

NEONATAL INTENSIVE CARE UNIT

Discharge Teaching

INTRODUCTION

Congratulations! Your baby is almost ready to go home. This eBook contains important information you will need in preparation for your baby's discharge from the hospital and afterwards. There are tips on infant care and easing the transition to caring for your baby at home. This is just a guideline and please discuss with your caregivers if you have any questions.

EASING THE TRANSITION TO HOME

How your new baby responds to living at home after being in the hospital depends on:

- Your baby's age or adjusted post-gestational age (for premature babies) or developmental level.
- Your baby's temperament, or how your baby usually responds to different situations, stimulation or environments.
- How long your baby is in the hospital.
- The reason your baby is in the hospital.
- The pain or discomfort your baby may have experienced.
- Medicines your baby may be taking.

How to help your baby adjust to being home

The environment of your home will be unfamiliar to your baby and different from what they experience in the hospital. You may need to help your baby adjust to new surroundings by:

- Trying to begin routines (e.g. sleeping or eating) at home.
- Taking time to bond with your baby.
- Keeping visitors to a minimum.

Don't get discouraged. It may take a while to develop daily habits that work for you and your baby.

How to help your family adjust to your new baby at home:

- Spend time together as a family.
- Get back to your usual family routines and rules.
- Encourage your family to talk about the hospital experience. For example, you can read stories about what happened at the hospital to sisters and brothers.
- Make sure everyone (including sisters and brothers) wash their hands before touching your baby.
- Encourage your family to participate in your baby's care at home, such as changing diapers or feeding.
- Allow your baby's sisters or brothers to talk about their feelings about having the new baby at home.
- Schedule time with sisters or brothers who may have felt left out during the hospitalization.
- Talk to your extended family and friends about your baby's special needs or issues.

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How you can help yourself adjust to being home

Some parents and caregivers also need time to adjust to home life. You may also have new tasks in caring for your baby's medical needs at home. You may feel extra tired or unusually busy as you help your family adjust to living with a new family member. Take care of yourself. You are important to your baby and family.

- Take a break. A quick walk or short nap can be just the thing to refresh your body and spirit.
- Get as much rest as possible. Try to sleep when your baby sleeps, if you can.
- Seek help from a support group, friends or extended family.
- Accept offers from your friends or extended family to help you during this time. Say "yes" to a prepared meal, babysitting, grocery shopping, or anything else that may make your life easier or free up some of your time.
- During breastfeeding or bottle-feeding, relax. Don't be afraid to ask for help so you can focus on your baby.
- Call your baby's doctor with questions or concerns.



TAKING A TEMPERATURE

Before every feeding in the NICU, you or your baby's nurse takes your baby's temperature. Regular temperature checks are not needed at home unless you are unsure whether the baby is over- or underdressed or if you are worried the baby may have a fever or is not acting normally.

We suggest dressing your baby as you would dress; for example, if you are wearing layers for a cold day, then dress your baby in layers as well.

Your baby's body temperature changes throughout the day. Expect higher readings in the afternoon than in the morning.

Your baby's temperature may increase with activity or crying.

An increase or decrease in temperature may indicate that your baby has an infection.

A normal temperature range for your baby is 97.6-99.6 degrees Fahrenheit (36.5-37.5 Celsius).

Always measure your baby's temperature with a thermometer under the armpit. That's what we recommend in the NICU. Some pediatricians will ask you to check the rectal temperature so we recommend you learn how to do it at your baby's pediatrician visit.

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USE OF BULB SYRINGE

A bulb syringe may be used to clear fluid from your baby's nose or mouth. This tool helps you clear nasal secretions if your baby has a cold or remove milk if your baby spits up. Follow these steps to use a bulb syringe:

Squeeze the bulb as shown in the photograph above.

Insert the tip into the nostril or mouth.

IMPORTANT: Take care to avoid inserting the tip too deeply into the nose or mouth, as this may cause gagging or injury.

Holding the syringe in place (nose or mouth), release the compression of the bulb, suctioning liquid into the bulb syringe.

Remove the bulb syringe from the baby's nose or mouth and squeeze the bulb again, expelling the contents into the trash or onto a paper towel.

Clean the tip of the bulb after each use. A bulb syringe may be sanitized by placing it in boiling water for 10 minutes.

Remember that sneezing is a normal way for your baby to clear their nose. Do not put fingers or cotton swabs into your baby's nose.



BATHING

Your baby's healthcare providers should teach you to bathe your baby before your baby is discharged from the NICU. Your baby typically only needs to be bathed 2-3 times per week.

Sponge bathe your baby until the cord has fallen off.

NOTE: Take care to avoid submerging your baby in water before the cord has fallen off. Once the cord has fallen off and the umbilicus is dry and healed, you may give your baby a bath in a tub.

Because your baby gets cold easily, make sure the room is warm and you have all your bathing supplies ready.

Wipe your baby's face with water, and clean eyes from the inner to outer corner.

The external parts of the ear may be wiped with a wet washcloth. Earwax naturally cleans your baby's ear canal and should be allowed to come out on its own. Never put cotton swabs in your baby's ears. They interfere with wax drainage and may damage the ear.

The NICU provides a mild baby soap to wash your baby. Start by washing the body. Be sure to clean skin folds, especially under the neck and chin where milk can collect from dribbling.

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When washing your baby's hair, try to avoid getting water in their eyes by cupping your hand across the forehead.

For a girl, wash her vaginal area from front to back.

Clean the buttocks last.

When the bath is done, wrap your baby in a towel and dry them.

DIAPER CHANGING

While your baby is in the NICU, diapers are weighed. This will no longer be necessary when you are home.



Wash your hands before and after you change your baby's diaper. If you need to leave the room while changing your baby's diaper, put the diaper back on and take your baby with you.

Lay your baby down on a flat surface. Put a blanket or changing pad on the surface before laying your baby down.

Remove the dirty diaper and clean your baby's bottom. If your baby had a bowel movement, use the diaper to wipe off most of the bowel movement. Clean your baby's bottom with a wet washcloth or diaper wipe. Do not use diaper wipes if your baby has a rash or circumcision that has

not yet healed; rather, use a cloth moistened with only water. Gently lift both legs and wash your baby's buttocks. Always wipe from front to back. Clean under all skin folds and between creases. Apply ointment or petroleum jelly as directed if your baby has a rash.

Put on a clean diaper. Lift both your baby's legs and slide the clean diaper beneath his buttocks. For a boy, gently direct his penis down as the diaper is put on. Fold the diaper down if your baby's umbilical cord has not fallen off.

CORD CARE

Your baby's umbilical cord will dry and fall off 1-3 weeks after birth. No routine cleaning is necessary. Cleaning or wetting the cord may actually extend the time until it falls off.

Do not cover or pull at the cord stump. Fold the front of the diaper down below the cord stump.

If the cord becomes soiled with stool or urine, wash it off right away with water. Gently pat the stump dry. This will prevent infection around your baby's cord stump.



If you notice redness, odor or oozing from the cord, notify your doctor. Do not give tub baths until the cord falls off. When it falls off, you might see a spot of blood on the diaper or clothes which is normal.

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NEWBORN SCREENING TESTS

Newborn screening is a public health initiative that targets all babies, both term and preterm. These tests screen newborns for conditions that benefit from early detection, diagnosis and intervention. Before your baby goes home with you, they will undergo the following tests:

NEWBORN SCREENING TEST (PKU TEST): A small sample of blood taken from your baby's heel is used to test your baby for rare but serious health conditions. Many of these conditions can be treated if found early. Testing is generally performed when a baby is 24-48 hours old, and it usually takes several weeks to get results. If a positive screen is detected, you and your pediatrician will be notified immediately and follow-up testing will be ordered. If you have not been informed of an abnormal test result after several weeks, it is most likely normal. Feel free to ask your provider for your baby's results if you are concerned.

CCHD SCREEN: This test uses pulse oximetry to look at the amount of oxygen in your baby's blood. It is designed to detect a critical congenital heart defect (CCHD) before a newborn shows signs of the condition. This test is performed close to discharge, and the result is displayed as a pass/fail. It is not necessary to perform a CCHD screen if your baby has already received an echocardiogram (ultrasound of the heart) after birth. If your baby is found to have low pulse oximetry screening, they will be evaluated further by a cardiologist (heart doctor).

HEARING SCREEN: This short test checks for hearing loss. It is easy and not painful. Babies are often asleep while being screened. This test is typically completed in the hospital prior to your baby's discharge. Your baby should be screened for hearing loss no later than 1 month of age. An abnormal hearing screening does not mean your baby cannot hear. Most babies who do not pass the hearing screen can hear but need more testing after discharge.

For more details, please visit the CDC Newborn Screening Portal:

www.cdc.gov/newbornscreening/

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SCREENING TESTS FOR PRETERM BABIES

EYE EXAM: If your baby was born at ≤ 32 weeks gestational age or weighed less than 1,500 grams (3 pounds, 5 ounces) at birth, they will have an eye examination at 4-7 weeks of age. Follow-up exams will be scheduled every week. The exam identifies any changes in the eye tissue caused by retinopathy of prematurity (ROP). ROP is abnormal development of the blood vessels in the back of the eye which, if severe, may cause blindness. Early detection of ROP allows preventative treatments to be used to preserve vision.

BLOOD COUNT: A final blood count test is usually done the week of your baby's discharge. If your baby has a low blood count, the doctor may order a blood transfusion or prescribe iron medication to assist your baby in making new red blood cells. Follow-up lab tests will usually be done in your pediatrician's office or an outpatient clinic.

CRANIAL ULTRASOUND: If your baby was born at less than 32 weeks gestational age, your baby will undergo a head ultrasound to detect any bleeding around the brain. Babies who weighed less than 1,000 grams at birth will also get a magnetic resonance imaging (MRI) scan of the brain near the time of hospital discharge. This may help predict the need for early intervention services to ensure the best possible developmental outcome. MRI may show abnormalities that a cranial ultrasound will not.

CAR SEAT TEST: Infants born earlier than 37 weeks gestational age, or who weigh less than 2500 grams, require oxygen when going home, or have any medical conditions that may not tolerate a sitting position, will need a car seat test. The test ensures your baby has a stable breathing and

heart rate pattern while positioned in the car seat. The test is usually performed in the hospital one or two days before discharge. You will buy the car seat and bring it to the hospital. Be sure to check your baby's weight before buying a car seat. Some babies are too small for some car seats. Make sure all the straps are in place and the car seat is in good condition and not expired (you can find the expiration date on the side of the car seat). During the test, your baby will be placed in the car seat for 90 to 120 minutes or the length of the car ride home, whichever is longer. Your baby's nurse will monitor your baby's heart rate, breathing, and oxygen levels. If your baby passes the car seat test, you will be able to use the car seat you have provided. If your baby does not pass their car seat test, the hospital may repeat the test. Please discuss with your baby's doctor or nurses if you have any further questions.

TIPS AND TRICKS

Tips and tricks from preemie parents

These tips from parents of preemies will help you save time, lessen stress and get better sleep at home with your NICU baby.

Time savers for feeding and pumping

For parents of multiples, keep your babies on the same schedule. If one baby wakes early for a feed, wake the other baby(s) and feed him/her as well.

Pump your next feed(s) directly into the bottle (this works well with most common brand bottles) and leave it at the bedside ready to go. Breastmilk stored at home can stay at room temperature for 4-6 hours. This will save you time from pouring milk into separate containers, refrigerating milk and warming it. The milk is all set up and ready to go!

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If you are feeding formula, have a large batch made up before bedtime, fill the bottles to desired amount before bed and keep in the fridge ready to go. Invest in a bottle warmer or get a hot water dispenser to make bottle warming quick and easy in the middle of the night.

Have enough bottles to get you through a whole night without washing. Also having several pump kits to last you through the night will help you get more sleep. Store used bottles and pump kits in zip lock bags in the fridge until the morning, then you can wash them all together at once rather than using precious sleep time to wash during the night.

For babies with reflux, have some kind of safe inclined baby chair to put them in while you're pumping after their feeding. This can be a bouncy chair, pod, rock and play, etc.

Tips and tricks for managing life at home with a preemie

Not being able to hold your baby after feeds because you need to pump can be very difficult emotionally. Take this time to read to your baby while he/she sits next to you in the inclined chair. Reading to your baby is great for development and bonding and makes pumping more enjoyable.

Baby carriers such as K'Tan, Moby, Baby Bjorn, Ergo, etc. (there are many on the market) are also a great way to bond with your baby and keep them upright after feeds during the day when you have bottle washing or other things to get done.

Delivery services or drive-up/pick-up for ordering baby care products, formula, diapers, meals, etc. are all very useful time savers and also help keep your baby at home away from potential illness during flu and viral season.

Apps such as Baby Connect and MyPreemie are useful for keeping track of feeds, volumes, doctor appointments and development.

As a parent you're always your baby's best advocate and you know your child better than anyone. Don't be afraid to ask your pediatrician about feeding or medication plans after you are discharged from the NICU. If something doesn't seem to be working well, or doesn't feel right, speak up and let your pediatrician know.

If you have several doctors' appointments for your babies and are seeing specialists, keep a binder of appointments, specialists, and questions to ask them. Also, write down a brief understanding of what was discussed during these visits. When juggling life with NICU babies after discharge it can be overwhelming to remember all the details of these visits to reflect on later or discuss with your spouse or your pediatrician.

Keeping your baby well fed and warm are a couple of the most important tasks when taking home your preemie(s). Stick to your feeding schedule no matter who shows up to visit. Dress your baby in layers (onesie under pajamas or clothes, sleep sacks or swaddlers on top of pajamas). Hats are okay during the day when you are awake with the baby.

When you go to the pediatrician, ask the nurse to take your baby's temperature before you undress and weigh and measure the baby. If your baby is undressed for several minutes and placed on a cold scale the temperature may drop quickly.

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BREASTMILK TIPS

Breastmilk for your baby in the NICU

Your infant has been admitted to the Neonatal Intensive Care Unit (NICU) and you may wonder if breastfeeding and breastmilk feeding is still possible. **It is!** The nurses and a Lactation Consultant are here to help.



Photo courtesy of Jane Morton, MD

Breastmilk provides the best nutrition for your baby.

Factors in breastmilk may prevent infections and help shorten your baby's time in the hospital. Milk from mothers who deliver prematurely differs from milk of mothers who deliver at

term and is specially designed for the baby's needs. Even a few drops of the first milk you produce, called colostrum, contains important infection-fighting cells. It is often yellow in color and we call it "Liquid Gold". We use every drop! Breastfeeding and providing breastmilk for your newborn is one of the most important things you can do for your baby. Even if you had not planned to breastfeed or planned to breastfeed for only a few weeks, breastmilk will give your baby the very best start in life.

Benefits of breastmilk feeding:

- 600 nutrients that no artificial formula can replicate
- Fats that help with brain growth
- Fats, sugars, and proteins to help the baby grow strong and healthy
- Hormones that teach the baby's intestines to digest food

- Antibodies and live cells to prevent and fight infections.

Establishing your milk supply with a pump:

- Pump as often as you would nurse a baby, at least 8 times in 24 hours. This is the best way to establish a good milk supply, especially until your production reaches 24 ounces in 24 hours.
- Spend 5 minutes hand expressing and massaging each breast before pumping. Refer to this video: www.newborns.stanford.edu/Breastfeeding/HandExpression.html
- Pump every 2-3 hours during the day with one 4-5 hour break at night for pump-dependent moms. For example, if you pump before bed at 11 p.m., pump once during the night (around 4 a.m.) and again at 6 or 7 a.m.
- Pump for 15-20 minutes total if you are double pumping. Pump at the highest suction setting that is comfortable for you. Pumping should not be painful. You may get nothing or only a few drops of colostrum the first few times. This is normal and expected.
- Relax while you are pumping. Think of your baby and visualize him/her nursing at your breast.
- Pumping during the night is essential in the first two weeks, and/or if your milk supply is down.
- Keep a pumping diary and record the pumping times and the volumes of milk you express.

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Photo courtesy of Jane Morton, MD

- Refer to this video to maximize your milk production:
www.newborns.stanford.edu/Breastfeeding/MaxProduction.html
- If your baby needs supplemental feedings, you should continue pumping breasts as long as supplement is needed. This helps maintain an adequate milk supply.
- If baby is not breastfeeding, pump both breasts 15 minutes at least 8 times in 24 hours.
- If baby is breastfeeding and taking bottles afterwards, pump both breasts 10 minutes after each feeding. The goal is to breastfeed and/or pump at least 8 times per 24 hours.

*"The key to maintaining a milk supply over time is to establish a daily routine while expressing and stick to it, mimicking the frequency and length of a baby's usual breastfeeding routine."
(LLI BREASTFEEDING ANSWER BOOK, p. 253)*

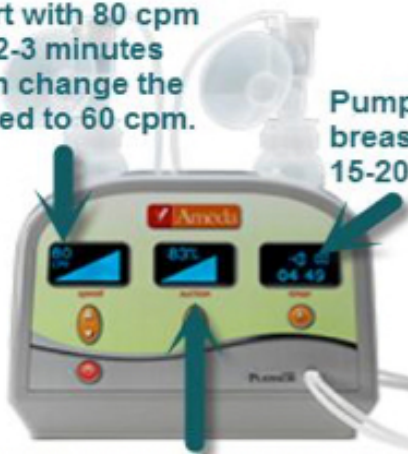
Using a breast pump

Wash your hands well with soap and water. Find a quiet, comfortable place to sit with a drink and a snack.

- Practice hand expression for approximately 5 minutes on each breast before pumping.
- Assemble the pump kit.
- Center the flanges over your breast(s) to make an air-tight seal.
- Consider using a hands-free bra when pumping both breasts at once.
- Adjust pump settings and begin.

- Flange fit and comfort: You have a good flange fit when you see space around your nipple and the base is drawn into the nipple funnel. You may apply a thin layer of oil to reduce friction. If you experience pain while pumping, please have the flange size checked by a Lactation Consultant.

Pump Settings



Start with 80 cpm for 2-3 minutes then change the speed to 60 cpm. Pump both breasts for 15-20 minutes.

When you turn on the pump increase suction to 31% right away. As you decrease the speed you can increase the suction. These are guidelines, please adjust as needed. Pumping should not hurt!



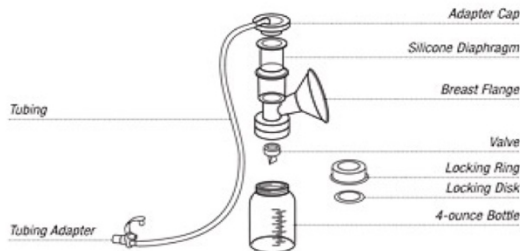
To Single Pump:

Remove one tube and close the white pump connector

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Cleaning Pump Parts After Each Use

Take the Collection Kit apart to clean:



How to put Collection Kit back together:

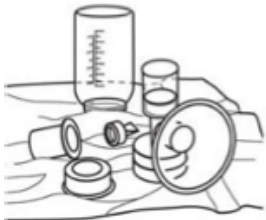
1. Place diaphragm into piston chamber and snap white cap onto piston chamber.
2. Gently secure white valve into lower portion of breast flange.
3. Screw collection bottle onto breast flange.
4. Insert white pump connector to ends of the tubing then insert connector into the pump.



To Dual Pump:

illustrations by Ameda

Both tubes should be attached to the white pump connector.



Wash all parts except tubing, adapter cap, and tubing adapter in warm, soapy water.

- Take kit apart to clean. You will clean five independent parts.
- Allow parts to air dry on clean towel or drying rack before next use.
- Do not wipe parts with towel.
- Cover parts with a clean towel if not planning to use again right away.
- The breast flanges and bottles may be washed on the upper rack of dishwasher.

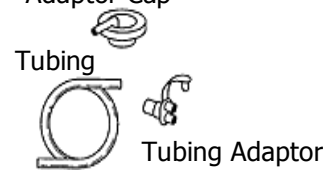


Valve

Note: Wash diaphragms and valves gently by hand. Do not insert anything into valve while cleaning. You may sanitize your pump parts by: sterilizer, microwave steaming bag, or boiling. Please follow the directions that come with your pump kit.

Do not wash

Adaptor Cap



Containers, labeling and transporting breastmilk:

- Write the date and time the milk was pumped on a baby label and place it on each container of milk. Avoid touching the inside of the cap and collection bottle. Obtain more labels from your baby's nurse as needed.
- Use separate, sterile storage container for each pumping session. Do not combine milk from several pumpings in one container. Collect milk in small volumes to avoid wasting any thawed breastmilk. The containers will hold 2-3 ounces of milk.
- Containers, caps and labels will be provided while you are in the hospital. After discharge, you will need to purchase containers made for milk storage. Avoid sandwich bags or thin disposable feeding bottle liners that can split when frozen. Glass or hard plastic BPA-free containers with leak-proof lids or breastmilk freezer bags can be used.

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- The milk must be discarded if the container has been compromised or is leaking in any way.
- Fresh or frozen milk can be safely brought to the hospital in a cooler with ice on the bottom and top of the bottles/bags.

Breastmilk storage for home

BREASTMILK STORAGE Term Babies				
Room Temperature	Cooler with 3 Frozen Ice Packs	Refrigerator	Freezer	Thawed Breastmilk
4-6 hours 66-78° F 19-26° C	24 hours At 59° F 15° C	3-5 days At 39° F 4° C Or lower	6-12 months 0-4° F 18-20° C	Use within 24 hours

Breastmilk storage for your baby in NICU

BREASTMILK STORAGE Preterm Babies					
Room Temp	Fridge, Fresh Milk	Fridge, Thawed	Fridge, Fortified Breastmilk	Fridge, Thawed Donor Milk	Freezer
4 hrs	48 hrs 0-4° C 32-34° F	24 hrs	24 hrs	48 hrs	3-6 months -20° C 0° F

Breastmilk storage tips...

- Be sure to leave some extra room at the top of the container so the bottle/bag will not overflow when freezing.
- Place the milk in the refrigerator if you plan to use it within 48 hours. Put milk in the coldest part of your freezer (not in the door) if you do not plan to use it. *Breastmilk cannot be refrozen if thawed.*
- Refrigerated and frozen breastmilk may separate as the cream layer forms on top and may be other colors such as yellow, white, or greenish depending on your diet. These are normal variations. Gently swirl (don't shake) the bottle to mix the milk layers.
- Rarely, some mothers notice their defrosted breastmilk has a soapy taste or odor. This is due to lipase, an enzyme, which helps to digest the fat content of the breastmilk. If this occurs, scald the breastmilk (do not bring to a boil in a pot of water) on a stove until tiny bubbles appear along the sides of the pan; do this before freezing. The scalding process will neutralize the enzyme, preventing the soapy taste or smell.

Appropriate breastmilk volumes

At first, if you are hand expressing during the first 48 hours after delivery, you may only see moisture or drops, but as your copious production of milk comes in, usually in 3-5 days, you will start to see sprays of milk. You should produce a full milk supply of at least 13 ounces per 24 hours by 5-7 days or 24 ounces by 2 weeks postpartum whether your baby is premature or term.

Preterm baby and breast pump dependent mom				
By Day 7: look for 350ml/day or 11-12 oz/day				
By Days 14-21 after delivery look below:				
	ml/day	Oz/day	ml/pump	Oz/pump
IDEAL	750-1000	25-35	90-120	3-4
ADEQUATE	500	16-20	60-75	2-2½
BORDERLINE	<350	11-12	40-45	1½

Full term baby	
Baby's age	Average feeding
First week (after Day 4)	1-2 oz (30-60ml)
1 to 3 weeks	2-3 oz (60-90ml)
1-6 months	3-5 oz (90-150ml)

How to maintain a healthy pumping routine:

- Plan to rent a hospital grade electric breast pump for at least while your baby is in the NICU. The "Pump in Style" and "Purely Yours" pumps are not hospital grade.
- Be sure to bring your kit and clean bottles to the hospital with you when visiting your baby. You may use one of the electric breast pumps in the parent rooms or in the NICU.
- The most common causes of low milk supply are fatigue and infrequent milk expression (the more you pump, the greater your milk supply!)

- Try to pump in a quiet, peaceful setting. Use a comfortable chair (straight back best). A warm drink may help. It may help you to relax and your milk to flow if you keep a picture of your baby nearby during pumping, or pump at the baby's bedside, or after holding your baby.
- Eat a balanced diet and drink to satisfy thirst. Water is best. Your urine should be pale yellow in color. You don't need to drink milk to make milk. Bring snacks and beverages with you to the hospital. Include leafy green vegetables and whole grains in your diet. Long cooking, steel cut oats may help increase your milk supply.
- Please review all medications you are taking with your baby's nurse, physician, or Lactation Consultant.

The most important part of successful pumping is to stimulate a let-down reflex.

This is when your milk begins to flow freely. Warm, wet compresses applied to the breasts and light, circular massaging of the breasts prior to and/or during a pumping session will help this natural reflex occur. Thinking of or looking at your baby, or a photo of your baby, or even holding the baby skin to skin, is also helpful. Milk is produced on a supply and demand basis. When pumping full-time for a baby unable to nurse at the breast, emptying the breasts regularly stimulates and maintains the milk supply.

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Maintaining full milk production

When you reach 25-35 ounces (750-1,050 ml) per baby per day, you've met your goal. Most mothers can then pump fewer times each day and keep up their production. What then?

- Try cutting back to 5-7 pumpings each day. If your production decreases, go back to 8 pumpings a day.
- Try sleeping 6-8 hours at night. Many pumping mothers pump right before bed and then first thing in the morning, once they have developed a full supply. If you can do this without too much breast fullness, go ahead, unless your milk production starts to decrease.
- Pump for a shorter time. For most mothers, 10-15 minutes of pumping is long enough.
- Write in your Daily Milk Supply Log the amount that you pump each 24 hours. Your Lactation Consultant will help you keep on track.

Thawing breastmilk or warming stored milk when you are home with the baby:

- You can thaw frozen milk in the refrigerator. Thawed milk is safe in the refrigerator for up to 24 hours.
- Label milk with the date and time it was thawed.
- Use the oldest milk first.
- Breastmilk that has been thawed may not be refrozen.
- To warm the milk: put a bottle/bag of breastmilk in a bowl of warm water with the sides lower than the bottle's lid for approximately 10-20 minutes.
- Keep the heat low. High heat kills the live cells in your milk that help keep your baby healthy.

- *Don't save the leftover milk once the bottle has been in your baby's mouth saliva.*

CAUTION

Never microwave breastmilk. Microwaving can cause severe burns to baby's mouth from hot spots that develop in the milk during microwaving. Microwaving can also change the composition of breastmilk.

How to feed your baby

Each baby is sent home with a recommended and individualized feeding plan of breastmilk and/or formula. Continue to feed your baby following this plan and discuss any changes with your pediatrician. Your baby's nutritional needs will change as they grow. Your baby should not start solid (baby) foods until around 6 months of age. Discuss starting solid foods with your pediatrician. If you are able to breastfeed or supply breastmilk, continue doing so even after starting your baby on solid foods. Breastfeeding is recommended for at least the first year of your baby's life.

How to burp your baby

Burp your baby when you switch breasts or after every 2-3 ounces from a bottle. Burp your baby again once they finish eating. Your baby may spit up when burping. This is normal. Hold your baby in any of the following positions to help them burp:

Hold your baby against your chest or shoulder. Support their bottom with one hand. Use your other hand to gently pat or rub their back.

Sit your baby upright on your lap. Use one hand to support their chest and head. Use the other hand to gently pat or rub their back.

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Place your baby across your lap. Your baby should face down with their head, chest, and belly resting on your lap. Hold your baby securely with one hand and use your other hand to gently pat or rub their back.

CIRCUMCISION CARE

What to expect

Immediately following a circumcision, your baby's penis may appear slightly swollen around where the foreskin was removed. A penis that is healing normally may look very red at first with a yellowish coating. Over several days, this will disappear. Your baby's penis should heal in 7-10 days.

The penis may be covered with a light dressing like petroleum-coated gauze. The gauze may come off when your baby urinates. You may continue to cover the penis with petroleum gauze for the first couple days following the procedure to prevent tender skin from sticking to the diaper.

Your baby may have a plastic ring around the penis, and this will come off within 8 days.

Most important is to keep the area as clean as possible. If particles of stool get on the penis, use warm water to clean the area. You may gently blot the area or squeeze water from a wet cloth or cotton ball onto the penis. Do not use soap or diaper wipes as these may sting or irritate the penis.

When to call the pediatrician:

Signs of possible infection may include:

- Redness that does not go away
- A penis that is swollen
- Crusted yellow sores or blisters
- Foul smell
- Infection is rare, but if you are concerned, you should call your pediatrician.

What to do after the circumcision has healed

After the circumcision has healed, the penis usually requires no additional care. Occasionally, a small piece of the foreskin remains. If so, pull back this skin gently each time you bathe your baby and gently clean the area.

For additional information refer to the link www.healthychildren.org/English/ages-stages/baby/bathing-skin-care/Pages/Caring-For-Your-Sons-Penis.aspx

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NICU Discharge Teaching (cont'd)



PUTTING YOUR BABY TO SLEEP

How to position your baby for sleep

Place your baby on their back to sleep. The American Academy of Pediatrics (AAP) recommends that healthy infants be placed on their backs to sleep. Placing babies on their backs to sleep does not increase the risk of other problems like choking, flat head, or poor sleep. By comparison, babies who are placed on their stomachs to sleep are at higher risk for sudden infant death syndrome (SIDS). Other ways to reduce SIDS include breastfeeding, refraining from smoking, and getting routine checkups for your baby.

Sleeping tips

IMPORTANT: Do not let your baby sleep in the middle of your bed, couch, or other soft surface, like a waterbed. If your baby's face gets caught in these soft surfaces, they may suffocate.

Your baby needs their own crib. Allowing your baby to have a designated, independent sleep space establishes the foundation for good sleeping habits for your child as they grow older.

Do not let your baby get too hot. Keep the room at a temperature that is comfortable for an adult.

Use a crib or bassinet that has firm sides. Use a firm, flat mattress. Cover the mattress with a fitted sheet that is made especially for the type of mattress you are using.

Remove all objects, such as toys, pillows, bumpers, or blankets from your baby's bed while they sleep.

More information can be found at:

www.aap.org/en-us/about-the-aap/aap-press-room/pages/american-academy-of-pediatrics-announces-new-safe-sleep-recommendations-to-protect-against-sids.aspx



TUMMY TIME

Why tummy time is important

Babies spend a lot of time sleeping on their backs. In order for babies to build strength, a certain amount of "tummy time" is needed when they are awake. Tummy time is a great way for babies to strengthen arm and shoulder muscles, which can be important for their development. Shoulder strength is needed later when they reach for a toy and begin to crawl.

How to engage in tummy time

Your baby will be ready for tummy time when they are awake, alert, and calm. Once or twice per day, place your baby on their stomach for 10-20 minutes.

Continued on next page

NICU Discharge Teaching (cont'd)

Tummy time tips:

- Start with short periods of tummy time, 2-3 minutes a day.
- Lie on your back, placing your baby tummy down on your chest.
- Place a rolled towel under your baby's shoulder and upper chest to make head lifting and movement easier.
- If you lay your baby down on the floor, lie on the floor with your baby and talk or sing to them.
- Always stay with your baby during tummy time. Ensure your baby is never left unattended.

If your baby was born preterm, wait until your baby's due date before beginning tummy time.



COMFORTING YOUR BABY

Babies communicate with you by crying. Cries may mean your baby is hungry or needs a new diaper. They may mean your baby is hot or cold, or tired and having trouble calming down to sleep. It may take you a few weeks to know what your baby is communicating with which cry. At first, try different things to see what works. Sometimes, you may not be able to find a reason for the crying, and this may be very troubling. You may feel stressed and overwhelmed.

Tips for comforting your baby:

- Hold your baby skin to skin and rock them, or swaddle your baby in a soft blanket.
- Gently pat your baby's back or chest. Stroke or rub their head.
- Quietly sing or talk to your baby, or play soft, soothing music.
- Go for a drive with your baby in their car seat, or go for a stroller ride.
- Burp your baby to get rid of extra gas.
- Give your baby a soothing, warm bath.

Tips for when you can't get your baby to stop crying:

- Take a breath, close your eyes and count to 10.
- Put your baby in the crib and leave the room for few minutes.
- Avoid picking up your baby until you're calm.
- Ask a family member, friend, or neighbor to take over for a while.

You should never shake your baby under any circumstances. While you may become frustrated if your baby won't stop crying, shaking your baby poses a serious risk to your baby's health. Shaken Baby Syndrome (SBS) is a serious brain injury caused by forceful and violent shaking of a baby. The movement of a baby's head back and forth can cause bleeding and increased pressure on the fragile brain. A baby's neck muscles are not strong enough to tolerate this "whiplash" motion. Many babies die from SBS and others who survive may have intellectual disability, blindness, paralysis, seizure disorders, and/or learning and speech problems.

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If you shake your baby or you are concerned that someone else may have shaken your baby, call your healthcare provider right away or go to the emergency room.

Signs and symptoms of SBS may include:

- Extreme crankiness
- Difficulty staying awake
- Trouble breathing or no breathing
- Seizure and vomiting
- No reaction to sounds or acting lifeless
- Tremors or shaking

LEARNING TO DELIVER CPR

It is very important that you learn how to deliver CPR before taking your baby home from the hospital. The letters CPR stand for Cardio Pulmonary Resuscitation. When your baby is close to discharge, your baby's nurse will give you a CPR DVD to watch. The video will teach you how to perform infant CPR. Watch the video so that you feel comfortable delivering infant CPR. There are also CPR classes available for parents to attend, which we recommend. Ask your baby's nurse for more information. Additionally, there are brochures available for you to pick up near the gift shop downstairs.

IMMUNIZATIONS

Why get your baby vaccinated?

Vaccine-preventable diseases are much less common than they used to be, thanks to immunization; however, they have not gone away completely. Consider that before the measles vaccine was invented, nearly everybody in the U.S. became infected with the virus at some point in their lives and hundreds died each year. By comparison, doctors working in the U.S. today may never see a single case of measles. Outbreaks of some of diseases still do occur, and vaccination remains important. For example, in 2013 there were several measles outbreaks around the nation, with large outbreaks in Texas and New York City. It only takes one or two people to introduce a disease to a community. If members of that community aren't vaccinated, the threat of an outbreak is likely. Bottom line: When fewer babies get vaccinated, more babies get sick. You can protect your baby by vaccinating them.

Vaccines are typically administered to term babies at two months of age.

Seven childhood diseases that can be prevented by vaccines

Diphtheria (the 'D' in DTaP vaccine)

- Signs and symptoms include a thick coating in the back of the throat that can make it hard to breathe.
- Diphtheria can lead to breathing problems, paralysis, and heart failure.
- About 15,000 people died each year in the U.S. from diphtheria before there was a vaccine.

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Tetanus (the 'T' in DTaP vaccine; also known as Lockjaw)

- Tetanus is unique among vaccine-preventable diseases because it is not spread from person to person. Often, the bacteria enter the body through an open wound, like a cut caused by a contaminated object.
- Signs and symptoms include painful tightening of the muscles, usually all over the body.
- Tetanus can lead to stiffness of the jaw that can make it difficult to open the mouth or swallow.

Tetanus kills about 1 person out of every 10 who get it.

Pertussis (the 'P' in DTaP vaccine, also known as Whooping Cough)

- Signs and symptoms include violent coughing spells that can make it hard for a baby to eat, drink, or breathe. These spells can last for several weeks.
- Pertussis can lead to pneumonia, seizures, brain damage, or death. Pertussis can be very dangerous in infants.
- Most pertussis deaths are in babies younger than 3 months of age.

Any caregiver who spends a significant amount of time taking care of the baby should be vaccinated against Whooping Cough.

Hib (Haemophilus influenzae type b)

- Signs and symptoms include fever, headache, stiff neck, cough, and shortness of breath. There might not be any signs or symptoms in mild cases.

- Hib can lead to meningitis (infection of the brain and spinal cord coverings); pneumonia; infections of the ears, sinuses, blood, joints, bones, and covering of the heart; brain damage; severe swelling of the throat, making it hard to breathe; and deafness.
- Children younger than 5 years of age are at greatest risk for Hib disease.

Hepatitis B

- Signs and symptoms include tiredness, diarrhea and vomiting, jaundice (yellow skin or eyes), and pain in muscles, joints and stomach. But usually there are no signs or symptoms at all.
- Hepatitis B can lead to liver damage and liver cancer. Some people develop chronic (long term) hepatitis B infection. These people might not look or feel sick, but they can infect others.
- Hepatitis B may cause liver damage and cancer in 1 out of 4 children who are chronically infected.
- This vaccine is typically administered within the first hours or days of life.

Polio

- Signs and symptoms include flu-like illness, or there may be no signs or symptoms at all.
- Polio can lead to permanent paralysis (in arms or legs, or sometimes inhibits breathing) and death.
- In the 1950s, polio paralyzed more than 15,000 people every year in the U.S. Now it is close to being eliminated worldwide.

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Pneumococcal disease

- Signs and symptoms include fever, chills, cough, and chest pain. In infants, symptoms can also include meningitis, seizures, and sometimes rash.
- Pneumococcal disease can lead to meningitis (infection of the brain and spinal cord coverings); infections of the ears, sinuses and blood; pneumonia; deafness; and brain damage.
- About 1 out of 15 children who get pneumococcal meningitis will die from the infection.

Children usually catch these diseases from other children or adults, who might not even know they are infected. For example, a mother infected with Hepatitis B can infect her baby at birth.

For more information, please visit:
www.cdc.gov/vaccines/index.html

IMMUNIZATIONS FOR PRETERM INFANTS

Some parents of NICU babies are concerned about immunizing their newborns. They worry that their babies may be too young or too fragile to safely receive vaccines. All preterm babies should be given the standard childhood vaccinations. They should get every immunization when they reach the ages at which these shots are normally given to all children.

If you're uncertain, keep in mind:

- If preterm babies get the infections that vaccines can prevent, they have a greater chance of having disease-related problems due to immature immune systems.

- All of the available vaccines are safe when given to preterm and low birth weight babies.
- Any side effects associated with the vaccines are similar in both full-term and preterm babies.

Hepatitis B vaccine. In most circumstances, the AAP recommends the hepatitis B vaccine for stable, low birth weight preterm babies at one month of life or before the baby is discharged from the hospital to return home, whichever comes first. For late preterm (>34 weeks gestational age) and term infants (>37 weeks gestational age), this vaccine should be given in the first hours or days of life.

Respiratory Syncytial Virus (RSV)

prevention: If your baby was born very preterm or has other medical conditions that would make any respiratory infection particularly severe, your baby may be given a first dose of monthly antibody (Nov-Apr) before being discharged from the hospital to prevent severe illness related to RSV.

RSV causes cold symptoms such as cough, congestion, and fever. In young infants, symptoms may be more severe and include trouble breathing and hospitalization. Preterm babies or babies with lung, heart, or immune deficiency problems are at the greatest risk for disease-related complications. If your baby is at risk for more severe illness, they may receive a monthly shot to prevent RSV in the first year of life. Ask your doctor for more information.

RSV season starts in the fall and runs into the spring. The virus spreads easily. If you're not sure whether your baby has RSV, call your doctor.

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RSV signs and symptoms:

- Labored breathing or fast breathing, wheezing, and gasping for breath
- Fever
- Bluish lips and finger tips

RSV prevention:

- Wash your hands before touching your baby
- Avoid bringing your baby to crowded places
- Do not smoke near your baby

PETS AT HOME

Be alert when you have pets in the house. Family pets can often exhibit jealous behavior and hurt your baby. Pets should never be left alone with a baby even if the animal has previously seemed friendly. Talk to your vet about ways to introduce your baby's scent to a pet before bringing your baby home.

Pet reptiles, including turtles, snakes and lizards are common sources of infection from salmonella in children.

Cats have been known to crawl in to the cozy cribs of infants to sleep and have inadvertently suffocated babies.

DISCHARGE MEDICATION ADMINISTRATION

We frequently recommend you give your baby iron and multivitamin supplementation following discharge from the hospital. Both medications are available at most grocery and drug stores. We will ask you to buy and bring those medications with you to the hospital a day prior to your baby's discharge. You will practice giving these medicines before you take your baby home.

FOLLOW UP APPOINTMENTS

Your pediatrician

After discharge from the NICU, your pediatrician will be your baby's primary doctor. We will send a summary of the baby's hospital course to your pediatrician on the day of discharge. We generally suggest you make an appointment with your pediatrician within 1 or 2 days of discharge from the NICU. Once the baby is discharged home from the hospital, questions and concerns regarding your baby should be directed to the pediatrician.

High risk infant follow up clinic (HRIF)

This multidisciplinary clinic follows infants who are at increased risk for neurodevelopmental problems due to prematurity, genetic conditions or severe illness. Our NICU team will make the appointment referral for you. You will be contacted by the clinic in the first few weeks after discharge to arrange an appointment. The clinic will evaluate your infant's development and make recommendations for any further services that may be needed.

Early Start

Infants who qualify to be seen in HRIF may also qualify to receive therapy services from this state sponsored program. We will make this referral for you if your infant meets the state guidelines for referral.

Other appointments may include:

- Ophthalmologist (eye doctor)
- Cardiologist (heart doctor)
- Physical therapy
- Specialty services for other types of doctors if your infant requires follow up
- Lactation Consultants are also available to see mothers and infants after discharge



WHEN TO CALL YOUR BABY'S PEDIATRICIAN

Please call your pediatrician with any questions or concerns. Specific situations that require communication with your doctor include:

- Temperature of under 97.5 F (36.5 C) or over 100.4 F (38 C)
- Vomiting repeatedly or forcefully or with blood noted in the vomit
- Refusing to eat for more than 2 feedings in a row
- Less than 6 wet diapers in 24 hours
- No poop/stool for 48 hours
- More than 2 diarrhea stools in a day, or blood in the stool
- Swollen stomach that does not go down
- Excessive sleepiness, or you cannot wake up your baby with touching and handling
- Extreme irritability and the baby cannot be consoled
- Swelling or drainage around eyes
- New blisters or pustules on the skin
- Congested cough or runny nose
- Thrush, or patches of white in the mouth

Seek care immediately or call 911 if:

- Your baby has blue lips
- Your baby is having difficulty breathing or is not breathing

SAFETY TIPS

Support your baby's head and neck when holding them.

Keep an eye on your baby. Never leave your baby alone on a bed, sofa, table or other high surface. Even young babies may be able to flip over, or wiggle their way to an edge and fall.

Always place your baby on their back to sleep. Your baby should sleep on a firm surface unobstructed by soft objects like bumper pads, blankets, stuffed animals or pillows. These could suffocate your baby and lead to Sudden Infant Death Syndrome (SIDS). For more information see section on PUTTING YOUR BABY TO SLEEP.

Inspect your crib for safety. New cribs are generally built according to the latest safety guidelines, but older cribs may not meet these standards.

- Slats should be no more than 2 3/8" apart so your baby's head cannot get caught between them.
- The mattress should come right up to the sides of the crib.
- Mobiles should be removed from the crib once your baby can stand.
- Cords or strings from blinds and appliances should be out of your baby's reach.

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Choose toys that cannot be swallowed by your baby. As a general rule of thumb, a toy is a choking hazard if it fits in the center of a toilet paper roll. Avoid toys that have small parts or sharp edges.

Avoid using pacifiers and other toys that tie around your baby's neck. Do not put necklaces on your baby. Take off bibs or other clothing tied around your baby's neck before putting them into a crib or playpen. Cords or strings of any kind should be kept out of your baby's reach.

Heat your baby's bottle in a bottle warmer or in a bowl of warm water. Avoid microwaving your baby's bottles. Microwaving liquid can create hot spots in the milk or formula and destroy the good antibodies in breast milk.

Adjust your water heater temperature setting to less than 120F. Be sure to keep hot liquids and drinks away from your baby's reach. Burns in early childhood are most often caused by hot liquid or tap water. When cooking, use back burners, turn pot handles inward, and keep your baby away from the stove.

Use hats and the shade of a stroller or an umbrella to shield your baby from direct sunlight. Be sure that the clothing your baby wears in the sun during warmer weather is lightweight so they do not overheat. Babies lack the ability to sweat and are unable to cool off when it's very hot. You may use infant-approved sunscreen after your baby is 6 months old.

Explain your baby's needs to older siblings. Make sure older sisters and brothers understand not to pick up your baby even when they're crying until checking in with an adult.

Keep household cleaners, chemicals and medications out of your baby's reach. Always store these items in their original containers so that everyone can easily tell what they are. Buy products with child-resistant caps, and make sure cabinets that are accessible to your baby are locked.

Refrain from smoking around your baby. Smoking in the home increases the risk for SIDS and respiratory illnesses. Wear a smoke jacket or shirt when smoking outside and remove it before interacting with your baby. Wash your hands after smoking.

Make sure you have a car seat that meets the federal safety standards.

Be sure to install the car seat properly and always correctly buckle your baby into the seat when you drive. Local fire stations often have programs to check the proper installation of car seats. If you need help finding someone to check your car seat, ask your nurse or social worker for help.

KEEP THE DISCHARGE INSTRUCTIONS IN YOUR DIAPER BAG FOR QUICK REFERENCE.

KEEP EMERGENCY PHONE NUMBERS STORED IN YOUR CELL PHONE AND/OR POSTED NEAR THE TELEPHONE IN YOUR HOME.