



Baby Care

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Warning Signs to Report to Your Baby's Physician

- Any under-the-arm (axillary) temperature above 100.4° F or below 97.7° F.
- Any yellow or yellow-green discharge from the eye.
- Concerns about jaundice. *(Your baby will be checked for jaundice at your Postpartum Care Center clinic appointment. If you do not have an appointment or you have continuing concerns, notify your baby's physician.)*
- Concerns about the circumcision, including bright red bleeding *(more than a spot)*, swelling, foul discharge, or inability to urinate.
- Concerns about the cord, including bright red bleeding *(more than a spot)* or a foul odor to the cord.
- If your infant's behavior changes and he/she is very lethargic or listless.

Call the **Breastfeeding Center at 425.899.3494** if your newborn infant feeds fewer than seven or eight times in 24 hours, does not have a bowel movement in 24 hours, or has fewer wet diapers than he is days old.
(For instance, we expect that a 3-day-old infant will have three wet diapers.)
By the time your milk is in, we expect six to eight wet diapers in 24 hours.

EVERGREEN HOSPITAL MEDICAL CENTER
Women's & Children's Services

Evergreen: A Baby-Friendly Hospital

We are proud that Evergreen Hospital Medical Center was the first hospital in the United States to be designated as a "Baby-Friendly Hospital." To gain this accreditation, our breastfeeding procedures were observed and assessed by a team of experts to prove that we meet all of the required standards in the "Ten Steps to Successful Breastfeeding."

Evergreen is featured in a documentary video that showcases family-centered care and breastfeeding support. We are honored to be used as a model to show other hospitals how to provide such care.



The Baby-Friendly Hospital Initiative is a global program created by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO). The program recognizes hospitals and birthing centers that offer excellent education programs and breastfeeding care, like those offered at Evergreen.

Evergreen's staff of Internationally Board Certified Lactation Consultants would be delighted to answer any questions about infant feeding, the Baby-Friendly Hospital Initiative, or the Ten Steps to Successful Breastfeeding. Call the Breastfeeding Center at **425.899.3494**.

Normal Newborn Care



Questions usually arise when you are at home with your baby. The following observations and suggestions may be helpful to you. Your physician and the Family Maternity Center staff welcome your questions at any time. Remember, however, that your love and instinctive, good common sense will get you through most situations.

Questions

When Do I Call for Advice or Help? This is a question new parents frequently ask. When your baby is new, the answer is to call whenever you find yourself worried. In time, you learn to trust your feelings and will know when things are not right with your baby. The nursing and physician staff welcome your questions. Please call your baby's physician. You may also call the Evergreen Healthline at **425.899.3000**, 24 hours a day, seven days a week.

INFANT FEEDING

This section will explore important aspects of breast and formula feeding. At Evergreen we want you to know your choice about how to feed your baby will be supported and respected. We hope you will learn as much as you can about infant feeding and the many health advantages that breastfeeding offers you and your baby. Many factors will influence your decision—your family's way of doing things, your partner's feelings, your lifestyle, how your close friends feed their babies, your own feelings about your body, your work commitments, your feelings about mothering and how much support you will receive. If you decide you do not wish to breastfeed, we will help you learn all of the important aspects of safely preparing and feeding infant formula. If you are on the fence with your decision, you might try breastfeeding. It is easier to stop nursing than to wish later that you had started! This priceless opportunity to nurse this baby comes only once.

BREASTFEEDING

Nursing your baby can be one of your greatest pleasures and memories of your mothering experience. You may have many questions and concerns. It is true, it can sometimes be challenging at first. If you get the help and support you need, you will be among the millions of women who look back on this time as one of the most wonderful and fulfilling experiences they've had.

- Breastmilk contains hundreds of nutrients, growth factors, hormones, and antibodies. Breastmilk is the perfect food for human infants as it contains everything an infant needs to grow well and stay healthy.
- Exclusive breastfeeding is recommended until table foods are started at 6 months. Once table foods are begun, it is recommended that mothers continue to breastfeed for a year or longer for the research-based benefits for baby and for mother. The benefits of breastfeeding are related to the length of time a baby is breastfed and how exclusively

the baby is breastfed. So the longer a baby is breastfed and the more exclusively a baby is breastfed, the greater the benefits are. Benefits for baby and mother include:

- Lower incidence of respiratory infections and ear infections
- Greatly reduced incidence of diarrhea and vomiting
- Reduced incidence of Sudden Infant Death Syndrome (SIDS)
- Reduced incidence of serious allergies
- Reduced incidence of insulin dependent diabetes mellitus
- Reduced incidence of postmenopausal breast cancer and ovarian cancer
- Reduced incidence of postpartum bleeding
- Reduced incidence of osteoporosis

(For a more complete discussion of the benefits of breastfeeding, see Pregnancy, Childbirth and the Newborn, pages 423-424.)

If you are struggling with your decision about whether or not to breastfeed, or you have specific questions or concerns about infant feeding, call the Breastfeeding Center at **425.899.3494**.

The staff, midwives, and physicians of the Family Maternity Center believe strongly in the benefits of breastfeeding. Breastfeeding experts are available to answer your questions and offer advice. Your nurse has received special training in helping mothers to succeed in breastfeeding and supporting mothers that choose to formula feed. Please ask for help at any time.

Beginning Breastfeeding. Nurse your baby at least eight times in 24 hours. Many babies nurse more often. Allow your baby to nurse as long as she desires. Don't limit the length of feeding. Many babies nurse from only one breast at each feeding in the first few days after birth. If the baby feeds from only one breast, use the alternate breast with the next feeding.

Sleepy Phase. Many babies are sleepy in the first 24 hours or so after birth. Full-term, healthy newborns are born with adequate fluid stores, so supplementation with water or formula is not recommended unless there is a medical problem. If your baby nursed well after delivery, then you can rest assured that when your baby becomes more alert, breastfeeding will continue to go well.

- It is a good idea to awaken your sleepy baby and attempt to nurse every 1 to 3 hours. Some babies awaken easily with gentle stimulation such as unwrapping and a diaper change. Try holding your baby skin-to-skin against your body and express a drop of colostrum into her mouth. If your baby does not awaken after 10 to 15 minutes of trying, put baby skin to skin against your body and try again in an hour or two.

- If your baby does awaken to nurse, you may need to continue with some “gentle” stimulation to keep your baby feeding. Try lifting the baby’s upper arm, stroking legs, feet and head.
- After long periods of sleep, some babies go through a “*marathon nursing phase*” where they want to nurse “all the time” and can’t be put down. This is the way your baby stimulates your body to establish a good milk supply. Allowing your baby to eat as often as she wants is best. If your baby does finally fall asleep during this frequent-feeding phase, you can usually get a break from nursing if your baby is held and cuddled. If you put your baby down, she may soon awaken and want to nurse again. Remember, the more you nurse, the sooner your milk comes in!
- Avoid pacifiers or bottle nipples until baby is nursing reliably. Pacifiers and bottles can lead to breastfeeding problems as your new baby and you learn how to breastfeed.
- Keep a record of your baby’s feedings, wet diapers, and bowel movements. (You can use the form at the end of this section.) Your baby should be having at least one wet diaper per day of life (for example 3 days old = 3 wet diapers) and two to three daily bowel movements. By day six, your baby should have six or more wet diapers and 2 to 10 bowel movements in 24 hours. Bowel movements are the best indication that your baby is getting enough to eat. You no longer need to record this information after the first week unless asked to do so by your baby’s physician or the Breastfeeding Center.
- Attend the hospital Baby Care and Feeding class held every morning and afternoon in the Family Maternity Center.
- Breastfeeding will be assessed again at your Postpartum Care Center visit. Your baby will be weighed then, and you can get help with feeding.

*If you have questions or concerns about how your baby is nursing,
call the Breastfeeding Center at **425.899.3494**.*

Five Tips for Successful Breastfeeding

1. If you encounter any difficulty nursing, ask for help. Problems have solutions.
2. Keep your baby skin-to-skin after birth to ease your baby's transition from womb to the outside world, and put your baby to breast as soon as possible after birth.
3. Continue to nurse your baby every 1 to 3 hours, or any time your baby is awake, has his hands to his mouth, moves his tongue, or turns to a touch of the cheek. This is the language your baby uses to say, "I'm hungry."
4. Use your baby's hunger cues to decide when to nurse—not the clock. An abundant milk supply is related to the frequency and completeness of milk removal from the breast.
5. Wait until feeding is going well before introducing a bottle or pacifier. Early use of bottles and pacifiers often leads to feeding difficulties and early weaning.

The Ten Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk unless medically indicated.
7. Practice rooming-in: allow mothers and infants to remain together 24 hours-a-day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (*also called dummies or soothers to breastfeeding infants*).
10. Foster the establishment of breastfeeding support and refer mothers to them on discharge from the hospital or clinic.



Sore Nipple Treatment

Nipple soreness can be prevented or reduced by making sure your baby is correctly latched onto and positioned at the breast. Still, in spite of good latch and position, sore nipples can still occur. Sore nipples generally heal with time. The following suggestions have been helpful to many mothers. You may need to experiment to see what works best for you.

During Feedings:

- Feed your baby before he/she gets frantic. Pay attention to the more subtle feeding cues, such as sucking on fingers or lips, rooting, or bringing fists to face.
- It might be more comfortable if you begin feeding your baby on the least sore breast.
- Stroke baby's lips with your nipple to encourage a wide open mouth.
- Make sure your baby's mouth is WIDE OPEN (like a yawn), before placing the baby on your breast. Hug your baby in close for the entire feeding with the baby's chest, tummy, and knees against your body in the cradle hold, reverse cradle hold, and side-lying positions. The chin should be touching the breast. A healthy, full-term baby is able to breathe being this close. *Refer to www.breastfeeding.com for video clips of babies latching.*
- With sore nipples, you may want to limit feedings to 15 to 20 minutes per side. Break the suction when removing baby from the breast by placing your clean finger inside baby's mouth until you feel the suction release.

Between Feedings:

- To aid healing, you may want to try some or all of the following:
 - a. Express a drop of your milk onto the nipple and let it dry. Then apply olive oil or a lanolin product like Lansinoh or Pure Lan.
 - b. If there are cracks or the nipple is bleeding, call the Breastfeeding Center at **425.899.3494** for further help. This may indicate a problem with the way the baby is latching.
 - c. Change nursing pads when they become wet. Soft cloth pads are available for purchase from The Baby & Family Boutique at Evergreen (Coral 225).
- Avoid the use of soap directly on the areola.
- Rub a little colostrum or breastmilk on nipples after nursing.
- Use "Soothie" pads, which contain a cool gel that is very soothing to sore nipple skin (available in The Baby & Family Boutique at Evergreen).

For the Pain:

- Apply ice to numb the nipple before feeding and ice packs afterwards. (*Frozen washcloths, frozen peas, or unpopped popcorn kernels in a Ziploc bag work well.*)
- You may safely use a mild pain reliever such as ibuprofen or Tylenol.

If your condition does not improve or worsens in the next couple of days, please call the Breastfeeding Center at **425.899.3494** for further assistance.

Treatment of Engorgement

Engorgement is a painful swelling and hardening of the breast tissue resulting from inflammation. It most often occurs when the milk comes in and as a result of baby feeding infrequently. With engorgement the baby often has difficulty latching on.

Before Feeding:

- Before nursing, apply warm moist heat to your breasts. This can be done by taking a shower or applying warm moist compresses. (Use washcloths, towels, diapers or disposable diapers.) In some cases, a “breast bath” works well. To do this, bathe breasts in a sink, bathtub, or pot of warm water for a few minutes.
- Gently massage each breast.
- Hand-express enough milk to soften the areola, making it more compressible and easier for your baby to latch on to. A pump could also be used to accomplish this.

During Feeding:

- Frequent nursing every 1 to 3 hours, allowing your baby to nurse as long as he/she desires, is very important. Feed the baby in this manner around the clock until the engorgement resolves. Time feedings from the beginning of one to the beginning of the next.
- Gently massage the breast in the direction of the milk flow to soften the breast, being careful not to disrupt baby’s latch.

After or Between Feedings:

- You can pump your breasts after each feeding if necessary just until you feel the pressure is relieved. Don’t expect to feel “normal” at this point as engorgement takes time to resolve completely. You can stop the pumping once your baby is nursing vigorously at each breast and your engorgement is relieved. Leaking milk is common as the engorgement is resolving.
- Apply ice packs to your breast for about 20 minutes for comfort and to reduce inflammation. Large baggies filled with frozen peas, corn, or unpopped popcorn kernels work well for this purpose as well.
- A pain reliever may be necessary. Ibuprofen works well and is a good anti-inflammatory medication. Take as directed.
- Wear a well-fitting, supportive bra if you feel more comfortable. However, it is probably better to go braless than to wear a bra that is too tight.

Resolution of engorgement varies from woman to woman. It is reasonable to expect improvement within 24 to 72 hours or sooner. *Call the Breastfeeding Center at 425.899.3494 if you cannot get your baby latched on, or if your symptoms are not improving,*

You Know Breastfeeding is Going Well If:

- You hear the baby swallowing during feeding.
- Baby is satisfied and content after feeding.
- Baby has 2 to 10 bowel movements each 24 hours.
- Baby has 6 to 8 wet diapers each 24 hours (after milk is in). If you are using disposable diapers, it is difficult to tell if they are wet. It can be helpful to place a Kleenex or small piece of paper towel in the diaper to tell if it is wet. If you have concerns, please contact your baby's physician or the Evergreen Healthline.

Call the Breastfeeding Center If:

- Your nipples are cracked and bleeding and you are having difficulty feeding, or nipple soreness persists beyond 10 days and makes feeding difficult.
- Baby is not nursing at least eight times in 24 hours, or is nursing non stop for more than a few hours and never seems to be satisfied.
- Breasts become engorged and you are unable to relieve engorgement at home.
- Baby has fewer than two bowel movements in 24 hours.
- Your baby is premature or small for gestational age or has a health concern that affects his ability to feed.
- You go home using a nipple shield. We want to follow you until your baby is feeding well.
- You have any questions or concerns.

Storing Breastmilk

1. Fresh breastmilk can be kept at room temperature up to 10 hours; however, we generally recommend refrigeration as soon as possible. You may store fresh breastmilk in the refrigerator for up to 8 days. If not used during that time, it may be frozen for up to 6 months in a freezer. Place container in the back of the refrigerator or freezer. Do not store in the door. Breastmilk can be stored in the deep freeze at 0° F for up to 12 months.
2. Store in a clean glass or plastic container. Plastic disposable bottle bags work well.
3. Milk stored in 2-4 ounce volumes is easier to thaw.
4. Label the container with date of collection written on tape attached to the container. Some feeding bags have a special place to write on. Write the baby's name on the label if it is stored in the nursery or if you will be taking it to daycare.

5. Thaw your frozen breastmilk in warm water. Never use a microwave oven or boiling water to thaw, as extreme heat may kill immune cells in the milk and could cause burns in the baby's mouth. Once thawed, breastmilk is good for up to 48 hours in the refrigerator. Do not refreeze.
6. Appearance of your mature breastmilk is similar to skim milk but may greatly vary in color from yellow to blue. The milk fat does separate after thawing. Shake gently to remix.
7. Discard previously frozen breastmilk left over in the bottle after feeding or if left at room temperature over 2 hours.
8. If your baby is in the Special Care Nursery or Intensive Care Nursery, you may be given other specific directions about milk collection and storage.

Call the Breastfeeding Center with questions or concerns at 425.899.3494.

Diet

If You Are Breastfeeding. Very few foods that you eat will bother your baby. Most babies (including babies fed formula) have gassy and fussy times during the day no matter what you eat. Gassiness and fussiness are conditions most likely related to your baby's developing digestive abilities and maturing nervous system and are a normal part of the first months of life.

Eat well while you are breastfeeding. Nurture yourself with good foods that you enjoy. Don't worry about occasionally skipping a meal or having a cup of coffee or piece of chocolate. Mothers have been breastfeeding successfully for thousands and thousands of years in a variety of cultures, eating a variety of foods, and their babies have thrived. *See Pregnancy, Childbirth and the Newborn, pages 441-443, for more information.*

Infant Feeding: Formula Feeding

If you have made the decision that formula feeding is the best choice for you, our nurses and lactation consultants will support you in your choice. They will assist you in getting off to a good start.

In the beginning, most new parents have many questions about formula feeding. Parents wonder about which formula to choose, how much to feed the baby, how to mix formula and what kind of bottles and nipples to use. The following information will help you to know the basics of formula feeding.

Feeding your baby is a wonderful and enjoyable experience. Cuddling your baby during feedings and even holding the baby "skin-to-skin" will give your baby the closeness to you that she needs. During feedings, cradle the baby's head sometimes in your left arm and

sometimes in your right, which is thought to aid in the development of the eyes. Always hold your baby for feedings and never prop the bottle; your baby needs not just the calories from the milk, but the special time with you that promotes bonding and provides you with some wonderful memories.

Choosing the Formula. The American Academy of Pediatrics is very clear in their recommendation that babies receive an iron-fortified formula for the whole first year of life. A cow milk-based formula is best unless your baby has an allergy to cow milk. Formulas available may include Enfamil with iron, Similac with iron, and Nestle’s Carnation Good Start (also iron fortified). There are organic iron fortified formulas such as Horizon too. Use of low iron formulas increase the risk of babies becoming anemic and having other health problems. Studies have shown that babies fed an iron-fortified formula have no more gassiness, fussiness, or constipation than infants fed low iron formulas. As much as formula manufacturers advertise differences in formulas, they are all regulated by the Infant Formula Act and are relatively the same. So choose a formula and stay with it so your baby can become used to it.

If your baby’s doctor has told you your baby needs to be on a soy formula because of an allergy to cow milk, Isomil and Prosobe are available. All the soy formulas are iron fortified as well. Soy formulas are not “hypo-allergenic;” babies can be allergic to soy products too.

Frequency of Feeding and Amount. In the first few days of life, full-term babies will feed from 8 to 12 times in 24 hours. At first, babies take about a half ounce to an ounce of formula at each feeding. Take the first feeding slowly. Your baby may want only sips at first and then gradually, over the next several days, will take 1 to 3 ounces at each feeding. Feed your baby when he or she seems hungry. Don’t try to adhere to a schedule at first. Your baby may feed 8 to 12 times in 24 hours in the first few days.

Later, feeding may be less frequent, with a greater amount of formula consumed at each feeding. It is very easy to over feed a bottle-fed baby, so it is important to watch your baby closely; when she has had enough, she will stop sucking and look drowsy. Do not urge the baby to take more. You will know if your baby is getting enough if she acts satisfied after feeding. When the baby is three or more days old, the number of ounces consumed with each feeding will increase. Often, by the time the baby is six or seven days old, she will drink from 16 to 24 ounces in 24 hours. Babies don’t always take the same number of ounces at each feeding. Just like you, she will sometimes have a large meal and sometimes a snack. Watch your baby—she will tell you by her feeding behavior if she is done or if she wants more.

Babies will have at least one wet diaper for each day old they are until they are having 6 or more wet diapers in 24 hours. At first the stools will be black-green meconium stools. By about 3 days of age, the stools will be brown, green-yellow, or yellow. At first, the stools will be more liquid and by the end of the first week, they will be more like putty and softly formed.

Preparation of Formula. When you buy formula, you will notice that formula comes in ready-to-feed, concentrate, and powder. They are nutritionally the same. Powder is the least expensive and ready-to-feed the most expensive. Follow the manufacturer's directions precisely—diluting the formula or putting too much powder in can result in inadequate nutrition or overload of nutrients into your baby's system, both can result in serious health problems for the baby.

On occasion, formulas are recalled for various reasons. We recommend you write down the serial number from each formula product you use. That way if there is a recall, you will easily be able to identify if you have used the product in question.

If you are using a city water supply, you can use water right from the faucet. It does not need to be boiled unless you are using well water or water that has not been treated. Bottles do not need to be boiled; they can be washed in the dishwasher or by hand. Nipples can be washed by hand using a nipple brush and hot, soapy water followed by a hot water rinse. You can choose plastic bottles, glass bottles, or use plastic bottle insert bags. The type of bottles and nipples you use are a personal choice. Do check the nipple before feeding by holding the full bottle upside down—the milk should come out of the bottle in a slow drip. If it comes out in a stream, the nipple needs to be discarded, as the milk will come too fast for your baby. If the milk does not drip out, check to see if the nipple is clean by forcing hot water through the opening.

Though it is not necessary to warm formula, it is a nurturing thing to do for your newborn. If you are mixing formula from concentrate or powder, you can use warm water to mix the formula. Otherwise, if the formula is cold, heat the bottle in warm water. **NEVER MICROWAVE MILK.** It is possible for babies to get scald burns in their mouths from hot spots in the milk. Once you begin to feed your baby, you can keep the formula for one hour and then discard. If you are making formula for a day's feedings, the formula can be kept in the refrigerator for 24 hours. When mixing powdered formula, always add the water first.

When your baby is little, burping halfway through a feeding during a feeding pause may be helpful. If you don't get a burp easily, finish the feeding and try again. Enjoy the special feeding times with your baby!

If you have any questions or concerns about your baby's formula, talk with your baby's physician. Feeding questions or concerns will also be addressed at your Postpartum Care Center appointment.

Evergreen Hospital Medical Center purchases infant formula from the manufacturer. We do not accept or receive formula samples and therefore cannot redeem formula coupons that you may have. Please contact the formula manufacturer if you wish to receive these coupons.

PACIFIERS

To get feeding off to a good start, we do not use pacifiers for healthy babies in the hospital. Each time your baby signals that he is hungry by rooting or sucking on his lips or fists, is wide awake, or is making sucking movements with his mouth, we will encourage you to feed your baby rather than delay a feeding by using a pacifier. When feeding goes well, you are less likely to have problems with engorgement or to have a baby with poor weight gain and jaundice. Some parents find that their babies still want to suck even following a good feeding. Using a finger to suck on or a pacifier could be an option once feeding is going well and the baby is gaining weight. *If you are uncertain, call the Breastfeeding Center at 425.899.3494 and discuss this with the lactation consultant.*

YOUR NEWBORN

Understanding Your Newborn. While each baby is a unique individual, there are certain characteristics and behaviors that are common to newborns. This section will describe some of the physical and behavioral traits you may notice in your baby during the first few weeks of life.

Head

Head Shape. Because of pressure before or during birth, your baby's head may be temporarily misshapen. Normal head shape usually returns by the end of the first week. Babies delivered by cesarean birth may not have this head molding.

Soft Spots. Your baby has two obvious soft spots or fontanelles. One is on the top of the head and the other is near the back of the head. Both fontanelles are covered by a tough membrane, and with normal handling and care, you can't damage the soft spots when shampooing, brushing, or stroking your baby's head. The soft spot in the front usually closes by 18 months of age and the one in the back by 2 to 6 months.

Eyes

Eye Color, Tears, and Swelling. Caucasian infants usually have grayish-blue eyes at birth; some will have blue-brown eyes. Infants of other ethnic backgrounds may have grayish-brown, blue-brown, or brown eyes. An infant's true eye color may not be known for several months, however. Tear ducts are small at birth. Tears are usually not produced in noticeable amounts with crying until your baby is 1 to 2 months of age. Swollen, puffy, or red-looking eyes are often noticed after delivery and result from pressure during birth. Swelling and inflammation usually go away in a few days.



Eye Discharge. Occasionally, a baby may have irritation from the antibiotic ointment given at birth. You may notice a small amount of yellow discharge from your baby's eyes during your hospital stay. This usually clears up within 24 hours. If you notice continued yellow discharge or crusting on your baby's lids and lashes after you get home, please notify your baby's doctor.



This can be a symptom of infection. If your baby has white matter collecting in the inner corner of the eye, it may be from a blocked tear duct. Gently wash it away.

Vision. A newborn's eyes often do not seem to work together. As the eye muscles strengthen, the baby's eyes should focus in line with each other. Babies are near-sighted at birth. They see objects best that are 8 to 12 inches from their noses. When you talk to your baby, hold him close to your face so that he can see you. Your baby sees in color and prefers bright colors, black and white, and circular shapes.

Ears

Ears: From the Start. Newborns have a wide variety of ear sizes, shapes and positions that are normal. At birth, your baby's ears may bend easily. In time, the ear will feel firmer. Babies do hear at birth and will recognize their mother's voice.

Ear Discharge. It is normal for a baby's ears to produce wax. It is not normal for them to produce any other kind of discharge. If you think the discharge from your baby's ears is not wax, please consult your baby's physician. **Q-tips should not be used in your baby's ears at any time.** Ears can be cleaned well with the corner of a clean, damp washcloth.

Skin

Skin Color. The skin is thin and dry. You may see some veins through it. The skin in the Caucasian newborn is a pink to reddish color. In the African-American infant, the skin color appears as a reddish-black color that darkens as the baby gets older. In Asian babies, the skin is a tea rose color. As babies cry, they all may become a deeper red.

Frequently, dark bluish spots may appear on the lower portion of the back, buttocks, or limbs of babies who are African-American, Asian, Mediterranean, or Native American. These are called *Mongolian spots*. They are caused by a temporary accumulation of pigment under the skin and they usually fade during the preschool years. Despite the name, these spots have nothing to do with Mongolism or Down Syndrome.

In the newborn, it is common for the baby's hands and feet to appear bluish. This is called *acrocyanosis*. In the first few days of life, this is seen because the baby's circulatory system is not yet efficient at getting blood to the extremities.

Milia. These are tiny white spots often seen on the nose and chin. They are caused by obstruction of oil or sebaceous glands. You should not squeeze these spots. They usually disappear in several weeks.

Peeling. Most babies' skin peels after birth because they have been in fluid for many months. This generalized peeling is completely normal and requires no treatment, including oils or lotions.

Rashes. A temporary rash, called *erythema toxicum*, may occur during the first few weeks. It consists of small areas of redness with raised yellowish-white centers and it may resemble a flea bite. This rash requires no treatment and does not make the baby uncomfortable.

Red Blotches. Many babies have reddened areas of skin on their upper eyelids and forehead. These areas are called "angel's kisses" and usually fade with time as the baby's skin grows thicker and less transparent. Redness may reappear when your baby cries.

Stork Bites. These red spots can be seen at the nape of the neck; these do not fade.

Diaper Rash. Diaper rash is often caused by irritants in the urine or stool. To minimize this, be sure to change your baby's diaper frequently (every 2 to 3 hours during the day). Always wash the diaper area with plain water at each change. If you launder your own diapers, double rinses with one-half cup of vinegar per rinse load may help to eliminate any soap and neutralize the ammonia.

If your baby develops a rash in spite of these precautions, try to change diapers more frequently and expose the reddened area to the air several times a day. A diaper rash ointment applied to the rash area after air-drying may be helpful. Occasionally, babies develop a yeast infection of the diaper area, and this must be treated with medication prescribed by the baby's physician. If any rash doesn't improve within a few days, please contact your baby's doctor.



JAUNDICE

During pregnancy, your baby needed more red blood cells to carry oxygen than she needs once she is born. The red blood cells that are no longer needed break down. A substance is released during this process called bilirubin. Bilirubin sometimes builds up in the baby's blood and causes the skin to appear yellow or tan and the whites of the eyes to be yellow. Jaundice is the name for the yellow color. Your baby will be checked for jaundice while you are in the hospital and at your Postpartum Care Center clinic appointment.

Most jaundice caused by this normal adjustment following birth requires no treatment. It is called "physiologic jaundice." This jaundice reaches its peak in 3 to 5 days after birth and then begins to disappear. Babies excrete bilirubin naturally in their stool, and as a result, babies who are not fed frequently enough do not have many bowel movements, so the bilirubin is reabsorbed back into the blood stream, increasing the degree of jaundice. To prevent this type of jaundice, nurse your baby a minimum of eight to twelve times in 24 hours. If you are formula-feeding, be sure to feed your baby as much as he will comfortably take and as often as he lets you know he is hungry. Avoid water bottles, as water and sugar



water increase the severity of jaundice by making your baby feel full so he will not consume the nutrients he needs.

Certain conditions that increase the likelihood of jaundice include:

- Not being fed often or long enough
- Prematurity, because the liver, which processes the bilirubin, is immature
- Mother who has type O blood and a father who has a different blood type (which may lead to a kind of jaundice called an “ABO incompatibility”)
- Bruising or bleeding under the scalp as a result of the birth process
- Being induced for labor and/or having epidural anesthesia

If you are worried that your baby is jaundiced anytime in the first week of life, *you can call the Postpartum Care Center, Monday – Saturday from 8:30 a.m. to 4:00 p.m., at 425.899.3602*, and we will talk to you about how to check for jaundice. We may ask you to come in so we can check your baby with a light meter that estimates the blood level of the bilirubin.

If you are worried about your baby’s jaundice in the evening, at night, or on a Sunday, call the Evergreen Healthline at **425.899.3000**. They will give you further instructions for after-hours care.

If the bilirubin reaches a certain level, your baby’s physician may decide your baby needs a blood test and treatment if the blood levels of bilirubin are high and will refer you for phototherapy. Phototherapy (providing a special light source to your baby’s skin) helps break down the bilirubin under the skin’s surface, causing the jaundice to go away more rapidly. In addition to phototherapy, treatment usually includes making sure the baby is getting an adequate amount of milk. Phototherapy can be done in the hospital if needed, but is usually done at home.

Home Phototherapy service includes:

- Setting up phototherapy equipment and showing your family how to use it
- Visiting your home daily to assess and weigh your baby
- Answering questions about baby care and feeding concerns
- Performing a skilled and gentle blood draw to check your baby’s bilirubin level
- Providing breastfeeding assistance and support
- Communicating daily with your baby’s physician

Mucus, Spitting Up, and Vomiting

Mucus. For the first few days of life, your baby may have excess mucus that may cause her to gag and/or vomit. This may be more noticeable with feedings since feedings tend to loosen the mucus in your baby's stomach.

If your baby does begin to gag or spit up mucus, turn the baby on her side and gently pat her back as if to burp her. You may need to use a bulb syringe to gently suction the mucus out of the lower cheek area of the baby's mouth or from her nose.

If you are feeding your baby and she begins to gag or spit up, stop the feeding and turn and pat your baby as described. Once your baby has calmed down, the feeding may be continued.

Spitting Up and Vomiting. Almost all babies spit up during the first week or so. This is usually a small amount of milk solids associated with a feeding, such as a wet burp. The baby usually brings up only about a teaspoon of formula or breastmilk. If it has been awhile since a feeding, the milk may be partially digested and look curdled.

Your baby may only be spitting up because of air trapped in the stomach, which is now coming up along with part of the feeding. Be sure to burp your baby prior to feeding if your baby has been crying for a while. Babies swallow air during crying.

Breastfeeding babies often burp right around the breast while they are feeding. However, you may wish to gently burp the baby between breasts or after feeding. This isn't always necessary. If the baby does not burp after a minute or so of gently rubbing or patting the back, he probably doesn't have to!

If you are bottle feeding, hold your baby slightly upright during feeding so that air can rise above the milk, and be sure your baby has a good hold on the nipple when sucking so he doesn't suck in a lot of air during the feeding.

Spitting up in a forceful way, causing milk to hit the floor as much as 3 or 4 feet away, is called *projectile vomiting*. Your physician should be notified if this type of vomiting occurs regularly or any time your baby has a fever or diarrhea along with vomiting, or seems listless.

Taking Temperatures

Is there a fever? An axillary (under the arm) temperature will usually tell you if your baby has a fever. To take an axillary temperature, place the digital thermometer under your baby's arm centering the tip in the armpit. Lower your baby's arm and hold it firmly against his/her body. Be sure no clothing touches the tip of the thermometer. Leave in place until it beeps (approx. 3-5 minutes). Remove the thermometer and read the number. After use, always clean the thermometer with a cotton pad and alcohol.

If your baby's temperature reads above 100.4 degrees or below 97.7 degrees, notify your baby's health care provider. Be sure to let your physician know how your baby's temperature was taken.

Note: Ear probe thermometers are not considered to be accurate in newborns. Temp-strips placed on the forehead and pacifier thermometers are not as accurate as an axillary (under the arm) temperature taken with a digital thermometer. Axillary (under the arm) method is preferred.

On rare occasions, your physician may request a rectal temperature. Lubricate the digital thermometer tip with Vaseline or A&D Ointment. Position your baby on his back, holding his ankles in one hand and the thermometer in the other. Gently insert the lubricated tip into the rectum until the tip can no longer be seen (no more than ½ inch). Hold the thermometer carefully in place until it beeps. Remove the thermometer and read the number. After use, always clean the thermometer with a cotton pad and alcohol.

Care of the Circumcised and Uncircumcised Infant

Circumcision. If your son is circumcised, it may be done before you leave the hospital. There are two methods of circumcision: one using a *gomco* and one using a *plastibell*.

If the *gomco* device is used, a piece of Vaseline gauze may be wrapped around the end of the penis for about 24 hours. When this falls off or you remove it, you may apply Vaseline or A&D Ointment to the circumcision area to keep the diaper from sticking to the penis. Do this for a few days. Otherwise, no treatment is necessary. If the gauze does not come off after 24 to 48 hours, wrap the gauze dressing in a wet, warm washcloth to soak the area or soak the baby in a warm bath. Then gently unwrap the gauze. If it continues to stick, it can be removed at your Postpartum Care Center clinic appointment. You may wash the area with water. As the site heals, there may be a small amount of yellowish drainage but this should be gone within one week and you may see white or yellow patches with no drainage.

If the *plastibell* device is used, the plastic ring usually drops off 5 to 10 days after circumcision. No special dressing is required and the baby can be diapered and bathed. Do not apply Vaseline to the area. A dark brown or black ring encircling the plastic rim is

perfectly normal and will disappear when the rim falls off. The plastibell gradually falls off. Do not pull it off; let it completely fall off on its own.

Notify your baby's doctor if:

- Any bright red bleeding or oozing occurs (call your baby's doctor immediately and apply gentle, firm pressure to the circumcision site to slow the bleeding)
- Your baby does not urinate within 24 hours following the circumcision
- Any unusual swelling or redness is seen
- There is an obvious thick yellow or green drainage with a foul odor
- The plastibell does not fall off in 10 days

Uncircumcised Infant. If your son is not circumcised, there is no special care necessary. Do not attempt to forcibly retract the foreskin. As the penis grows, the foreskin loosens and is usually retractable by 4 to 6 years of age. There may be a whitish discharge around the tip of the penis—this is called *smegma*. Gently clean and wash as usual.

Bowel Movements and Urinating

Bowel Movements. During the first day or two of life, your baby will have thick greenish-black, tar-like stools, called *meconium*. As your baby begins to nurse or formula-feed, these stools will change first to a brown-green stool and then to yellow. Breastfed babies have frequent loose yellow stools by the third or fourth day of life. It is not unusual for your baby to have a bowel movement with every feeding during the first several weeks. If your breastfed baby is not having 2 to 10 stools per day by the third to fifth day of life, it is suggested that you call the Breastfeeding Center (425.899.3494) or your baby's physician to assess the baby's feeding patterns and possibly arrange for a weight check. After a month or so, your baby may begin to have a bowel movement only every few days. If your baby is formula fed, the stools may at first look seedy and then change to a more pasty yellow. For the first week, your baby may have bowel movements with each feeding. After awhile, this will change to 1 to 4 bowel movements a day.

Constipation. Your breastfed baby will not become constipated as long as breastmilk is the only food. Formula-fed infants are more likely to become constipated. A constipated stool is one that is hard, painful to pass, and may resemble pebbles. Recommendations for relieving constipation are varied. Therefore, we suggest you do not use any type of enema, suppository, or laxative without first contacting your baby's physician.

Diarrhea. Occasionally, normal breastmilk stools are thought to be diarrhea because of their frequency and loose consistency. It is very unusual for a breastfed baby to have diarrhea if she is fed only breastmilk. If, however, your breastfed or formula-fed baby has unusually frequent bowel movements that are watery, possibly greenish with mucus and blood, and exhibits other signs of illness such as fever, fussiness and poor appetite, or floppiness, please contact the baby's physician right away.

Urinating. A baby's urine is normally clear and light yellow in color. Occasionally, a baby may have some brick-colored flecks in his diaper, in the urine. This is normal in the first couple of days of life. Usually, a baby has one wet diaper a day for each day old he is until the sixth day, when he will have about 6 to 8 wet diapers a day, for the next several months. It is very difficult to know how many wet diapers a baby has if you are using disposable diapers. If you are concerned that your baby is not urinating, place a Kleenex or small piece of paper towel in the disposable diaper to detect urination. *If you have concerns, please contact your baby's physician or the Evergreen Healthline at 425.899.3000.*

BABIES WITH SPECIAL NEEDS

Premature Babies. A baby born before 37 weeks gestation is a premature infant. Premature babies are immature and as a result, they have special needs. Following are some ways you can better care for your preterm baby.

- A preterm baby's lungs are often immature. Any time you have questions about your baby's breathing patterns, discuss your concerns with your baby's nurse or physician. At home, if your baby has difficulty breathing and/or his body or face looks blue, **call 911**. (Remember, blue hands and feet are normal at first.)
- Preterm infants can have difficulty maintaining a normal body temperature. Keep a hat on your baby's head and keep him or her wrapped warmly or tucked in skin-to-skin with you. Once you are home, take your baby's temperature under the arm. If your baby's temperature drops below 97.7° F, place your baby on your chest skin-to-skin. If the temperature does not rise after 30 minutes, call your baby's physician.
- Hypoglycemia or low blood sugar level can be a problem for premature infants in the first day or two after birth. Babies who exhibit signs of low blood sugar (i.e., jitters, irregular breathing, refusal to eat) will have a blood test. If the blood sugar is low, glucose (sugar) water will be offered to raise blood sugar. If you are breastfeeding, you will be encouraged to breastfeed to give your baby the sugar she/he needs in your milk.
- Feeding can be a bigger challenge for premature babies. They need more frequent feedings (at least every 3 hours), and they tire easily. Quiet rooms, dimmed lights, and minimal talking and stimulation help to reduce tiring.
- If you are breastfeeding, ask to discuss breastfeeding with a lactation consultant. If you are formula-feeding, your nurse or lactation consultant will help you with feeding guidelines. *After discharge, call the Breastfeeding Center at 425.899.3494 with breastfeeding questions and direct formula-feeding concerns to your baby's physician.*
- Jaundice is more common in premature infants. *(See discussion of Jaundice in this section of this notebook.)*
- Because of their size, premature babies often require extra support to travel safely in their car seat. All babies weighing 5 ½ pounds or less will be monitored for one hour before going home to assess their ability to breathe effectively while in the car seat.

(Bring your car seat to the hospital so the test will not delay your going home.)

SGA (Small for Gestational Age). SGA baby's body proportions are similar to a full-term infant, but their size is that of a preterm infant. They have many of the same challenges as preterm infants, including difficulty maintaining normal body temperature, problems with blood sugar, and difficulty breathing effectively in a car seat. *(See section on premature babies for specific information.)*

CALMING YOUR BABY

Calming Your Baby. When babies cry, it is usually for a good reason. Crying is your baby's way of letting you know he has reached his limit. Unfortunately, we don't always understand this form of communication. Common things to check are: hunger, gas, too hot/too cold, and simply needing attention. Here are some ways to comfort your baby:

- **Hunger:** Nursing, feeding.
- **Gas:** One of the most effective ways to help your baby with gas is to let your baby nurse. Suckling makes the intestines move and releases endorphins which are the baby's natural pain reliever. In addition, burping, patting baby's bottom, leg/abdominal exercises, applying a hot water bottle, heating pad, or even a water bottle filled with warm water to abdomen (be careful that temperature is not too hot for baby).
- **Too hot:** Removing clothes and extra blankets.
- **Too cold:** Changing baby's diapers, placing the baby skin-to-skin with mother or father/partner for 30 minutes, putting baby in warm bath, putting baby in snuggli, swaddling baby, cuddling baby, increasing room temperature, adding clothes, taking baby to bed with you, warming baby's blanket(s) in the dryer, then using to swaddle baby.
- **Startled baby:** Swaddling baby, cuddling baby, holding baby's extremities, carrying baby in a sling or snuggli, putting baby in a hammock, walking baby, taking baby for a car ride, rocking baby in the cradle, rocking baby standing up (back and forth or up and down), putting baby in a swing chair. If baby is still crying, try walking outside, turning on the bath water, giving baby a bath, massaging baby, turning on/off music, dancing with baby, showering with baby.



Also, just because something didn't work last time or half an hour ago doesn't mean it won't work now. After a while, both you and baby will develop favorite calming methods. At times, you may need to take care of yourself to take care of the baby. If the baby is still crying after trying everything, you could make the baby as happy and safe as possible, and give yourself ten minutes alone in the shower or with your favorite music. Every member of the family needs to help you. Take turns trying to comfort baby. Sometimes, a new person doing the same thing can help calm baby.

Remember, your baby has come a long way from the warm and all-comforting womb. Touching, talking, holding, rocking, cuddling, and stroking are forms of communication.

They tell your baby that you care for him and help your baby to find his place in the world. The *Happiest Baby on the Block*, book or DVD, by Dr. Harvey Karp has many extremely helpful techniques for calming infants. This book is available at our Baby and Family Boutique.

SHAKEN BABY SYNDROME

What is Shaken Baby Syndrome? Shaken Baby Syndrome is a form of child abuse that happens when someone shakes a baby hard. Hard shaking causes the baby's head to whip back and forth. The brain slams repeatedly against the skull and starts to bleed and swell. The adult may throw the baby down after a shaking. If the baby's head hits something, even a soft crib mattress, the impact can further injure his brain. There may be no visible sign of abuse at first, but hard shaking can lead to brain damage, learning problems, mental retardation, blindness, deafness, seizures, paralysis, or even death.

How Does it Happen? A tired, angry, or frustrated parent or caregiver will sometimes shake a fussy baby to try and make her stop crying. This shaking is dangerous because babies have large heads and brains, and their weak neck muscles cannot support the stress of shaking.

Why Babies Cry? Crying is a baby's only way to tell you what he needs. Some babies cry more than others. Babies may cry because they are: hungry or just need to suck, sick (check baby's temperature), tired, too hot or too cold, teething (getting new teeth), uncomfortable and need to be held or cuddled, or colicky (unexplained crying—ends at about 3 months of age).

What To Do When Your Baby Cries. When your baby cries, you can nurse or slowly feed your baby a bottle (remember to burp her during the feeding and immediately afterward), check your baby's diaper, rock your baby gently, try placing your baby in an infant swing or bouncy chair, or take your baby for a ride in a stroller or car. Try not to get upset or angry when your baby is crying. If this happens, try to breathe deeply and relax, call a relative or friend for support, listen to calming music, write down your feelings, ask someone you trust to baby-sit so you can exercise or go for a walk, or call your doctor or a family help line for support. When all else fails, it's okay to place the baby in a crib or other safe place, shut the door, and allow her to cry for a few minutes while you take a break in another room.

How You Can Prevent a Tragedy? Never shake or throw your baby around. Gentle bouncing and playing with a baby will not cause Shaken Baby Syndrome. Always place your hand under your baby's head to provide support. Make sure and tell all your family members and caregivers about the dangers of shaking a baby.

Handle With Care. We all need to realize that a lack of control can lead to violence which can cause permanent damage. If you shake your baby hard in a moment of rage or you see or hear that someone else has shaken your baby, take the baby to the hospital immediately. Early treatment can prevent future problems...and may save your baby's life.

Shaken Baby Syndrome information provided by the Children's Protection Program at Children's Hospital and Regional Medical Center (206.526.2194). *Please see the Resource Directory in this notebook for additional resources.*

SLEEPING AND POSITIONING

Initial Sleeping Habits. Very few babies sleep through the night during the first months of life. Try not to make sleeping through the night your number one objective. Also, don't compare your baby's sleep habits to your neighbor's baby. With few exceptions, babies need to be fed several times at night to get adequate calories for growth. Recognize night feedings as normal behavior for infants. Gradually, night sleep lengthens as your baby matures.



Helping Your Baby to Sleep:

- If yours is a healthy newborn, position your baby on her back, not on the side or tummy. Sleeping on the back is associated with a greatly decreased incidence of SIDS (Sudden Infant Death Syndrome). When your baby is awake, place her on her side and tummy to avoid the development of a flat spot on the back of her head.
- Avoid using any pillows, soft comforters, plastic waterproofing materials, or lambskin in the baby's bed.
- Being snugly wrapped in a receiving blanket helps some newborns settle into sleep. Avoid over bundling in many blankets.
- The motion of rocking, walking, swinging, or car rides may help your baby relax for sleeping.
- Try music, singing, or a gentle massage for a soothing sleep ritual.
- Many parents find that babies sleep best when tucked in next to their parents.
- Continue making your usual family sounds when you bring your baby home. Babies have the ability to close out sounds and learn to sleep through most noises.
- Babies sleep anywhere from 10 to 20 hours in 24 hours, with an average of 14 hours. As long as your baby is feeding well and is healthy, trust your baby to know how much sleep she needs.

Care of the Umbilical Cord and Fingernails

Umbilical Cord. Until your baby's umbilical cord falls off within 1 to 2 weeks, you need to clean around the cord base with alcohol once a day. Gently pull up on the cord and clean between the skin and the base of the cord with a Q-tip dipped in water. Ask your pediatrician if water is best. Some providers prefer that alcohol be used.

There are no nerve endings in the cord, so this procedure will not hurt your baby. Some odor around the base of the cord is normal. As the cord dries and begins to fall off, you may note a small amount of dark red blood on the baby's diaper or shirt. If the cord continues to bleed, has yellow-green discharge and a foul odor, or your baby has a fever or seems sick, call your baby's doctor.

Nail Cutting. The best time to cut your baby's nails is when he is asleep. Sometimes the nail end detaches on its own and can be easily pulled away. Some mothers choose to bite the nail ends off. If you need to cut the nail, try a small pair of manicure or cuticle scissors.

Bathing Your Baby

Bath Time. Newborns generally do not become very dirty. The bath is primarily a time of enjoyment for the family and a time for happy interaction with your baby. For cleanliness, we recommend that you wash your baby's bottom with plain warm water every time you change the diaper. Wash his face with warm water whenever it's dirty and shampoo his hair two or three times a week. If these areas are kept clean, a complete bath can be done as frequently or infrequently as you and your baby wish.

If your baby loves a bath, it can be a daily ritual. If your baby is not happy bathing initially, skip it for a few days and try again. A full bath once a week is sufficient for cleanliness. You do not need to wait until the cord is off to bathe your baby.



NEWBORN SCREENING TESTS

State law requires that all babies born in Washington have a blood test called the "newborn screening test." This test identifies disorders in the baby that, if not found and treated early, can cause mental retardation or result in serious illness. The law gives parents the right to refuse the screening test for their baby if having the test conflicts with their religious beliefs or practices. If this is true for you, be sure to tell the hospital staff or your health care provider.

In Washington, the screening test is used to detect nine disorders. They are:

- 1. Phenylketonuria (PKU):** Persons with PKU are unable to break down and use a substance in the diet (phenylalanine). If not treated with a diet low in phenylalanine, brain and nerve cell damage occurs, which causes mental retardation.
- 2. Congenital Hypothyroidism (CH):** This condition is caused by the absence or abnormal development of the thyroid gland, located in the front of the neck. The thyroid gland makes a hormone (thyroxine) that affects mental and physical growth. When the thyroid gland does not produce enough hormones to stimulate healthy growth, the infant will not grow normally and can become mentally retarded. CH is treated very effectively by giving the baby daily thyroid medication.

- 3. Congenital Adrenal Hyperplasia (CAH):** This condition is caused by the inability of the adrenal glands to produce normal amounts of adrenal hormones. The adrenal glands are located above the kidneys and secrete a hormone that regulates the amount of salt the baby uses and loses. Without the hormone, the infant loses large amounts of salt, which can result in loss of essential body water, shock, and possibly death. This can be treated by giving the baby the hormones he or she is missing.
- 4. Sickle Cell Disease and Other Hemoglobin Abnormalities:** Sickle cell disease occurs when the hemoglobin (the oxygen-carrying part of the red blood cell) does not form or develop normally. In fact, the hemoglobin has a sickle or crescent shape instead of being round. Sickle cell disease can cause many health problems right from infancy that can lead to severe illness and even death. Treatment with antibiotics helps to reduce serious infections that are common with sickle cell disease. Several other hemoglobin abnormalities are also detected by screening, although many do not require medical follow up.

The blood sample is collected on a special absorbent paper from a small prick on your baby's heel. The first test is done while you are in the hospital. This allows your doctor to begin treatment for your baby, if necessary, as soon as possible. A second sample is collected when your baby is 7 to 14 days old. The second sample is collected because, with some infants, a disorder may not have been detected with the first test. This sample may be taken at your baby's first doctor appointment or at the Evergreen Hospital Medical Center Laboratory. Your baby's doctor will let you know where to have the second test done. The blood samples are sent to the State Public Health Newborn Screening Laboratory in Seattle for testing. It will show not only those that have the disease but also those that carry the trait. All have reproductive implications for the family.

- 5. Biotinidase deficiency** is a treatable disorder that affects the way the body recycles biotin, one of the B12 vitamins. Because this system doesn't work properly, the body has very low levels of biotin. This vitamin is necessary for many functions in the body. If left untreated, biotinidase deficiency can cause brain damage and other complications. Biotinidase deficiency is easily treated with daily supplements of the biotin vitamin. To prevent problems, treatment must begin shortly after birth.
- 6. Galactosemia** is a treatable disorder. It affects the way the body processes the sugar galactose, a component of milk and dairy products. Children with galactosemia cannot process galactose. As a result, galactose and other by-products build up in the bloodstream and cause physical and developmental damage. The first step in treatment is to remove the baby from breast milk and commercial formula. Soy-based formulas that contain no galactose should be substituted into the baby's diet. Individuals with galactosemia must remain on a restricted diet and maintain low blood galactose levels throughout life.

- 7. Homocystinuria** is a treatable disorder that affects the way the body processes protein. Children with homocystinuria cannot use a part of the protein called methionine. If left untreated, methionine and related molecules build up in the bloodstream and lead to brain damage and other disabilities. Some people with homocystinuria respond to vitamin B6 (pyridoxine). Those who do not respond to this treatment are placed on a special diet that is low in methionine. To prevent mental retardation and developmental disability, treatment must begin shortly after birth.

- 8. Maple syrup urine disease (MSUD)** is a treatable disorder that affects the way the body processes protein. Children with MSUD cannot use parts of the protein called branched-chain amino acids. If left untreated, branched-chain amino acids build up in the bloodstream and cause brain damage. Maple syrup urine disease is treated with a special diet that is low in branched-chain amino acids. To prevent mental retardation, treatment must begin shortly after birth. Since protein is essential for normal growth and development, the child must continue on a special formula that provides protein and essential nutrients, but contains little or no branched-chain amino acids.

- 9. MCAD deficiency** is a treatable disorder that affects the way the body breaks down fats. If left untreated, MCAD deficiency can cause life-threatening illness. It is very important for people with MCAD deficiency to avoid fasting. MCAD deficiency is treated by eating frequent meals that are high in carbohydrates and low in fats. These infants will require special treatment throughout their life.

Your baby's doctor will receive the report of the test, usually in 5-7 days after the sample is collected. Make sure to ask about the results of your baby's newborn screen. For more information, please visit www.doh.wa.gov/newbornscreening.

NEWBORN HEARING SCREENING

It is estimated that the prevalence of hearing loss in newborns is 3 infants per 1,000 live births. One in 1,000 newborns is born deaf. And, ninety percent of children with hearing loss are born to hearing parents.

Without newborn screening for hearing soon after birth, most children with moderate to profound hearing loss are not diagnosed until they are two years old. Others with mild to moderate hearing loss may not be identified until they enter school. Because the first two years of a child's life are the most critical for learning speech and language, early detection and treatment is essential. Undetected mild hearing loss can significantly affect a child's ability to learn language, interfere with parent-infant bonding, and delay social and emotional development.

Equipment to detect hearing loss at birth is both effective and efficient. When hearing loss is detected early, steps can be taken to aid hearing and improve language and

communication skills. When detection of hearing loss is delayed, infants and children who are hard of hearing or deaf do not get early opportunities to learn language and have their hearing aided. As a result, they fall behind hearing children in communication and social-emotional development. This may eventually result in lower education and employment levels in adulthood.

The American Academy of Pediatrics, the National Institute on Deafness and Other Communication Disorders, and the National Institutes of Health have all published position statements endorsing universal newborn hearing screening. In addition, they state that all infants with a confirmed hearing loss or deafness should receive appropriate intervention before six months of age from healthcare professionals with expertise in hearing loss and deafness in infants and young children.

Because we and your baby's physician believe that newborn hearing screening is so important, we offer newborn hearing screening to all families with newborns. You will be given information about the program during your hospital stay. The newborn hearing screen is performed after birth while you and your baby are in the hospital. It takes only a few minutes and causes no discomfort to your baby.

A specially trained technician administers a hearing screening test. The test we use at Evergreen is called *Automated Brainstem Auditory Evoked Response* (ABAER). Special sensors are placed on your baby's skin. A soft rubber earphone sends a series of quiet sounds into your baby's ear. The sensors measure the responses of your baby's hearing nerve. The data is computerized and stored.

Babies either pass the screening test or are referred for further testing. You will be informed of your baby's results right after the test. If you have questions you can contact our Newborn Hearing Screening Program at **425.899.3556**. And, any future concerns you may have about your baby's ability to hear should be shared with your baby's physician.

If your baby does not pass the hearing screening they will need more testing to confirm whether or not they have a hearing loss. The most common reasons why a baby may be referred for further testing are middle ear fluid or infection, an ear canal blocked with debris, or a permanent hearing loss. If your baby has been referred for further hearing testing it is also important to understand that there are varying degrees of hearing loss. A hearing loss can range from mild to profound (deaf). Babies with the mildest degrees of hearing loss will respond to you when you talk with them. They will also respond to louder sounds. However, they will have difficulty hearing the softest sounds of speech. Babies with the most severe degrees of hearing loss will have difficulty hearing speech and even very loud sounds. However, they will respond to you when you talk with them face to face.

The sooner you find out if your baby has a hearing loss, the sooner you can begin to help your baby learn to listen and develop language. Research shows that most children with hearing loss, whose families receive appropriate services before 6 months of age, are able to develop language normally.

The following clinics in our area can test your baby's hearing:

- **Children's Hospital & Regional Medical Center**
PO Box 5371, MS CH-78, Audiology, Seattle, WA 98105
Phone: 206.987.5173 • **Fax:** 206.987.3878
- **Children's Bellevue, Audiology**
1135 116th Ave. NE, Suite 400, Bellevue, WA 98004
Phone: 425.454.4644 • **Fax:** 425.451.0214
- **Evergreen Speech & Hearing Clinic, Inc.**
1800 116th Ave., Suite 103, Bellevue, WA 98683
Phone: 425.454.1883 • **Fax:** 425.454.2036
- **Mary Bridge Speech & Hearing Clinic**
Mary Bridge Children's Hospital, 1220 Division, Tacoma, WA 98403-1321
Phone: 253.403.1450 • **Fax:** 253.627.5004
- **University of Washington**
Pediatric Audiology Clinic Center for Human Development and Disability (CHDD), PO Box 357920, Seattle, WA 98195
Phone: 206.685.4692 • **Fax:** 206.543.5771
- **Virginia Mason Medical Center**
Listen for Life Department, 1100 Ninth Avenue, Seattle, WA 98111
Phone: 206.223.8802 • **Fax:** 206.223.2388

IMMUNIZATIONS

Immunizations are now available to treat almost any "childhood diseases." The benefits of the immunizations are much greater than the possible risks of the vaccines for almost all people. See pages 412-417 in *Pregnancy, Childbirth and the Newborn* for more information about immunizations.

Washington State Law RCW 28A.31.118 requires that every child be immunized before entering school and daycare centers. Your baby may receive the first immunization (the first of three hepatitis B shots) while in the hospital. The remaining immunizations are available at your baby's well-baby checkups, at the local health department, or at a community clinic.

The possible risks or side effects of each immunization will be explained to you at the time your baby receives each vaccine. The risks vary from each vaccine but can include such symptoms as soreness at the injection site, fever, and fussiness.

Keep an accurate record of all the vaccines your baby has received. This record will be necessary if you place your baby in daycare and when your child begins school.

This is a good time to get your own immunizations up to date. As an adult, you will need to have a tetanus-diphtheria booster (Td) every 10 years.

Feeding Log

DATE:	TIME:											24 HR Totals
Feeding (right)												
Feeding (left)												
Wet Diaper (✓)												
Bowel Movement (✓)												
DATE:	TIME:											24 HR Totals
Feeding (right)												
Feeding (left)												
Wet Diaper (✓)												
Bowel Movement (✓)												
DATE:	TIME:											24 HR Totals
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