sufficient amount of iron-fortified formula at the appropriate frequency. Hold your baby in a semi-sitting position to feed him.

Do not warm expressed breastmilk or formula in containers or jars in a microwave oven.

Delay the introduction of solid foods until your baby is ready, usually at about 4–6 months of age.

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

## Oral Health

To avoid developing a habit that will harm your baby's teeth, do not put him to bed with a bottle containing juice, milk, or other sugary liquid. Do not prop the bottle in his mouth.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

## Infant Care

Discuss any questions or concerns you have about

- Skin and nail care: bathing, soaps, lotions, diaper area preparations, detergent
- Crying and colic
- Thumbsucking and pacifiers
- Normal sleep patterns, sleeping arrangements
- Bowel movements: Patterns may vary
- Use of thermometer: A rectal temperature of 100.4°F/38.0°C is considered a fever. Use of a rectal thermometer is preferred; temperature should not be taken by mouth until 4 years of age.

## Promotion of Parent-Infant Interaction

Learn about your baby's temperament (e.g., active, quiet, sensitive, demanding, easily distracted) and how it affects the way he relates to the world.

Try to console your baby, but recognize that he may not always be consolable regardless of what you do. Crying may increase during the next few weeks, including a possible peak of approximately 3 hours per day at 6 weeks of age. Ask about strategies to console your baby.

Nurture your baby by holding, cuddling, and rocking him, and by talking and singing to him.

Spend time playing and talking with him during his quiet, alert states.

## Promotion of Constructive Family Relationships and Parental Health

For the mother returning to work: Discuss ways to continue breastfeeding, and feelings about leaving your baby.

Continue to try to rest and take time for yourself. Talk to your health professional if you are feeling depressed, overwhelmed, or overtired.

Spend some individual time with your partner.

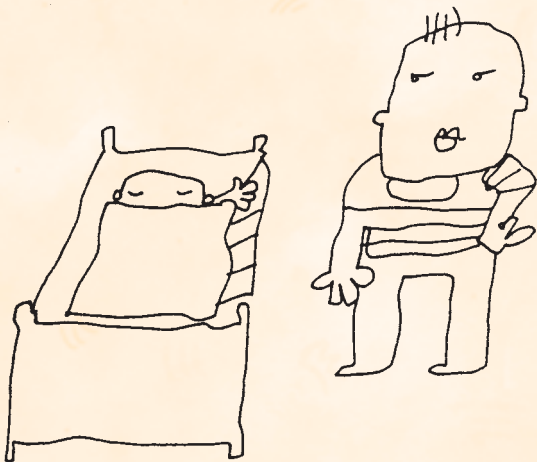
Keep in contact with friends and family members. Avoid social isolation.

Encourage your partner to participate in the care of the baby.

Continue to provide attention to the other children in the family, appropriately engaging them in the care of the baby.

Have your postpartum checkup. If you decide to become pregnant again, your next baby will be healthier if there is adequate spacing between the pregnancies.

Discuss family planning with the health professional and with your partner.



## Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food and/or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed. Learn about and consider attending parent education classes and/or parent-child play groups.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.

For the mother returning to work: Discuss child care resource and referral agencies or similar community services with the health professional.





*The infant's responses to her parents provide important feedback when they cuddle her or talk and sing to her.*

## TWO MONTH VISIT

**B**y 2 months after birth, the parents and their baby are communicating with each other. Parents can gain their baby's attention, and she responds to their cues. The baby looks into her parents' eyes, smiles, coos, and vocalizes reciprocally. She is attentive to her parents' voices and reacts with enjoyment when her senses are stimulated with pleasant sights, sounds, and touch. The infant's responses to her parents when they cuddle her or talk and sing to her provide important feedback.

By this age, the baby has established a regular feeding and sleeping schedule. The bottlefed baby is fed approximately every 3 to 4 hours; the feedings may be more frequent for the breastfed baby. Night feedings may occur less frequently now. The baby will not need solid foods until she is 4–6 months old, and parents should wait until then to introduce cereal. Adding cereal to her bottle will not help her sleep through the night.

The baby can now hold her head upright for brief periods of time while she is being held. Her weight, length, and head circumference continue to increase along her predicted growth curve.

Parents may still feel tired and need to take naps. Typically, they have settled into their new roles, learning how to divide the tasks of caring for their baby, themselves, and the needs of the family.

Just as they have settled into these roles, however, many parents must negotiate new ones. Those returning to work need to make plans for future caregiving arrangements. Concerns about leaving the baby may conflict with the need to support the family or pursue career goals. Separation often brings guilt feelings that need to be resolved.

Quality, affordable child care is a concern at this stage because caregivers should provide developmental stimulation as well as physical care. Although many families rely on relatives or friends to care for their children, such caregivers do not always have the necessary skills. Child care courses are often available through community hospitals or organizations such as the American Red Cross.

Ideally, parents plan some time to spend together. Single parents may choose to spend time on outside interests and relationships. It is also important that other children in the family have some time alone with their parents for activities they enjoy. Parents can encourage responsible siblings to participate in the care of the baby to alleviate feelings of being left out.

Mothers should have had a postpartum checkup by this time. They should also have discussed family planning arrangements with their partner and the health professional.

## HEALTH SUPERVISION: 2 MONTHS

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family.

Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
- How have things been going in your family?
- How is Kaitlin doing?
- What do you and your partner enjoy most about her?
- What questions or concerns do you have about Kaitlin?
- Have there been any unexpected stresses, crises, or illnesses in your family since your last visit?
- Who helps you with Kaitlin?
- How would you describe Kaitlin's personality? How does she respond to you?
- Is it easy or hard to know what she wants?
- How is Kaitlin sleeping?
- Do you put Kaitlin to sleep on her back?
- Does Kaitlin have a regular schedule now?

*If infant is breastfed:* How often and for how long do you breastfeed? Do you have any concerns about breastfeeding?

*If infant is bottlefed:* How many ounces does your baby drink per feeding, and what is the total for 24 hours?

- Is Michael fastened securely in a rear-facing infant safety seat in the back seat every time he rides in the car?
  - Do you think Michael hears all right? Sees all right?
  - Are you getting enough rest?
  - Have you been out of the house without the baby? Who takes care of the baby when you go out?
  - Do you have the opportunity to spend time with other parents and babies?
  - How are your other children? Do you spend time with each of them individually?
  - Are you returning to work or school? What plans have you made for child care?
  - Have you had a postpartum checkup? Did you discuss family planning arrangements at this checkup? With your partner?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?

## Developmental Surveillance and Milestones

- Coos and vocalizes reciprocally
- Is attentive to voices
- Shows interest in visual and auditory stimuli
- Smiles responsively
- Shows pleasure in interactions with adults, especially parents and other primary caregivers
- In prone position, lifts head, neck, and upper chest with support on forearms
- Has some head control in upright position

## Observation of Parent-Infant Interaction

Are the parent and infant interested in and responsive to each other (e.g., gazing, talking, and smiling)? Does the parent hold and cuddle the infant? Does the parent appear depressed, tearful, angry, anxious, fatigued, overwhelmed, or

uncomfortable? Is the parent aware of the infant's distress and effective in comforting her? Does the parent give any signs of disagreement with or lack of support from partner? Does the parent generally appear comfortable?

## Physical Examination

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be noted particularly:

- Torticollis
- Metatarsus adductus
- Developmental hip dysplasia
- Cardiac murmurs
- Neurologic problems
- Abdominal masses
- Evidence of possible neglect or abuse

## Additional Screening Procedures

**Vision:** Examine eyes; assess for red reflex, strabismus. (Eyes should be aligned by this age.)

**Hearing:** Conduct or arrange for initial hearing screening if not previously done, with follow-up screening, evaluation, and referral as needed (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Discuss possible side effects, what to do about them, and when to call the health professional.

## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Continue to use a rear-facing infant safety seat that is properly secured in the back seat of the car.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Continue to put your baby to sleep on her back or side; remind your relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, comforters, quilts, pillows), soft toys, or toys with loops or string cords.

Continue to keep your baby's environment free of smoke. Keep your home and car nonsmoking zones.

If you use a mesh playpen or portable crib, the weave should have small openings less than 1/4 inch (6 mm). Never leave your baby in a mesh playpen or crib with the drop-side down.

Keep your baby out of chronically moldy, water-damaged environments.<sup>9</sup>

Never leave your baby alone or with a young sibling or a pet.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby, especially as she begins to roll over.

Wash your hands frequently, especially after diaper changes and before feeding your baby.

Wash your baby's toys with soap and water.

Install smoke alarms if not already in place and make sure they work properly. Test them monthly.

Do not drink hot liquids or smoke while holding your baby.

Keep your baby out of direct sunlight.<sup>8</sup>

Never, never shake your baby. Be aware of the damage shaking can cause.

Keep toys with small parts or other small or sharp objects out of reach.

Contact your health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash or purplish spots
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration

Review emergency procedures:

- When to call the health professional
- When to go to the emergency department

Ask your child care provider about procedures for handling an emergency in the child care setting.



## Nutrition

Be sure that your baby is gaining enough weight.

If you are breastfeeding: Be sure that breastfeeding is of appropriate frequency and duration. Discuss with the health professional any problems you are having with breastfeeding.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D–deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

If you are bottlefeeding: Be sure that your baby receives a sufficient amount of iron-fortified formula at the appropriate frequency. Hold your baby in a semi-sitting position to feed her.

Do not warm expressed breastmilk or formula in containers or jars in a microwave oven.

Delay the introduction of solid foods until your baby is ready, usually at about 4–6 months of age.

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

## Oral Health

To avoid developing a habit that will harm your baby's teeth, do not put her to bed with a bottle containing juice, milk, or other sugary liquid. Do not prop the bottle in her mouth.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

## Infant Care

Discuss any questions or concerns you have about

- Skin and nail care: bathing, soaps, lotions, diaper area preparations, detergent
- Crying and colic
- Thumbsucking and pacifiers
- Sleeping arrangements, normal sleep patterns
- Bowel movements: Patterns may vary
- Use of thermometer: A rectal temperature of 100.4°F/38.0°C is considered a fever. Use of a rectal thermometer is preferred; temperature should not be taken by mouth until 4 years of age.

## Promotion of Parent-Infant Interaction

Talk with the health professional about your baby's temperament and how you are dealing with it.

Nurture your baby by holding, cuddling, and rocking her, and by talking and singing to her.

Encourage your baby's vocalizations. Talk to her during dressing, bathing, feeding, playing, and walking.

Read to your baby. Play music and sing to her.

Establish a bedtime routine and other habits to discourage night waking.

Stimulate your baby with age-appropriate toys.

## Promotion of Constructive Family Relationships and Parental Health

Take some time for yourself and spend some individual time with your partner.

Keep in contact with friends and family members. Avoid social isolation.

Choose babysitters and caregivers who are mature, trained, responsible, and recommended by someone you trust.

Encourage your partner's involvement in the health supervision visit and in caring for the baby.

Continue to meet the needs of other children in the family, appropriately engaging them in the care of the baby.

Discuss family planning with your partner and the health professional.

For the mother returning to work: Discuss ways to continue breastfeeding, and feelings about leaving your baby.

## Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed.

Consider attending parent education classes and/or parent support groups.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.

For the mother returning to work: Discuss child care arrangements with the health professional.



## Only I Can Care for Him

During the 2 month health supervision visit, Dr. Meyer notices that Ms. Conforti seems to hover over her baby, Tony, throughout the physical examination. All new parents are concerned about their baby's well-being, but Ms. Conforti seems especially anxious. She has called frequently about "colds" and has brought Tony in to see the doctor five times since the 1 month visit.

Although Ms. Conforti's initial responses to Dr. Meyer's questions do not reveal any problems or concerns, she admits that she and her husband have not been out together since Tony was born. As the doctor gently questions her further, Ms. Conforti acknowledges that she has not been away from her baby since his birth and that she feels worried all the time.

"I just don't feel comfortable leaving my baby with a babysitter or even with my husband. I'm afraid that anyone I leave Tony with might not know what to do if there's a problem."

Dr. Meyer remembers that Ms. Conforti had some vaginal bleeding during her pregnancy and that Tony was born 3 weeks

before her due date. The doctor talks with Ms. Conforti about her anxious feelings.

"Although you did have some difficulties during your pregnancy and Tony was born early, he is now a perfectly healthy baby," explains Dr. Meyer reassuringly. "Tony has experienced no lasting consequences from either of those conditions."

The doctor shows her Tony's growth curve, reviews the results of the physical examination with her, and assures her that many parents worry if they experience a problem during the pregnancy or if the baby is born preterm.

At the end of the visit, Dr. Meyer suggests scheduling a follow-up visit with both parents. "Ms. Conforti, why don't both you and your husband bring Tony in for a visit in 2 weeks so we can talk more about your need to take some time for yourself and spend time with your husband, and how you and your husband can best support one another?"



*I just don't feel comfortable leaving my baby with a babysitter or even with my husband. I'm afraid that anyone I leave him with might not know what to do if there's a problem.*



*Most employed mothers will have returned to work by the time their infant is 4 months old, and it is important that child care arrangements work for the baby and the family.*

## FOUR MONTH VISIT

**T**he relationship between parents and their 4-month-old infant is pleasurable and rewarding. The baby's ability to smile, coo, and laugh encourages his parents to talk and play with him. Clear and predictable cues from the infant are met with appropriate and predictable responses from his parents, promoting mutual trust. During this period, the infant masters early motor, language, and social skills by interacting with those who care for him.

Responding to the sights and sounds around him, the 4-month-old raises his body from a prone position with his hands and holds his head steady. He may be so interested in his world that he sometimes refuses to settle down to eat. He stops feeding from the breast or bottle after just a minute or two to check out what else is happening in the room. Parents may need to feed him in a quiet, darkened room for the next few weeks.

Over the next 2 months, the baby will be ready to start eating solid foods. If he sits well when supported, holds his head up, and seems to be hungry, it is time to introduce one new solid food every week or so. The tongue thrust reflex and production of saliva may cause a lot of drooling at this age. Early teethers can be irritable, although most babies do not get their first teeth until after

6 months, and some babies may not do so until after 1 year.

As key social and motor abilities become apparent at 4 months, the infant who appears to have a delay in achieving these skills may need a formal developmental assessment. An infant who lacks a social smile may suffer from emotional or sensory deprivation. Are the parents interested in and appropriately interactive with their infant? If developmental delays are found, health professionals should explore their origin and make referrals for early intervention.

Most employed mothers will have returned to work by the time their infant is 4 months of age, and it is important that child care arrangements work for both infant and family. An irritable child who cries frequently or does not sleep through the night may clash temperamentally with a family that values regularity and tranquillity. Family problems such as inadequate finances, few social supports, or low parental self-esteem may impair the parents' ability to nurture. It is important that parents seek help when feeling sad, discouraged, depressed, overwhelmed, or inadequate. Parents who have the support they need can be warmly rewarded by their interactions with their 4-month-old infant.

## HEALTH SUPERVISION: 4 MONTHS

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family.

Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
  - How are you feeling?
  - How is your family getting along?
  - What do you enjoy most about Bobby?
  - What questions or concerns do you have about Bobby?
  - What new things is he doing?
  - Have there been any major stresses or changes in your family since your last visit?
  - Who helps you out with Bobby?
  - How do you know what Bobby wants or needs? Is it easy or difficult to tell?
  - What have you found to be the best way to comfort Bobby?
  - Do you have any questions about feeding Bobby? What are you feeding him at this time?
  - Does Bobby sleep through the night?
  - Do you put Bobby to sleep on his back?
  - Is Bobby fastened securely in a rear-facing infant safety seat in the back seat every time he rides in the car?
  - Do you think Sabrina hears all right? Sees all right?
  - Are you reading to Sabrina or singing to her?
  - Have you returned to work or school, or do you plan to do so? What are your child care arrangements?
  - Have you and your partner been getting out without the baby? Who takes care of the baby when you go out?
  - Do you know what to do in case of an emergency?
  - Do you know first aid and infant CPR?
  - Do you know how to reduce your baby's risk of exposure to lead hazards if you live in an older home or one that has been renovated recently?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?

## Developmental Surveillance and Milestones

### Questions and Possible Responses

- **Do you have any specific concerns about Jerome's development or behavior?**
- **How does Jerome communicate what he wants?**  
 Demonstrates range of feelings (pleasure, displeasure, sadness)  
 Vocalizes (babbling, "aaaa," "eeee," "oooo")
- **What do you think Jerome understands?**  
 Recognizes parent's voice
- **How can Jerome move his body?**  
 Controls head well  
 In prone position, holds head upright and raises body on hands  
 Sits with support  
 Rolls over from front to back  
 Opens hands and holds own hands
- **How does Jerome act around family members?**  
 Babbling and coos  
 Smiles, laughs, and squeals  
 Recognizes parent's voice and touch  
 Has spontaneous social smile
- **Tell me about Jerome's typical play.**  
 Mouths objects  
 Blows bubbles  
 Imitates a cough or razzing noises  
 Reaches for and bats at objects  
 Grasps rattle



### Milestones

Babbles and coos

Smiles, laughs, and squeals

In prone position, holds head upright and raises body on hands

Rolls over from front to back

Opens hands, holds own hands, grasps rattle

Controls head well

Begins to bat at objects

Looks at and may become excited by mobile

Recognizes parent's voice and touch

Has spontaneous social smile

May sleep for at least 6 hours

Able to comfort himself (e.g., fall asleep by himself without breast or bottle)

## Observation of Parent-Infant Interaction

Are the parent and infant interested in and responsive to each other (e.g., gazing, talking, and smiling)? Does the parent hold and cuddle the infant? How does the parent attend to the baby when he is being examined? How does the parent comfort the baby when he cries?

## Physical Examination

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be noted particularly:

- Developmental hip dysplasia
- Cardiac murmurs
- Neurologic problems
- Evidence of possible neglect or abuse

## Additional Screening Procedures

**Vision:** Examine eyes; assess for red reflex, strabismus.

**Hearing:** Conduct or arrange for initial hearing screening if not previously done, with follow-up screening, evaluation, and referral as needed (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Be sure that immunizations are up to date. Discuss possible side effects, what to do about them, and when to call the health professional.





## How Can I Help My Baby?

**D**ennis Booker was born with Vater syndrome. He had an imperforate anus, poorly formed vertebrae, and esophageal atresia. Although his twin brother had no physical disabilities, Dennis required immediate surgical intervention and has needed ongoing care and multiple hospitalizations. The Booker family lives in a rural county of 29,000 residents who do not have access to obstetricians, pediatricians, or public health clinics to provide care for mothers and children.

At birth, Dennis was transferred to a children's hospital 130 miles from home. He had numerous surgeries for his various disabilities, including insertion of a gastrostomy tube for feeding. His parents spent most of their time at the hospital learning how to care for him. Dennis is very alert and his responses are characteristic of normally developing infants.

At 3 months of age, Dennis was discharged from the hospital. Church members, friends, and grandparents now help his parents by taking care of Dennis's twin brother and the Bookers' 2-year-old daughter so that

Mrs. Booker can provide care for Dennis and Mr. Booker can return to work. The local physician can provide basic immunizations, screenings, and other preventive services, but the Bookers need to return to the children's hospital frequently to obtain specialized treatment and care coordination services.

Carla Gomez, a local public health nurse, visits the Bookers' home. After several visits, Carla and Mrs. Booker begin to develop a trusting relationship. During one home visit, Mrs. Booker asks how she can help Dennis develop as normally as possible. Carla helps her review the developmental tasks Dennis needs to accomplish and the environmental changes his family can make to help Dennis achieve certain developmental milestones.

Carla refers Dennis's family to regional agencies that provide home-based early intervention services such as physical therapy and occupational therapy. The Bookers learn how to encourage Dennis as he begins to imitate sounds and develop motor skills and coordination. Carla helps the family make videotapes of

Dennis mouthing, reaching, putting his hand to his mouth, and attempting to sit. The tapes help the physician at the children's hospital assess the range of Dennis's skills and determine additional referrals as needed. The Bookers also discuss ways they can help Dennis learn to feed himself after the gastrostomy tube is removed.

Carla also helps the family find financial assistance and specialized child care services, and refers the Bookers to state programs that provide assistance for families of children with special health care needs. Through her public health training and home visiting support, Carla is able to help both Dennis and his family learn strategies to improve their health.

## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Continue to use a rear-facing infant safety seat that is properly secured in the back seat of the car each time.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Continue to put your baby to sleep on his back or side; remind relatives and child care providers to do the same. For healthy babies, back sleeping is preferred and reduces the risk of sudden infant death syndrome (SIDS).<sup>5</sup>

Do not use soft bedding (blankets, quilts, pillows), soft toys, or toys with loops or string cords.

Continue to keep your baby's environment free of smoke. Keep your home and car nonsmoking zones.

Keep your baby out of chronically moldy, water-damaged environments.<sup>9</sup>

Never leave your baby alone or with a young sibling or a pet.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby, especially as he begins to roll over.

Wash your hands and your baby's hands, especially after diaper changes and before feedings. Clean your baby's toys with soap and water.

Do not drink hot liquids or smoke while holding your baby.

Continue to keep your baby out of direct sunlight.<sup>8</sup>

Never, never shake your baby. Be aware of the damage shaking can cause.

Keep toys with small parts or other small or sharp objects out of reach.

Keep all poisonous substances, medicines, cleaning agents, health and beauty aids, and paints and paint solvents locked in a safe place out of your baby's sight and reach.

Check your home for lead poisoning hazards (e.g., chipped lead paint, lead dust, lead water pipes, poorly glazed pottery).

Keep sharp objects (e.g., scissors, knives) out of reach.

Do not give your baby plastic bags or latex balloons.

Use safety locks on cabinets.

Do not put your baby in an infant walker at any age.

Contact your health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash or purplish spots
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration

## Nutrition

Continue to breastfeed or to use iron-fortified formula for the first year of your baby's life. This milk will continue to be his major source of nutrition.

Give your baby an iron supplement if you are breastfeeding exclusively.

Begin introducing solid foods with a spoon when your baby is developmentally ready.

Wait 1 week or more before offering each new food to see if there are any adverse reactions. Start with an iron-fortified, single-grain cereal such as rice. Gradually increase the variety of foods offered, starting with puréed vegetables and fruits and then meats.

Always supervise your baby carefully while he is eating.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D-deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

Be sure that your caregiver is feeding your baby appropriately.

Avoid feeding solid food directly from a jar. Discard any milk or jarred foods when your baby has finished eating.

Do not warm expressed breastmilk, formula, or food in containers or jars in a microwave oven.

## Oral Health

Do not put your baby to bed with a bottle containing juice, milk, or other sugary liquid, prop the bottle in his mouth, or allow drinking from a bottle at will during the day.

If teething, your baby may have a fever, drool, become fussy, or mouth objects. A cold teething ring may help ease mild discomfort. Consult the health professional if symptoms persist.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

## Promotion of Parent-Infant Interaction

Nurture your baby by holding, cuddling, and rocking him, and by talking and singing to him.

Encourage your baby's vocalizations. Talk to him during dressing, bathing, feeding, playing, and walking.

Read to your baby. Play music and sing to him.

Play games such as pat-a-cake, peek-a-boo, so-big.

Encourage play with age-appropriate toys.

Establish a bedtime routine and other habits to discourage night waking.

Encourage your baby to learn to console himself by putting him to bed awake.

Begin to help your baby learn self-consoling techniques by providing him with the same transitional object—such as a stuffed animal, blanket, or favorite toy—at bedtime or in new situations.

Talk with the health professional about your baby's temperament and how you are dealing with it.

## Promotion of Constructive Family Relationships and Parental Health

Talk with the health professional about child care arrangements, and your feelings about leaving your baby if you are returning to work.

Take some time for yourself and spend some individual time with your partner.

Keep in contact with friends and family members. Avoid social isolation.

Choose babysitters and caregivers who are mature, trained, responsible, and recommended by someone you trust.

Encourage your partner to participate in the care of the baby.

Continue to meet the needs of other children in the family, appropriately engaging them in the care of the baby.

## Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed.

Consider attending parent education classes and/or parent support groups.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.





*The major developmental markers of a 6-month-old are social and emotional. A 6-month-old baby likes to interact with people.*

## SIX MONTH VISIT

Parents cherish their interactions with their social 6-month-old infant, who smiles and babbles back at them but has not yet mastered the ability to move from one place to another. The feelings of attachment between the parents and their child create a secure emotional bond that will help provide stability to the changing family. The major developmental markers of a 6-month-old are social and emotional. A 6-month-old baby likes to interact with people. She increasingly engages in reciprocal and face-to-face play and often initiates these games. From these reciprocal interactions, she develops a sense of trust and self-efficacy. Her distress is less frequent.

The infant is also starting to distinguish between strangers and those with whom she wants to be sociable. She usually prefers interacting with familiar adults. At 7 or 8 months, she may appear to be afraid of new people.

The 6-month-old can sit with support and smiles or babbles with a loving adult. She may have a block or toy in hand. As she watches her hands, she can reach for objects such as cubes and grasp them with her fingers and thumbs. She can transfer objects between her hands and obtain small objects by raking with all fingers. She may also mouth, shake, bang, and drop toys or other objects. The infant's language has moved beyond making

razzing noises to single-consonant babbling. The 6-month-old often produces long strings of vocalizations in play, usually during interactions with adults. She can recognize her own name. She can also stand with help and enjoys bouncing up and down in the standing position. She likes rocking back and forth on her hands and knees, in preparation for crawling forward or backward.

An infant who tends to lie on her back, show little interest in social interaction, avoid eye contact, and smile and vocalize infrequently is indicating either developmental problems or a lack of attention from her parents and other caregivers. She may need more nurturance, increased health supervision, formal developmental assessment, or other interventions.

Over the next few months, as the infant develops an increasing repertoire of motor skills such as rolling over and crawling, parents must be vigilant for falls. The expanding world of the infant must be looked at through her eyes to make exploration as safe as possible. The baby will do more sooner than her parents anticipate. Toys must be sturdy and have no small parts that could be swallowed or inhaled. Baby walkers should never be used at any age. To avoid possible injury, it is never too early to secure safety gates at the top and bottom of stairs and install window locks and guards.

## HEALTH SUPERVISION: 6 MONTHS

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family. Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
  - How are things going in your family?
  - How is Rosa doing?
  - What do you and your partner enjoy most about her?
  - What questions or concerns do you have about Rosa?
  - Have there been any major stresses or changes in your family since your last visit?
  - What are some of Rosa's new achievements?
  - How does Rosa spend her day?
  - How do you know what Rosa wants? Is it easy to tell?
  - Are you breastfeeding Rosa?
  - If not, what type of formula do you use? How often do you feed her? What is the total amount of formula consumed per day?
  - Have you introduced solids? What is Charles eating? Has he had any reactions?
  - Do you put Charles to sleep on his back?
  - Is Charles fastened securely in a rear-facing safety seat in the back seat every time he rides in the car?
  - Do you think that Charles hears all right? Does he turn his head when you walk into the room? Do you think he sees all right?
  - How are you balancing your roles of partner and parent?
  - Do you have a reliable person to care for your baby when you need or want to go out? What are your child care arrangements? Are you satisfied with them?
  - Do you know how to reduce your baby's risk of exposure to lead hazards if you live in an older home or one that has been renovated recently?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?





## Developmental Surveillance and Milestones

### Questions and Possible Responses

■ **Do you have any specific concerns about Katherine’s development or behavior?**

■ **How does Katherine communicate what she wants?**

Demonstrates range of feelings (pleasure, displeasure, sadness)

Vocalizes (babbling, “lala,” “dada”)

Gestures (points, shakes head)

■ **What do you think Katherine understands?**

Own name

Names of family members

Simple phrases (“no-no,” “bye-bye”)

■ **How does Katherine move?**

Sits with support

Rolls over

Creeps, scoots on bottom

■ **How does Katherine act around other people?**

Smiles, laughs, squeals

Responsive or withdrawn with family members

Outgoing or cautious with strangers

■ **Tell me about Katherine’s typical play.**

Mouths objects

Blows bubbles

Imitates a cough or razzing noises

Rakes small objects

Shows interest in toys

Shakes, bangs, throws, and drops objects

### Milestones

Vocalizes single consonants (“dada,” “baba”)

Babbles reciprocally

Rolls over

Has no head lag when pulled to sit

Sits with support

Stands when placed and bears weight

Grasps and mouths objects

Shows differential recognition of parents

Starts to self-feed

Transfers cubes or other small objects from hand to hand

Rakes in small objects

Is interested in toys

Self-comforts

Smiles, laughs, squeals, imitates razzing noise

Turns to sounds

May begin to show signs of stranger anxiety

Usually has first tooth erupt around 6 months of age

## Observation of Parent-Infant Interaction

Are the parent and infant interested in and responsive to each other (e.g., gazing, talking, and playing)? How does the parent attend to the baby when she is being examined? How does the parent comfort the baby when she cries?

## Physical Examination

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be noted particularly:

- Tooth eruption
- Problems with tendon reflexes, muscle tone, or use of extremities
- Developmental hip dysplasia
- Evidence of possible neglect or abuse

## Additional Screening Procedures

**Vision:** Examine eyes; assess ability to fix and follow with each eye, alternate occlusion, corneal light reflex, red reflex, strabismus.

**Hearing:** Conduct or arrange for initial hearing screening if not previously done, with follow-up screening, evaluation, and referral as needed (see Appendix D).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Be sure that immunizations are up to date. Discuss possible side effects, what to do about them, and when to call the health professional.



## We Are Exhausted!

**A**t the 6 month health supervision visit, Mrs. Leon tells her doctor that both she and her husband are exhausted because their daughter Maria awakens four times a night. Mr. and Mrs. Leon are happily married and share the care of their daughter. However, they have become short-tempered with each other due to lack of sleep. Mr. Leon, who is finding it difficult to perform his job responsibilities because of fatigue, has begun sleeping in the living room so that he will not be disturbed when Maria awakens during the night.

Dr. Ramirez, who has cared for Maria since her birth, again examines her and finds no evidence of feeding problems or other behavioral or developmental concerns. Maria is a happy, healthy baby who now sits, crawls, laughs, and babbles some syllables.

Dr. Ramirez asks about Maria's bedtime pattern. Mrs. Leon responds that she usually feeds Maria until she falls asleep, then places her in the crib.

Dr. Ramirez explains that when infants reach a period of

light sleep and wake up, they may not be able to go back to sleep unless they experience the same conditions that were present when they first fell asleep. So, when Maria wakes up, she needs (expects) to be held and rocked until she falls asleep again.

Dr. Ramirez advises Mrs. Leon to continue to hold and feed Maria before bedtime, but to put her to bed before she falls asleep completely. That way, if Maria does wake up during the night, she will awaken in the same place where she fell asleep. This association will help her return to sleep.

Dr. Ramirez asks Mrs. Leon to call in a week to discuss how the new strategy worked. The following week, Mrs. Leon calls to report that during the first 4 days there was no change. "Then Maria started to sleep longer and awaken less at night. My husband no longer sleeps in the living room, and we both feel a lot more rested and relaxed."

She thanks the doctor for explaining the link between Maria's bedtime ritual and her night waking, and for providing an effective strategy to solve the problem.

*When infants reach a period of light sleep and wake up, they may not be able to go back to sleep unless they experience the same conditions that were present when they first fell asleep.*



## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Continue to use a rear-facing safety seat properly secured in the back seat of the car each time. If using an infant-only safety seat, switch to a rear-facing convertible safety seat intended for babies up to 40 pounds (18 kg) when your baby weighs 20 to 30 pounds (9 to 13 kg) or is 26 inches (66 cm) long.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Continue to put your baby to sleep on her back or side<sup>5</sup> and avoid the use of soft bedding.

If you use a mesh playpen or portable crib, the weave should have small openings less than 1/4 inch (6 mm). Never leave your baby in a mesh playpen or crib with the drop-side down.

Get down on the floor and check for hazards at baby's eye level.

Never leave your baby alone or with a young sibling or a pet.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby to prevent her from falling.

Wash your hands and your baby's hands, especially after diaper changes and before feedings. Clean your baby's toys with soap and water.

Continue to keep your baby's environment free of smoke. Keep your home and car nonsmoking zones.

Empty buckets, tubs, or small pools immediately after use. Be sure that swimming pools have a four-sided fence with a self-closing, self-latching gate.

Do not drink hot liquids or smoke while holding your baby.

Limit time spent in the sun. Put sunscreen (SPF 15 or higher) on your baby. Use a broad-brimmed hat to shade your baby's ears, nose, and lips.<sup>8</sup>

Never, never shake your baby.

Do not leave heavy objects or containers of hot liquids on tables with tablecloths that your baby might pull down.

Keep toys with small parts or other small or sharp objects out of reach.

Keep sharp objects (e.g., scissors, knives) out of reach.

Keep all poisonous substances, medicines, cleaning agents, health and beauty aids, and paints and paint solvents locked in a safe place out of your baby's sight and reach. Never store poisonous substances in empty jars or soda bottles.

Check your home for lead poisoning hazards (e.g., chipped lead paint, lead dust, lead water pipes, poorly glazed pottery).

Keep the number of your local poison control center near the telephone, and call immediately if there is a poisoning emergency. Check with the poison control center about keeping ipecac syrup and/or activated charcoal in your home, to be used only as directed by the poison control center or the health professional.

Lower the mattress in your baby's crib.

Do not give your baby plastic bags or latex balloons.

Install safety devices on drawers and cabinets in your baby's play areas.

Install gates at the top and bottom of stairs, and place safety locks and guards on windows.

Remove dangling telephone, electrical, blind, or drapery cords near your baby's crib or play areas.

Keep small appliances out of your baby's reach. Place plastic plugs in electrical sockets.

Keep pet food and dishes out of reach. Do not permit your baby to approach the dog or other pets while they are eating.

Do not put your baby in an infant walker at any age.

Contact the health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash, purplish spots, or petechiae
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration
- Cough

### Nutrition

Continue to breastfeed or to use iron-fortified formula for the first year of your baby's life. This milk will continue to be a major source of nutrition.

Give an iron supplement to your baby if you are breastfeeding exclusively.

Begin to introduce a cup for water or juice.

Limit juice to 2 to 4 ounces per day.

When your baby is developmentally ready, introduce one new solid food at a time. Wait 1 week or more before offering each new food to see if there are any adverse reactions. Start with an iron-fortified, single-grain cereal such as rice. Gradually increase the variety of foods offered, starting with puréed vegetables and fruits and then meats.

Serve solid food two or three times per day. Let your baby indicate when and how much she wants to eat.

Avoid giving your baby foods that may be inhaled or cause choking (e.g., no peanuts, popcorn, hot dogs or sausages, carrot sticks, celery sticks, whole grapes, raisins, corn, whole beans, hard candy, large pieces of raw vegetables or fruit, tough meat).

Always supervise your baby while she is eating. Learn emergency procedures for choking.

Talk with the health professional about giving your breastfed baby a daily supplement of vitamin D if you are vitamin D-deficient or if your baby does not receive adequate exposure to (indirect) sunlight.<sup>4</sup>

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

Expect a difference in the consistency and frequency of your baby's bowel movements when changing from breastmilk to formula or introducing new foods.

Be sure that your caregiver is feeding your baby appropriately.

### Oral Health

Do not put your baby to bed with a bottle containing juice, milk, or other sugary liquid, prop the bottle in her mouth, or allow drinking from a bottle at will during the day.

Clean your baby's gums and teeth daily. Use a clean, moist washcloth to wipe the gums. Use a soft toothbrush to clean the teeth with water only, beginning with the eruption of her first tooth.

Give your baby fluoride supplements as recommended by your dentist, based on the level of fluoride in your baby's drinking water.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

### Promotion of Parent-Infant Interaction

Encourage your baby's vocalizations. Talk to her during dressing, bathing, feeding, playing, and walking.

Read to your baby. Play music and sing to her.

Play games such as pat-a-cake, peek-a-boo, so-big.

Provide opportunities for safe exploration.

Continue to provide regular structure and routines for your baby to increase her sense of security.

Establish a bedtime routine and other habits to discourage night waking.

Encourage your baby to learn to console herself by putting her to bed awake.

Consistently provide your baby with the same transitional object—such as a stuffed animal, blanket, or favorite toy—so that she can console herself at bedtime or in new situations.

Encourage play with age-appropriate toys.

Talk with the health professional about any problems your baby is having with separation anxiety.

### Promotion of Constructive Family Relationships and Parental Health

Take some time for yourself and spend some individual time with your partner.

Keep in contact with friends and family members. Avoid social isolation.

Choose babysitters and caregivers who are mature, trained, responsible, and recommended by someone you trust.

Continue to meet the needs of other children in the family, appropriately engaging them in the care of the baby.

Talk with the health professional about your child care arrangements and working hours. Discuss ways to make time for close interaction with your baby, and your own concerns about fatigue.

Discuss family planning with your partner and the health professional.

If you are thinking about having another baby in the next year or so, talk with the health professional about taking folic acid supplements.<sup>1</sup>

### Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed.

Consider attending parent education classes and/or parent support groups.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.





*No longer content to be held, cuddled, and coddled,  
the baby will now wiggle, want to be put down,  
and may even crawl away.*



## NINE MONTH VISIT

**T**he 9-month-old has made some striking developmental gains, displaying ever-increasing independence. He is more mobile and will express explicit opinions about everything, from the foods he eats to his bedtime. These opinions will often take the form of protests. The baby has also gained a sense of “object permanence”: He understands that an object or person—such as a parent—exists in spite of not being visible at the moment. He is not yet confident, however, that the object or person will reappear.

The 9-month-old will exhibit many behaviors indicating his insecurity with the world in general. His protests when a parent leaves signal his attachment and his fears. This same insecurity may lead to night waking. Until this age, the baby was waking during his normal sleep cycle but usually fell back to sleep. Now when he awakes, he realizes that he is in a dark room, without his parents. This realization generally leads to distressed crying, a behavior that causes difficulties for parents.

The parents’ world has also changed dramatically. The infant’s increasing activity—and increasing protests—necessitate setting limits. The

parents must decide when it is important to say no. This requires self-esteem, responsibility in their role as parents, and a great deal of energy. Parents may also view their infant’s growing independence with a sense of loss. No longer content to be held, cuddled, and coddled, the baby will now wiggle, want to be put down, and may even crawl away. He will say no in his own way, from closing his mouth and shaking his head when a parent wants to feed him to screaming when he finds himself alone.

Good parenting—which previously meant meeting the basic responsibilities associated with infant care, such as nurturing and feeding the baby—requires increasingly complex skills. As the baby’s first birthday approaches, the parents’ attitudes and expectations, based in part on their own early childhood experiences, will become a significant factor. At the 9-month visit, it is important for the health professional to assess the parents’ attitudes and abilities to cope with their child’s growing independence and protests. The health professional should also provide the parents with some basic skills and resources for making decisions about methods of managing their child’s behavior.

## HEALTH SUPERVISION: 9 MONTHS

The following questions are intended to be used selectively to invite discussion, to gather information, to address the needs and concerns of the family, and to build partnerships. Use of the questions will vary from visit to visit and from family to family. Questions can be modified to match the health professional's communication style.

### Questions for the Parent(s)

- How are you?
  - How are things going in your family?
  - What questions or concerns do you have today?
  - Tell me about Jamil. What do you find most rewarding about him?
  - What are some of his new achievements?
  - Have there been any major stresses or changes in your family since your last visit?
  - What is Jamil eating? Does he eat anything that is not food (e.g., clay, dirt, paint chips)?
  - Does Jamil wake up during the night?
  - Do you put Jamil to sleep on his back?
  - Is Jamil fastened securely in a rear-facing safety seat in the back seat every time he rides in the car?
  - Do you think that Jamil hears all right? Sees all right?
  - Now that Jamil can move on his own more, what changes have you made in your home to ensure his safety?
  - How does it feel to have Jamil becoming more independent?
  - What are your thoughts about discipline?
  - Do you have some time for yourself?
  - Do you have someone to turn to when you need help caring for Sara?
  - Do you have child care? How is it going?
  - Do you know how to reduce your baby's risk of exposure to lead hazards if you live in an older home or one that has been renovated recently?
  - Does Sara play in any place where there is peeling or chipped paint? Do you know if she has any other exposure to lead? Are any of Sara's siblings or playmates being treated for lead poisoning?
  - Do you feel safe in your neighborhood?
  - What would you do in case of an emergency?
  - Does anyone in your home have a gun? If so, is the gun unloaded and locked up? Where is the ammunition stored?
- Have you considered not owning a gun because of the danger to children and other family members?



## Developmental Surveillance and Milestones

### Questions and Possible Responses

- **Do you have any specific concerns about Alan’s development or behavior?**
- **How does Alan communicate what he wants?**  
 Vocalizes (babbling, “dada,” “mama”)  
 Gestures (points, shakes head)
- **What do you think Alan understands?**  
 Own name  
 Names of family members  
 Simple phrases (“no-no,” “bye-bye”)
- **How does Alan move?**  
 Creeps, scoots on bottom  
 Crawls  
 Pulls to stand  
 Cruises (walks by holding onto furniture)  
 Walks
- **How does Alan act around other people?**  
 Responsive or withdrawn with family members  
 Anxious when separated from parents  
 Outgoing or cautious with strangers  
 Plays social games such as peek-a-boo and pat-a-cake
- **Tell me about Alan’s typical play.**  
 Mouths objects  
 Pokes with index finger  
 Shakes, bangs, throws, and drops objects  
 Imitates sounds, movements

### Milestones

- Responds to own name
- Understands a few words such as “no-no” and “bye-bye”
- Babbles, imitates vocalizations
- May say “dada” or “mama” nonspecifically
- Crawls, creeps, moves forward by scooting on bottom
- Sits independently
- May pull to stand
- Uses inferior pincer grasp
- Pokes with index finger
- Shakes, bangs, throws, and drops objects
- Plays interactive games such as peek-a-boo and pat-a-cake
- Feeds self with fingers
- Starts to drink from cup
- Sleeps through the night but may awaken and cry
- May show anxiety with strangers
- Usually has first tooth erupt around 6 months of age

## Observation of Parent-Infant Interaction

Are the parent and infant interested in and responsive to each other (e.g., sharing vocalizations, smiles, and facial expressions)? Does the parent respond supportively to the infant's autonomy or independent behavior as long as it is not dangerous?

## Physical Examination

Measure the infant's length, weight, and head circumference. Plot these on the CDC growth charts (see Appendix C and the back pocket of this publication). Share the information with the family.

As part of the complete physical examination, the following should be noted particularly:

- Tooth eruption
- Parachute reflex to check for hemiparesis
- Cardiac murmurs
- Developmental hip dysplasia
- Neurologic problems
- Evidence of possible neglect or abuse

## Additional Screening Procedures

**Vision:** Examine eyes; assess ability to fix and follow with each eye, alternate occlusion, corneal light reflex, red reflex, strabismus.

**Hearing:** Conduct or arrange for initial hearing screening if not previously done, with follow-up screening, evaluation, and referral as needed (see Appendix D).

**Lead exposure:** Assess risk of lead exposure and screen as needed (see Appendix G).

**Anemia:** Screen for anemia (see Appendix F).

## Immunizations

Please see Appendix C and refer to the current recommended childhood immunization schedule in the back pocket of this publication.

Be sure that immunizations are up to date. Discuss possible side effects, what to do about them, and when to call the health professional.



## My Baby Has Become a Handful

When Ms. Barton brings in her 9-month-old daughter, Abby, for health supervision, she has no specific complaints. The results of Abby's physical examination are normal, but her weight for age has dropped from the 40th to the 25th percentile.

"I really try to feed Abby, but she can be pretty hardheaded," Ms. Barton admits. Dr. King notices that Abby's mother seems tired and a little depressed. When the doctor questions her further, Ms. Barton replies, "Abby has started waking in the middle of the night. During the day she crawls around and gets into everything. She was so easy before, but now I can't seem to keep up with her."

Dr. King discusses Abby's increasing mobility and emerging independence. "Many babies her age are hard to feed," Dr. King says reassuringly. "Try not to worry about it. And it's normal—even healthy—for Abby to get into everything."

Dr. King acknowledges that these behaviors can be difficult for a parent to handle and suggests strategies to manage

them. She schedules a follow-up visit in 1 week.

When Abby's mother returns the following week, she still seems depressed. She tells the doctor that because her husband has been working extra hours, he spends time with Abby only on Sundays and feels bad about it. She also indicates that her husband's parents seem to be around a lot of the time: "My husband's mother helps care for Abby, but she is always telling me how to handle her."

Dr. King empathizes with Ms. Barton about her difficult situation. "I don't have a simple solution for you, but I think if we work together on finding you more support, we can make your situation a lot better."

Dr. King refers Ms. Barton to a weekly parent support group that offers child care, and suggests that both she and her husband plan to bring Abby in for her next health supervision visit. The doctor also gives Abby's mother some booklets on infant development and on coping strategies for new mothers.

The doctor asks Ms. Barton to call again in 3 weeks. When

Abby's mother calls back, she sounds more depressed and acknowledges that she is not feeling any better. So Dr. King refers her for further evaluation and for possible counseling.

At the 1 year visit, Ms. Barton returns with a twinkle in her eye. She reports that she is feeling much better. She can't wait to tell Dr. King that Abby is walking all over the place!



## ANTICIPATORY GUIDANCE FOR THE FAMILY

In addition to providing anticipatory guidance, many health professionals give families handouts at an appropriate reading level or a videotape that they can review or study at home.

### Promotion of Healthy and Safe Habits

#### Injury and Illness Prevention

Continue to use a rear-facing safety seat properly secured in the back seat of the car each time. If using an infant-only safety seat, switch to a rear-facing convertible safety seat intended for babies up to 40 pounds (18 kg) when your baby weighs 20 to 30 pounds (9 to 13 kg) or is 26 inches (66 cm) long.

Never place your baby's safety seat in the front seat of a vehicle with a passenger air bag. The back seat is the safest place for children of any age to ride.

Continue to put your baby to sleep on his back or side<sup>5</sup> and avoid the use of soft bedding.

If you use a mesh playpen or portable crib, the weave should have small openings less than 1/4 inch (6 mm). Never leave your baby in a mesh playpen or crib with the drop-side down.

Get down on the floor and check for hazards at baby's eye level.

Never leave your baby alone or with a young sibling or a pet.

Test the water temperature with your wrist to make sure it is not hot before bathing your baby.

Do not leave your baby alone in a tub of water or on high places such as changing tables, beds, sofas, or chairs. Always keep one hand on your baby to prevent him from falling.

Wash your hands and your baby's hands, especially after diaper changes and before feedings. Clean your baby's toys with soap and water.

Empty buckets, tubs, or small pools immediately after use. Be sure that swimming pools have a four-sided fence with a self-closing, self-latching gate.

Continue to keep your baby's environment free of smoke. Keep your home and car nonsmoking zones.

Do not drink hot liquids or smoke while holding your baby.

Limit time spent in the sun. Put sunscreen (SPF 15 or higher) on your baby. Use a broad-brimmed hat to shade your baby's ears, nose, and lips.<sup>8</sup>

Never, never shake your baby.

Do not leave heavy objects or containers of hot liquids on tables with tablecloths that your baby might pull down.

Keep toys with small parts or other small or sharp objects out of reach.

Keep sharp objects (e.g., scissors, knives) out of reach.

Keep all poisonous substances, medicines, cleaning agents, health and beauty aids, and paints and paint solvents locked in a safe place out of your baby's sight and reach. Never store poisonous substances in empty jars or soda bottles.

Keep the number of your local poison control center near the telephone, and call immediately if there is a poisoning emergency. Check with the poison control center about keeping ipecac syrup and/or activated charcoal in your home, to be used only as directed by the poison control center or the health professional.

Do not give your baby plastic bags or latex balloons.

Install safety devices on drawers and cabinets in your baby's play areas.

Install gates at the top and bottom of stairs, and place safety locks and guards on windows.

Lower the mattress in your baby's crib.

Remove dangling telephone, electrical, blind, or drapery cords near your baby's crib or play areas.

Keep small appliances out of your baby's reach. Place plastic plugs in electrical sockets.

Keep pet food and dishes out of reach. Do not permit your baby to approach the dog or other pets while they are eating.

Do not put your baby in an infant walker at any age.

Learn first aid and child cardiopulmonary resuscitation (CPR).

Contact the health professional to assess early signs of illness:

- Fever of 100.4°F/38.0°C or higher (rectal temperature)
- Seizure
- Skin rash, purplish spots, or petechiae
- Any change in activity or behavior that makes you uncomfortable
- Unusual irritability, lethargy
- Failure to eat
- Vomiting
- Diarrhea
- Dehydration
- Cough

Review emergency procedures:

- When to call the health professional
- When to go to the emergency department

Ask your child care provider about procedures for handling an emergency in the child care setting.

## Nutrition

Gradually increase the variety and amount of table foods offered to your baby. The foods should be soft, moist, and easy to eat (e.g., tuna fish; cooked, mashed vegetables; spaghetti and sauce).

Encourage your baby to feed himself as much as possible.

Continue to offer your baby drinks in a cup.

Avoid giving your baby foods that could be inhaled or cause choking (e.g., no peanuts, popcorn, hot dogs or sausages, carrot or celery sticks, whole grapes, raisins, corn, whole beans, hard candy, large pieces of raw vegetables or fruit, or tough meat).

Supervise your baby carefully while he is eating.

Continue to breastfeed or to use iron-fortified formula for the first year of your baby's life.

Do not give your baby honey during the first year. It is a source of spores that can cause botulism in infancy.

## Oral Health

Do not put your baby to bed with a bottle containing juice, milk, or other sugary liquid, prop the bottle in his mouth, or allow drinking from a bottle at will during the day.

Encourage drinking from a cup.

Clean your baby's gums and teeth daily. Use a clean, moist washcloth to wipe the gums. Use a soft toothbrush to clean the teeth with water only, beginning with the eruption of her first tooth.

Give your baby fluoride supplements as recommended by your dentist, based on the level of fluoride in your baby's drinking water.

Bacteria that cause early childhood caries (baby bottle tooth decay) can be passed on to your baby through your saliva. To protect your baby's teeth and prevent decay, practice good family oral health habits (e.g., brushing, flossing).<sup>7</sup>

### Promotion of Parent-Infant Interaction

Talk with the health professional about your baby's temperament and how the family is adapting to it.

Encourage your baby's vocalizations. Talk to him during dressing, bathing, feeding, playing, and walking.

Play games such as pat-a-cake, peek-a-boo, and so-big.

Read to your baby. Give him cloth and hard cardboard picture books.

Play music and sing songs with your baby.

Provide opportunities for safe exploration.

Establish simple rules (e.g., "don't touch") and set limits by using distraction or separating your baby from the object or stimulus.

Establish a bedtime routine and other habits to discourage night waking.

Encourage your baby to learn to console himself by putting him to bed awake.

Consistently provide your baby with the same transitional object—such as a stuffed animal, blanket, or favorite toy—so that he can console himself at bedtime or in new situations.

### Promotion of Constructive Family Relationships and Parental Health

Talk with the health professional about the siblings' reactions to the baby's explorations.

Take some time for yourself and spend some individual time with your partner.

Choose babysitters and caregivers who are mature, trained, responsible, and recommended by someone you trust.

Encourage your partner's involvement in health supervision visits and infant care.

Keep in contact with friends and family members. Avoid social isolation.

Continue to meet the developmental needs of other children in the family, appropriately engaging them in the care of the baby.

Talk with the health professional about your child care arrangements and working hours. Discuss ways to make time for close interaction with your baby, and your own concerns about fatigue.

If you are thinking about having another baby in the next year or so, talk with the health professional about taking folic acid supplements.<sup>1</sup>

### Promotion of Community Interactions

If you need financial assistance to help pay for health care expenses, ask about resources or referrals to the state Medicaid programs or other state medical assistance and health insurance programs.

Ask about resources or referrals for food or nutrition assistance (e.g., Commodity Supplemental Food Program, Food Stamp Program, Head Start, WIC), housing, or transportation if needed.

Consider attending parent education and/or parent support groups.

Maintain or expand ties to your community through social, religious, cultural, volunteer, and recreational organizations or programs.



## BUILDING PARTNERSHIPS DURING INFANCY

### WHAT ELSE SHOULD WE TALK ABOUT?

#### Summarize Findings at the End of Each Visit

- Emphasize strengths. Underscore the infant's achievements and progress in development, the increasing competence of the parents, and how well they are all doing. Compliment the parents on their efforts to care for their baby and on their ability to recognize and respond to their baby's needs. Give them suggestions, reading materials, and resources to promote health and reinforce good health practices.

#### Arrange Continuing Care

##### Before the Next Visit

- Give the parents materials to help them prepare for the next health supervision visit.
- Recommend that the parents make an appointment for the next regularly scheduled visit.
- If indicated, ask the parents to make an appointment for a supplementary health supervision visit.

##### Other Care

- Be sure that the parents make an appointment to return to the health facility for follow-up on problems identified during the health supervision visit, or refer the infant for secondary or tertiary medical care.
- Refer the family to appropriate community resources for help with concerns identified during the visit (e.g., parenting classes, parent-infant groups, marital or financial counseling, mental health services, early intervention programs, adult education programs). Make arrangements to follow up on referrals and coordinate care.
- Encourage reading by giving the child a cloth or hard cardboard book.

## Infancy Endnotes

*For additional information, see the list of resource materials on infancy in the Bibliography (Appendix N).*

1. To minimize the risk of giving birth to a baby with a neural tube defect, women of childbearing age should consume 400 µg/day of folic acid before pregnancy and 600 µg/day during pregnancy. Vitamin supplementation is the most reliable way to ensure adequate amounts of folic acid.

Centers for Disease Control and Prevention. Preventing neural tube birth defects: A prevention model and resource guide. In Centers for Disease Control and Prevention [Web site]. Cited November 1, 1999; available at <http://www.cdc.gov/nceh/prevent/flontd/prefaceaboutfol.htm>.

Institute of Medicine. 1998. Update for *Nutrition During Pregnancy and Lactation: An Implementation Guide*. Arlington, VA: National Center for Education in Maternal and Child Health.

2. U.S. Department of Health and Human Services, Public Health Service Expert Panel on the Content of Prenatal Care. 1989. *Caring for Our Future: The Content of Prenatal Care—A Report of the Public Health Service Expert on the Content of Prenatal Care*. Washington, DC: U.S. Department of Health and Human Services.
3. Centers for Disease Control and Prevention, National Center for Health Statistics. 1999. Infant mortality statistics from the 1997 period linked birth/infant death data set. *National Vital Statistics Reports* 47(23):1–24.
4. American Academy of Pediatrics, Work Group on Breastfeeding. 1997. Breastfeeding and the use of human milk. *Pediatrics* 100(6):1035–1039.
5. Placing infants to sleep on their back is best for healthy infants through the first year of life and significantly reduces the risk of sudden infant death syndrome (SIDS). Placing infants on their side also lowers the risk of SIDS. However, if infants are placed on their side to sleep, the lower arm should be brought forward to help prevent them from rolling over onto the stomach.

National Institutes of Health, National Institute of Child Health and Human Development. 1997, April. *Sudden Infant Death Syndrome* [brochure/pamphlet]. Bethesda, MD: National Institutes of Health, National Institute of Child Health and Human Development.

6. Eliot L. 1999. *What's Going On in There? How the Brain and Mind Develop in the First Five Years of Life*. New York, NY: Bantam Books.

Newberger JJ. 1997. New brain development research—A wonderful window of opportunity to build public support for early childhood education! *Young Children* 52(4):4–9.

Washington University, and Parents as Teachers National Center. 1998. *Good Beginnings for All Children: From Brain Research to Action*. St. Louis, MO: Parents as Teachers National Center.

7. The following steps are recommended to reduce the risk of early childhood caries (also known as baby bottle tooth decay):
  - Never put the child to bed with a bottle containing milk, juice, or other sugary liquid
  - If the child has difficulty falling asleep, try comfort measures (a backrub, holding or rocking, a stuffed animal), or use a bottle filled with water
  - Encourage the child to use a tippy cup or small cup by 12 months
  - Clean the child's teeth daily from the time the first tooth erupts
  - Be sure the child receives a first oral health visit by 12 months
  - Urge family members to practice good oral hygiene so additional bacteria are not passed to the child

Clark M, Holt K, eds. 1998. *Early Childhood Caries Resource Guide*. Arlington, VA: National Center for Education in Maternal and Child Health.

*For additional information, see the following sources:*

Tinanoff N, ed. 1998. Proceedings: Conference on Early Childhood Caries, Bethesda, Maryland, USA, October 1997. *Community Dentistry and Oral Epidemiology* 26(Suppl. 1).

Tinanoff N, O'Sullivan DM. 1997. Early childhood caries: Overview and recent findings. *Pediatric Dentistry* 19(1):12–16.

8. Keep infants out of direct sunlight, and ensure full shade with carriage hoods, canopies, and umbrellas. In general, do not use sunscreen on infants younger than 6 months. In situations where the infant's skin is not protected adequately by clothing, it may be reasonable to apply sunscreen to small areas, such as the face and back of the hands.

*For additional information, see the following:*

American Academy of Pediatrics. 1999. *Fun in the Sun: Keep Your Baby Safe* [Web site]. Cited May 25, 1999; available at <http://www.aap.org/family/mnbroc.cfm>.

9. American Academy of Pediatrics, Committee on Environmental Health. 1998. Toxic effects of indoor molds. *Pediatrics* 101(4):712–714.
10. American Academy of Pediatrics, Committee on Infectious Diseases. 1997. *1997 Red Book: Report of the Committee on Infectious Diseases* (24th ed., p. 548). Elk Grove Village, IL: American Academy of Pediatrics.

Centers for Disease Control and Prevention. TB facts for health care workers. In Centers for Disease Control and Prevention [Web site]. Cited June 16, 1999; available at <http://www.cdc.gov/nchstp/tb/faqs/tbfacts/tbfacts.htm>.