The NICU Parents' Handbook

Women & Infants

New England's premier hospital for women and newborns

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Welcome to the NICU

NICU Philosophy of Care

We are dedicated to providing the highest quality neonatal care in a nurturing environment with babies and their families at the center of everything we do.

NICU Contact Information

Parents can call the NICU any time for updates on their baby's condition.

Women & Infants Hospital Main Number	(401) 274-1100
NICU 2nd Floor	Ext. 3200
NICU 3rd Floor	Ext. 3300
NICU Main Number	1 (888) 717-2229

We will only give information by phone and at the bedside to parents and banded family members. This is so parents hear the information first and you can communicate it as you choose.

NICU Leadership Team

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Who's Who in the NICU

Staff members at Women & Infants are experts in caring for newborn babies and have received advanced training to meet their special health care needs. This is a list of staff you may meet while your child is in the NICU. All staff members wear a photo identification badge. If you have questions about who is providing care, please talk with your baby's nurse.

- Attending Neonatologist (The Attending) – pediatrician with advanced training in the care of sick and/or premature newborns. The Attending leads the team providing care for your baby in the NICU. Depending on your baby's needs, the Attending may be a pediatric surgeon. The Attending also directs and participates in current scientific research.

Attending Neonatologists (*The Attendings*)
Jesse G. Bender, MD
Joseph Bliss, MD
William Cashore, MD
Mara Coyle, MD
Juan Sanchez Esteban, MD
Abbot Laptook, MD
Beatrice Lechner, MD
Yun Joo Lee, MD
Joseph McNamara, MD
William Oh, MD
James Padbury, MD
Bonnie Stephens, MD
Barbara Stonestreet, MD

- Neonatology Fellow (The Fellow) – pediatrician who is doing a three-year subspecialty training program in the care of sick or premature newborns. He or she will become an Attending after this training. The Fellow and the Attending coordinate medical care for your baby in the NICU.

- Pediatric Resident (The Resident) – medical doctor who is training to become a pediatrician. The Women & Infants/Hasbro Children's Hospital pediatrics residency program is the graduate training site for The Warren Alpert Medical School of Brown University. A resident may help manage the care of your baby under the guidance and supervision of the neonatologists.

Neonatology Fellows (*The Fellows*)
Maya Balakrishnan, MD
Meghan Calmus, MD
Melinda A. Caskey, MD
Susan Samuel Cohen, MD
Michael A. Hokenson, MD
Katharine Morton Johnson, MD
Ross Sommers, MD
Mariya Spasova, MD
Nancy Y. Tsai, MD

- Neonatal Nurse Practitioner – advanced practice nurse with specialized training in the care of sick and/or premature newborns. A nurse practitioner may manage the care of your baby under the guidance and supervision of the neonatologists.

- Private Pediatrician or Family Practitioner – doctor who will care for your child after discharge from the hospital. If your pediatrician is on staff here, he or she will be notified when your baby has been admitted to the NICU.

- Nurse Manager – administrator who directs the overall nursing care and operations of the NICU

- Assistant Nurse Manager (ANM) – administrator responsible for coordinating the day-to-day care, staffing, and operations of the NICU

- Case Manager – registered nurse who communicates with your baby's insurance company and coordinates post-discharge care for your baby

- Chaplain – professionally-trained, multi-faith clergy available to provide spiritual support, guidance and resources

- Charge Nurse - a neonatal nurse who may be assigned responsibility for making patient care assignments and helping families or staff. An ANM is always on call when the unit shift activity is assigned to a charge nurse.

- Laboratory Technician – specialist trained in drawing and analyzing baby's blood samples

- Lactation Counselor– a specially-trained health care provider who works with mothers to pump breast milk, maintain a milk supply and establish breastfeeding

- Lactation Consultant - an International Board Certified specialist trained to focus on the needs and concerns of the breastfeeding mother-baby pair and to prevent, recognize, and solve breastfeeding difficulties. They have educational and clinical backgrounds in the health professions.

Nurse Practitioners
Barbara Alskinis
Deborah Bacani
Heather Comerford
Gina Connerton
Susan Cournoyer
Robyn Gagnon
Barbara Gannon
Christine Gendreau
Debra Greiner
Colleen Griffin
Debra Karinski
Elizabeth Kirby
Kelley Lavine
Martha Mance
Sherry Matook
Maureen McCourt
Kathryn McLean
M.A. Murray
Julie Nye
Robin Schiappa
Christine Smiley
Jennifer Smith
Kristen Wilson

Assistant Nurse Managers *(ANMs)*
Stephanie Adam
Tricia Antone
Cindy Cathers
Michelle Gagne
Kathie Gouin
Jennifer Keller
Michele Kusiak
Sue Petzold
Carolyn Raymond
Jack Tanner

- Neonatal Nurse – nurse who has received special education in the care of sick and/or premature newborns

- Neonatal Pharmacist – responsible for reviewing and ordering medications used to treat babies in the NICU. The pharmacist also participates in daily rounds with the NICU team and provides drug information to doctors, nurses and parents.

- NICU Care Assistant (NCA) – helps your baby's nurse with bedside care such as checking vital signs, diaper changes and feedings, and is responsible for maintaining supplies at the bedside

- Nutritionist – these registered dietitians are experts in the growth and nutritional needs of sick and/or premature infants. They participate in daily rounds with the NICU team.

- Occupational Therapist – specialists who assess infant feeding and development and help parents and NICU staff provide developmentally-supportive care

- Parent Consultants – the March of Dimes and the Rhode Island Parent Information Network (RIPIN) have programs to support families during their NICU stay

- Radiology Technician – specialist trained in taking x-rays and/or ultrasounds to help with diagnosis and treatment

- Respiratory Therapist – specialist trained in the use of ventilators, respiratory support and oxygen therapy

- Social Worker – health care professional who works closely with the NICU team to support parents during their NICU stay, helping with emotional stress, post-partum depression, financial hardship or other issues affecting their well-being

- Unit Secretary – coordinates daily operations in the NICU, including processing medical orders, answering the phone and intercom, greeting and helping families with visitation procedures and facilitating communication in the NICU

Participating In Your Baby's Care

Information Worksheet

Baby's Name _____

Birth Date _____

Birth Weight _____ lbs. _____ oz. (_____ grams)

Birth Length _____

Attending NICU Physician _____

Fellow _____

Resident _____

Nurse Practitioner _____

Nurses _____

Social Worker _____

Lactation Counselor _____

Occupational Therapist _____

Other Caregivers _____

What to Expect When Your Baby is Admitted to the NICU

- Your baby will be placed on a warmer or in a Giraffe to stay warm. A small patch is placed on your baby's skin to control the amount of heat the warmer or Giraffe provides.

- Leads (small sticky patches attached to thin wires) will be placed on your baby's chest and abdomen to monitor heart and respiratory rates.

- A pulse oximeter sensor will be placed on your baby's foot or hand to monitor the amount of oxygen in the body.

- Some babies need help breathing. There are several kinds of respiratory support. Your baby's nurse or care provider will explain them to you.

- Some babies need IV fluid. This may be provided by placing a thin plastic catheter in a hand, arm or foot. Babies have very small and fragile veins so it may be necessary to place the IV in the scalp. We may need to shave an area on your baby's head to do this. We will save the hair from your baby's "first haircut" for you.

- Some babies may also need to have catheters placed in their umbilical cord. This may be used for more concentrated nutrition or to draw blood for laboratory tests.

Staying with Your Baby and Visitation Guidelines

Parents

In the NICU, we recognize the essential role of parents as part of the NICU care team. Parents are not considered visitors and are welcome in the NICU 24 hours a day, seven days a week. Parents are welcome to be with their baby during medical team rounds, nursing shift changes, and minor medical procedures.

Visitor Guidelines

We want to facilitate the parent/infant bonding process and your ability to provide care in a nurturing NICU environment with individualized support. When you come to the nursery, please stop at the front desk and sign in with the greeter or unit secretary. You will be asked to show identification or a hospital wristband.

- Upon first entering the baby's room, parents and visitors are asked to

perform a one-minute, fingertip-to-elbow scrub in the sink and then apply Avagard.

- Purell sanitizer should be used after touching any surfaces before touching the baby.

- All visitors must be accompanied by one or both parents while in the NICU.

- To maintain a quiet, healing environment for the baby, and for the developmental care of your baby, we recommend:
  - Having no more than two people in the baby's room for more than brief visits
  - Having no more than four people, including the baby's parents, in the room at a time

- Depending on the baby's and/or staff needs, visitors may be asked to limit the length of their visit.

- Siblings over the age of three may have a brief first visit at any time after the baby's admission to the NICU. All subsequent sibling visits should be through Kid's Klub (following page).

- Families are encouraged to use the family lounge and other family spaces for longer visits and for visiting with larger groups. Adult supervision is required for all children under the age of 13.

- Parents are encouraged to use the family spaces during sterile or other procedures (intubation, laser therapy for ROP, universal protocol procedures, arterial or venous access, etc.). Please let your baby's nurse know where you will be so he or she can come get you when the procedure is complete. Parents may be present for minor procedures including, but not limited to, nursing or medical assessments, feeding and hygiene care, suctioning and respiratory treatments, eye and audiology exams, developmental exams, heel sticks, and sonographic evaluations.

Kid's Klub

Kid's Klub is a program designed for children age three to 12 who have siblings in the NICU. It meets on Tuesday and Thursday evenings and includes stories, arts and crafts, snacks and a guided visit with the baby. There is no charge and you can register with the unit secretary.

Infection Control

We ask that anyone who has a cold or infectious disease not visit our

patients until he or she is well. This is a very important way to protect all the babies in our nurseries. Visits may also be restricted during outbreaks of communicable diseases to protect NICU babies from infection. We will post any restrictions at the NICU entrance and in the hospital lobby.

In an effort to meet the needs of individual families, exceptions to our visiting policies will be considered on a case-by-case basis by the assistant nurse manager.

Speaking Up For Your Baby

During your NICU stay, you may be concerned about all the different systems and services available. We encourage you to speak up and ask any questions as well as to use the family white board in your baby's room to leave messages or questions for your baby's care team.

Parents are equal members of the baby's health care team. During your baby's stay in the NICU, you are a constant presence in your baby's life and care. We encourage you to share information you have learned or observed about your baby's care with the care team. Over time, you will develop working relationships with your baby's doctors, nurses and other members of the care team that are based on trust and mutual respect.

Take an Active Role

Sometimes you might feel intimidated by your baby's doctors. This may be especially true if your child has many specialists. It is important to remember that you will carry out treatment plans at home and you must understand everything your baby's care provider is telling you.

If there is something you do not understand, please ask questions. Remember, every question you ask is important!

- Ask for clarification from any care provider when you don't understand a term.
- Ask for more information when you don't understand a treatment or why it needs to be done. Ask about possible side effects.
- Keep asking questions until you are satisfied that you understand what you need to know. You can then ask if there is anything you haven't thought to ask.

Feeding and Providing Breast Milk for Your Baby

Many infants in the NICU may be unable to nipple feed at first. These babies must be fed through a gavage tube. After your baby gets stronger and continues to grow, he or she will be fed by mouth.

We encourage all mothers to provide breast milk for their baby. Even if your baby is too sick or small to nurse, you should pump your breasts as soon as possible after delivery to assure a good milk supply.

Your bedside nurse or a lactation counselor on the mother-baby units will provide you with a pump kit and help you begin pumping. We are also here to help you with any questions you may have and have electric pumps in each of the rooms. Just remember to bring your kit to attach to the electric pump.

Sterile containers and labels are available in the nursery. Ask your baby's nurse for a supply to take with you. Mark each container with the date and time the breast milk was expressed. Freeze all breast milk until your baby begins to eat. Your baby's nurse will recommend how much milk to freeze in each bottle depending on your baby's anticipated daily needs. All expressed breast milk will be processed through the breast milk storage room, and it is limited to a 72-hour feeding supply. Your baby's nurse can explain this more.

Take care not to allow milk to thaw on the way to the hospital. Once thawed, breast milk must be used within 24 hours. Frozen breast milk lasts for up to six months. If your baby is eating, fresh milk is good for 48 hours when refrigerated and one hour at room temperature.

For more information about providing breast milk for your baby, please see the pamphlet entitled "Helping You Provide Mother's Milk to Your Hospitalized Baby."

Lactation Support

The lactation support program provides breastfeeding support and information to families. Nursing staff, lactation counselors and lactation consultants (IBCLC) are available to:

- Provide you with current, accurate information about feeding infants
- Provide help and information about breast pump rental, breast milk pumping, handling and storage

- Provide one-on-one assistance when you begin breast feeding and ongoing support as needed
- Offer help if you have any concerns with pumping or breastfeeding
- Help you develop an infant feeding plan that meet the needs of you and your infant as well as help you transition to home
- Connect you with breast-feeding support and specialists in your area when you go home

Your baby's nurse or care provider may request a lactation consult for any additional questions or concerns.

Kangaroo Care

Kangaroo care is a way of holding your newborn baby that has been shown to have short- and long-term benefits for you and your baby. Being close to the mother's body helps regulate how awake and attentive the baby is and reduces stress. In addition, babies who receive kangaroo care seem calmer and easier to care for, which sets a path for learning throughout their lives.

Benefits of kangaroo care for breastfeeding:

- Increases your milk hormones
- Increases the success rate of nursing among mothers of premature infants
- Increases milk supply on the next day of pumping
- Increases success with long-term breastfeeding

Benefits for your baby:

- Reduces crying and fussiness
- Helps stabilize your baby's heart and breathing rates
- Provides a healthy temperature
- Decreases the need for oxygen
- Improves weight gain

- Provides more restful sleep and better awake times

- Boosts mental development and motor skills as he/she grows

Kangaroo care is safe for most babies. Even tiny preemies on a ventilator can receive kangaroo care. If you wonder whether your baby is ready for kangaroo care, ask your baby's doctor or nurse. Only your baby's medical team – you, the doctor and the nurse – can decide whether your baby should receive kangaroo care and when it should begin.

How to provide kangaroo care:

- Kangaroo care sessions can be planned for day or night.

- You can provide kangaroo care by placing the baby upright between your breasts. Place preemie babies "heart-to-heart" and term babies "tummy to tummy."

- The baby should be wearing a diaper and your chest must be bare. You must be braless. Use a blanket to cover the baby.

It is important that your baby stay warm. Babies weighing less than 2000g will need a blanket folded in fours. Infants weighing more than 2000g will need a blanket folded in half. If your baby weighs less than 1000g, use a warmed blanket folded in fours and a hat. The nurse will remove the hat if the baby's temperature goes higher than 37C.

For more information about Kangaroo care, please see the pamphlet entitled "Helping You Provide Mother's Milk to Your Hospitalized Baby."

Infant Massage

The gentle, loving touch of parents not only comforts and soothes infants, it also can play an important role in the healing process. The infant massage program helps promote bonding between parents and their babies. In our NICU, parents can learn infant massage. The occupational therapist will be happy to teach you infant massage when the team feels your baby is ready. For more information, ask your baby's nurse.

Family-Centered Medical Rounds

Family-Centered Rounds are an important part of the care patients and families receive in the NICU at Women & Infants. Many caregivers are involved in each baby's care. It is important that all caregivers share information so they can work effectively as a team. This sharing takes place during medical rounds. The NICU medical staff participates in rounds every morning to discuss each baby's status and progress. You are encouraged to be at your baby's bedside during medical rounds.

Medical Rounds

- Include the baby's family, medical providers, nurses, and other allied health personnel (respiratory therapist, nutritionist, pharmacist, case manager) relevant to your baby's care

- Recognize the baby and their family as the focus of care and, as appropriate, involves the family in the decision-making process

- Include opportunities for your baby's health care team to receive input from the family

Women & Infants is a teaching hospital so the discussion may include talk about possible outcomes and different courses of action. If you have questions about your baby's care or about anything said during rounds, please speak with the medical staff person caring for your baby after rounds.

How Parents Can Participate During Rounds

If you have questions about your baby's treatment or plan of care, family-centered rounds provide an opportunity to speak with your baby's care team. Brief questions should be addressed at this time. Questions or concerns that involve significant differences to approaches in care or complex questions about your baby's condition should be addressed individually with the provider after rounds or in a family meeting. If you have additional questions, contact your social worker to schedule a family meeting.

Sign-Out Rounds (late afternoon)

Late each afternoon, the care team conducts sign-out rounds. During sign-out rounds, the care team that has been caring for your baby during the day meets with the care team coming on for the evening to transfer information regarding

the status and short-term care plan for your baby. These are shorter sessions and there may not be time for the care team to answer questions related to your baby's care. If you have questions at this time, please speak to your baby's nurse.

Family Meetings

Periodic family meetings with your health care team are an opportunity to discuss in more detail your baby's overall condition, progress and plan of care. Family meetings let you meet with the many members of the health care team at one time. If a family meeting is needed or requested, your social worker will make the arrangements. Understand that you don't have to wait for a family meeting to ask questions about your baby's care. Talk with your baby's nurse or doctor at any time.

Going Home – The Discharge Process

Discharge Class is held every Thursday evening from 5 to 6 pm. Please see the unit secretary to sign up.

Going home with your baby is an exciting time. We want to make sure that both you and your baby are prepared for this happy event.
In general terms, your baby will be ready for discharge when he or she is at least 34 weeks corrected age, can maintain a normal temperature in an open crib, has appropriate weight gain, takes all feedings by breast or bottle, goes at least five days with no breathing or heart rate events (sometimes termed "spells"), and is off all IV medications. Some babies may need more specialized discharge criteria if they will go home with special needs.

We have developed a guide to help us work with you to make sure your baby's transition home is smooth. Your baby's care team wants to make sure you feel as prepared as possible to go home with your baby when the time comes. Below is a list of activities you should be confident doing before you go home with your baby:

- Taking your baby's temperature
- Changing your baby's diapers
- Bathing your baby
- Dressing your baby
- Feeding your baby by breast or bottle
- Preparing breast milk or formula for your baby
- Giving your baby medications

- Placing your baby safely in a car seat
- Putting your baby "back to sleep" and "tummy to play"
- Caring for your son's circumcision

In addition, you should have:
- Completed a CPR class
- Completed discharge class
- Arranged discharge day transportation
- Arranged with your baby's provider for circumcision if desired
- Provided the name of your baby's pediatrician

For more information about the discarge process, please see the pamphlet entitled "Special Care Nursery Discharge Instructions."

Research

Women & Infants is a teaching hospital and part of The Warren Alpert Medical School of Brown University. As such, the hospital is involved in a variety of important medical education and research studies. Research is the most important way the medical field has made advances in the care of sick and/or premature newborns. Our Institutional Review Board checks all studies to ensure that they protect the rights of participants and consider if the benefits outweigh any potential risks. You may be asked to participate or have your baby participate in one or more studies. You have the right to refuse participation and your baby's care will not be affected in any way.

Your Baby's Room and Family Spaces

General Information About Your Baby's Room

Welcome to your baby's new room.

The NICU at Women & Infants was designed with the needs of babies and their parents in mind. We encourage parents to be with their baby at any time. Bring books, clothes and blankets (label everything with your baby's name). Your baby is assigned to a room large enough to let you care for him or her and bond. Each room has a small, locked refrigerator for breast milk and medications, a storage area, comfortable chair, sleeper couch and a sink to "scrub in."

To ensure the health, safety and privacy of your baby, please review the following guidelines. If you have any questions, feel free to ask your baby's nurse.

Hand Washing/Alcohol Hand Gel

Every day when you come into your baby's room, wash your hands up to your elbows with soap and water for at least one minute. After that time, if you leave the room but are still in the NICU, you can either re-wash or use alcohol gel to clean your hands. Ask your baby's nurse the best way to use the soap and hand gel. All visitors to your baby's room will be required to do a one-minute scrub from their fingertips to elbows.

Cell Phones

To reduce bedside noise levels in the NICU, please make sure that your cell phones are either set to vibrate or turned off. Use your cell phone in the family spaces throughout the NICU but not in your baby's room or in the corridors. To protect the privacy of our patients, please do not use your cell phone to take pictures or video of other babies in the NICU.

Refrigerator Use

Your baby's room has a small, locked refrigerator for storing pumped breast milk and medication for your baby only. Refrigerators for personal food and beverages are available in the kitchen in the Family Lounge.

Food and Beverages

The only food or beverage allowed in your baby's room is water in a covered container. You may use the family spaces and kitchen in the Family Lounge for eating meals and snacks.

Sleeper Couch

The couch in your baby's room folds out to make a single bed, which allows a parent to stay with their baby overnight. NICU staff can provide bed linens. During the day, please make the bed back into a couch by 8:00 am, and place the linens in the room's hamper. This will allow the maximum amount of space in the room which helps staff caring for your baby.

Nurse Call Light

If you need the immediate assistance of a nurse, use the nurse call button in your baby's room.

Computer Use/Access

Parents are welcome to bring in a personal laptop computer to use in their baby's room. To reduce bedside noise levels, please mute your computer or use headphones. The hospital provides free patient and guest internet access that you can access from your baby's room. For more information about the hospital's internet access, please see the brochure entitled "Patient and Guest Wireless Internet Access." There are public computers in the NICU Family Lounge and in the hospital's Family Resource Center located in the main lobby.

Loaner Laptop Program

If you would like to sign out a free loaner laptop for a 48-hour period, please contact the Patient and Family Centered Care office at ext. 1776.

CarePages - Share your journey. Feel the support.

CarePages is a FREE, personal, private web page service available to our patients and families to help family and friends stay connected before, during and after hospitalization. Starting a CarePage allows you to share updates about your health, record your emotions, worries, and successes. Journal your experience and receive emotional support from friends and families though messages, virtual gifts and more.

To create a CarePage go to: www.womenandinfants.org/carepages.

Patient Privacy

We ask that you and your baby's visitors respect the privacy of other families. Please do not discuss patient information in public and do not ask our staff questions about other babies or enter other babies' rooms.

You may have an opportunity to meet other parents during your stay in the NICU. If you connect with another parent whose baby is in the unit and that parent wishes to invite you in to see their baby, you may enter that room with the parent. You must consider yourself a "visitor" in that baby's room. The same would apply to inviting another parent in to see your baby.

For patient privacy, please do not take pictures or record video of other babies in the NICU.

Family Spaces

The family spaces located throughout the NICU are available at all times to give you and your visitors a quiet place to relax and visit. The NICU Family Lounge has a salt water aquarium for your enjoyment as well as a small kitchen where you can heat and eat food. When using any of these family areas, please be considerate of other families and leave each area clean and ready for others to use.

On the third floor, in the loft area of the Family Lounge is a public computer area. That is considered a quiet area for parents and other adult visitors. Children under the age of 13 are not allowed in this area. The Family Lounge offers an area for children to play but, for their own safety, do not leave children under the age of 13 unattended. This area is not supervised and we can not be responsible for their safety. If children are left alone, their parents will be asked to come and get them. We appreciate your cooperation.

Your Baby's Early Development in the NICU

In your baby's room, you will find a chart, "Your Baby's Developmental Progress in the NICU." This is a guide to the activities your baby will be able to participate in during his or her NICU stay. We encourage you to check it often. As your baby progresses, you may find there are new experiences you can share.

Babies in the NICU are born at different gestational ages. As the weeks go by, we add those weeks to your baby's age. This is called "correcting" your baby's age. Depending on the severity of your baby's illness and his or her gestational age, your baby will have different ways of responding to the world.

Remember, your presence at the bedside is important to your baby's development at any age. At first, your baby will focus on the basics: breathing and sleeping. You can help him or her to stay calm and comfortable by keeping activity at the bedside appropriate to your baby's needs.

Here are some characteristics of babies at different ages and stages of development, to help you to understand your baby's behavior:

Less than 26 weeks

- Early sensory responsiveness
- Light – The eyes are often closed, but eyelids are thin, so your baby is sensitive to changes in lighting.
- Sound – Shhhhh! Your baby may startle at loud voices or sounds.
- Touch – The skin is very fragile. For a soothing touch, gently place your hand on your baby rather than stroking the skin.
- Movement – Your baby may startle or have jerky movements. Keep his or her baby's arms and legs tucked close to the body and provide soothing boundaries.

26 to 28 weeks

- Your baby is still sensitive to light, sound, touch and movement. He or she may recognize your voice, touch and smell.

- Continue to keep your baby's bedside quiet and avoid bright lighting when possible. Avoid wearing strong perfumes.

- Sucking is often soothing for your baby. Offer a pacifier when he or she seems stressed.

- Hold your baby's hand or foot gently, or cradle his or her head and feet with your hand. Provide Kangaroo Care if your baby's medical team says it is okay.

- Change your baby's position slowly to prevent startles.

29 to 31 weeks

- Continue to provide a restful environment for sleep. Deep sleep increases at this age, and your baby grows while sleeping.

- Your baby may become restless with loud voices or sounds. He or she may become still in response to your soft voice and may look at you.

- Movements increase at this age. Your baby may do more stretching, may bring hands to face for self-soothing and may tuck arms and legs close to his or her body. Your baby will probably need to be positioned with nesting to contain some of these movements.

- Continue to change your baby's position slowly and avoid rocking when you are doing Kangaroo Care.

32 to 36 weeks

- Your baby will be more alert, visually. Continue to use your face and voice rather than introducing toys. It is easy for your baby to become over stimulated at this age so soft talking, singing and reading to him or her are best.
  Your baby also may enjoy soft music when it's time to go to sleep.

- Help your baby to bring his or her own hands to face and body for self-soothing. This tucked position goes with sucking and may help to prepare baby for feeding.

- Continue to avoid abrupt movements that may startle your baby.

- Your baby may enjoy different kinds of touch at this age. Continue Kangaroo Care and gentle holding of hands and feet. If your baby seems to enjoy this, introduce gentle massage. If the medical team says it is okay, the occupational therapy staff will be happy to teach you how to provide massage.

37 to 40 weeks

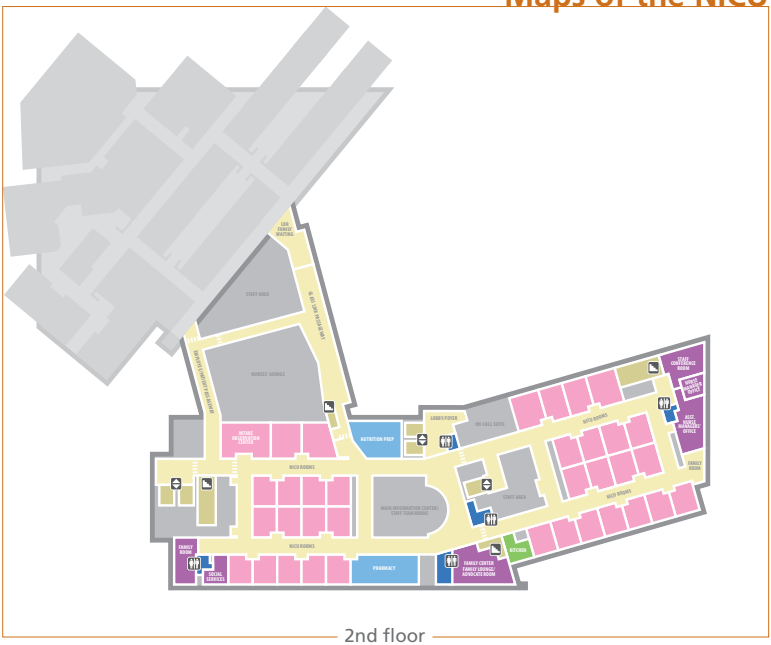
- Your baby will show more interest in his or her surroundings. Your face and voice are still the best toys, but you also might want to provide a mobile, crib mirror, and toys with soft music, for times when your baby is lying on his or her back, or sitting in an infant seat.

- Babies often prefer to have their head turned to one side at this age. Encourage your baby to look to both sides to see your face and use head supports to keep his or her head at midline when in a baby seat or car seat.

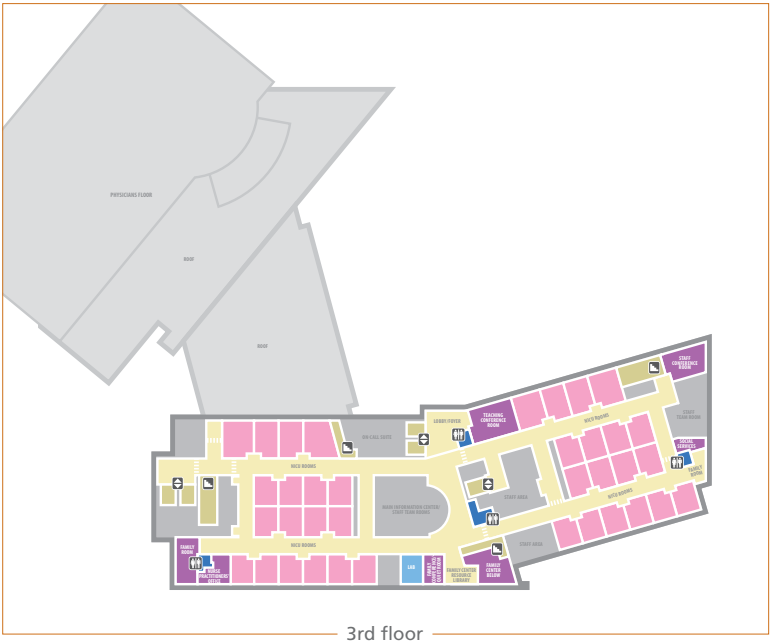
- Slow rocking while you are holding him or her may be enjoyable for your baby at this age.

Helpful Resources

Maps of the NICU



2nd floor



3rd floor

Spiritual Support

Trained multi-faith chaplains are part of your baby's care team. They offer spiritual support, a compassionate listening presence, prayer, and other resources. Baby blessings and baptisms can be performed by the chaplains. They can also access priests and clergy from various faiths if needed.

The chaplains' office is across the hall from the chapel, a multi-faith space in the main lobby that offers quiet and peace to all who enter. The chapel is open 24 hours a day. Chaplains Caroline Patterson and Wilson Villamar are available Monday through Friday from 8 am to 5 pm. You can call their office directly at 401-274-1122, ext. 1659, or through the Social Work Department at 401-274-1122, ext. 1360. Roman Catholic priests can also be accessed through RI Hospital.

Financial Counseling Services

If you do not have medical coverage or are left with a significant balance after insurance and cannot afford to pay your medial bills, a Women & Infants financial counselor will work with you to minimize your financial burden.

We will determine how to best meet your needs by:

- Helping you obtain private insurance coverage
- Creating and customizing an affordable payment plan
- Helping you apply for public assistance programs
- Determining your eligibility for hospital financial assistance programs

Financial counselors are available Monday through Friday from 8 am to 4:30 pm, and from 7 am to 3:30 pm on weekends and holidays. Our staff is knowledgeable, friendly and professional, and all of your information will be kept strictly confidential. To learn more or to be referred to a financial counselor, call the Business Office at 401-274-1122, ext. 1742 or 1424.

Newborn Coverage

If you have health insurance, there are rules about adding newborns to the plan. Those may include a deadline for adding the baby to the plan, maximum benefit amounts per individual, co-payments and deductibles. Our financial counselors can help you understand and follow the terms of your insurance plan. Please call us for more information.

Affiliated Special Care Nurseries

The Newborn Intensive Care Unit at Women & Infants Hospital provides specialized services for critically ill newborns throughout southeastern New England. We do this with the help of our outstanding team of affiliated hospitals with Special Care Nurseries. The medical directors and neonatalogists at each of these Special Care Nurseries are members of our Division of Newborn Medicine and faculty members at The Warren Alpert Medical School of Brown University. They each provide care here at Women & Infants Hospital as well as in their hospitals' Special Care Nursery.

Infants who require more intensive care or other specialized services offered at Women & Infants are often transported here from one of our affiliated Special Care Nurseries or another community hospital. We recognize that this is a stressful time and the distance often poses difficulties for families. Our staff can help arrange temporary lodging at the Providence Ronald McDonald House located across the street from Women & Infants.

When your baby no longer requires the intensive or specialized services provided by Women & Infants, we will begin preparing you and your infant for transfer to one of our affiliated Special Care Nurseries closest to your home. This is an exciting time as it will allow you to spend more time caring for your baby in preparation for going home. We encourage you to call and arrange a tour of one of our affiliated Special Care Nurseries and meet the staff before your transfer to familiarize yourself with your new environment.

Women & Infants affiliated Special Care Nurseries include:

Charlton Memorial Hospital
363 Highland Ave., Fall River, MA 02720
(508) 679-3131

Medical Director: Dr. Yun Joo Lee
Neonatologist: Dr. Joseph McNamara
Nurse Manager: Karen Gilson

For tours, call (508) 679-7308 or (508) 679-7645.
Directions: Take Route 195 east to Exit 8B/Route 24 north. Take Exit 5. Bear right off the exit and go halfway around the rotary. Continue up President Avenue through two traffic lights and turn left onto Hanover Street. The hospital is on the right.

Kent Hospital
486 Tollgate Road, Warwick, RI 02886
(401) 737-7000

Medical Director: Dr. William Cashore
Nurse Manager: Margaret Allaire

For tours, call (401) 737-7010, extension 1247.
Directions: Take Route 95 south to Exit 10B (Route 117 west) to the first set of lights. Turn right onto Commonwealth Avenue and bear right onto Leon Whipple Road. Follow this to the end and turn left onto Tollgate Road. The hospital is on the right. Parking is available in the back of the building.

St. Luke's Hospital
101 Page St., New Bedford, MA 02740
(508) 997-1515

Medical Director: Dr. Mara Coyle
Neonatologist: Dr. Jessica Slusarski
Nurse Manager: Kathy Colombe

For tours, please call (508) 961-5598.
Directions: Take Route 195 east to Exit 13A (Route 140 south). Follow Route 140 south straight through the lights (Route 6) onto Brownell Avenue. Turn left at the light onto Hawthorne Street. Go through one set of lights and follow for approximately eight blocks. Turn right onto Page Street. The hospital is on the right.

Neonatal Follow-Up Program at Women & Infants Hospital

Since 1974, the Neonatal Follow-Up Program has been providing supplemental care to children who were cared for in the Women & Infants NICU. Under the direction of Dr Betty Vohr, the program offers a multi-disciplinary team of specialists that follows your baby's growth and development. Some of these specialists cared for your baby while in the NICU.

The Neonatal Follow-up Clinic is considered part of the standard care your baby receives after discharge from the NICU. Your case manager will schedule your baby's first appointment as part of the discharge process. Fees for follow-up visits are billed to your insurance company. Patients may be responsible for co-payments at visits. Please note that

these check-ups DO NOT replace visits to a pediatrician for routine care, shots, or illness.

The Neonatal Follow-Up Program provides a variety of services for the following eligible infants:

- Babies born premature weighing less than 1500 grams (3 lb 5 oz)
- Babies of all weights who are at increased risk of developmental, neurologic or growth problems
- Babies who go home on oxygen or monitors, or with feeding problems

The Neonatal Follow-Up Clinic is handicap and stroller accessible. It is located off the main hospital campus at the corner of Eddy Street and Thurbers Avenue. Entrance to the parking lot is from Eddy Street.

The address is:

134 Thurbers Avenue
2nd Floor, Suite 215
Providence, RI 02905
Phone: (401) 453-7750
Fax: (401) 453-7738
Email: WHFollowup@wihri.org

Grams to Pounds
Metric Conversion Chart

Ounces	0	1	2	3	4	5	6	7	8	9	10	11	12	12	14	15
Pounds	Grams	28	57	85	113	142	170	198	207	225	284	313	340	369	387	425
1	454	482	57	539	567	593	624	652	680	709	737	765	794	822	850	879
2	907	936	510	992	1021	1049	1097	1106	1134	1162	1191	1219	1247	1276	1309	1332
3	1361	1389	964	1446	1474	1501	1531	1559	1588	1616	1644	1673	1701	1729	1738	1786
4	1814	1843	1481	1898	1928	1956	1984	2031	2041	2070	2098	2126	2155	2183	2211	2240
5	2268	2296	1871	2353	2382	2410	2438	2461	2495	2523	2552	2580	2608	2637	2665	2690
6	2722	2750	2325	2807	2835	2863	2892	2920	2948	3977	3005	3034	3062	3090	3119	3145
7	3175	3204	2778	3260	3289	3317	3343	3374	3402	3430	3459	3487	3516	3544	3572	3601
8	3629	3657	3232	3714	3742	3771	3799	3827	3856	3884	3912	3941	3969	3997	4025	4059
9	4082	4111	3686	4168	4196	4224	4253	4281	4309	4338	4366	4394	4423	4451	4479	4508
10	4536	4564	4139	4621	4640	4878	4706	4735	4763	4791	4820	4848	4876	4905	4933	4961

Glossary of Terms Commonly Used in the NICU

Abdominal distension – fullness or swelling of the abdomen (stomach) that makes it look bigger than normal

Abdominal girth – measurement of the abdomen (stomach) just above the umbilicus (belly button)

Ambu bag – a bag that is attached to a mask or endotracheal tube and used to give oxygen to the baby

Angiocath (angio) – a small, plastic tube used to give intravenous fluids; commonly called an IV

Antibiotics – medications used to fight infection

Bilirubin – a yellow pigment which can be seen in the skin of most newborn infants

Catheters – plastic tubing inserted into the body for feeding, suctioning, delivering IV fluids, and removing urine for specimens

Cc – cubic centimeter, a metric measurement used to measure fluid; one cc is the same as one ml (milliliter), 5 cc = 1 teaspoon, 15 cc = 1/2 ounce, 30 cc = 1 ounce, 60 cc = 2 ounces

Chest physiotherapy (CPT) – tapping or vibrating the chest to loosen mucus from the lungs before suctioning

Chest tube – a tube placed in the chest, just outside of the lungs, that creates a negative pressure (like a vacuum) to keep the lungs open

Circumcision – removal of the penis foreskin

Corrected age – the age of a baby in weeks after conception

Dextrostick (D-stick, glucose screen) – measurement of blood glucose (sugar) level

Electrolytes (lytes) – sodium (salt), potassium and chloride, essential body elements that may be checked in the blood or urine or added to the IV fluid

Endotracheal tube (ET tube) – a tube in the trachea (windpipe) to help breathing

Extubation – removal of the tube from the trachea (windpipe)

Gavage feeding – giving formula or breast milk through a gavage tube

Gavage tube – a small, plastic tube placed from the nose to stomach (called a nasogastric or NG tube) or from the mouth to stomach (called an orogastric or OG tube) through which the baby receives formula, breast milk or medications; also may be used to allow air to escape when baby is on NCPAP

Gestational age – the age of a baby from the time of conception to birth (full term = 40 weeks)

Giraffe – combination radiant warmer and isolette that can also provide controlled humidity; most often used to admit and care for very low birth weight (VLBW) babies

Gram – metric measurement of weight (454 grams = 1 pound)

Grunting – deep, short noises heard when a baby is having trouble breathing

Heat probe – a small, silver or gold probe, usually placed on the stomach or back to monitor body temperature and regulate the warming table or incubator temperature

Heat shield – a small, plastic shield placed over any baby weighing less than 1500 grams to protect against drafts

Hematocrit (crit) – concentration of red cells in the blood; red blood cells carry oxygen throughout the body

HOB – head of the baby's bed

Hood (oxyhood) – a small, plexiglass hood placed over the baby's head through which oxygen is given

Humidified mist – warm mist placed over the premature baby within his or her first days to help prevent water loss and keep the skin from drying and cracking

Hyperal solution (HAL) – IV solution containing sugars, proteins, and essential vitamins and minerals

Infiltrate – temporary bruising, redness or swelling around an IV that is caused when IV fluid leaks out of a vein and under the skin

Intake and output (I & O) – record of all fluid an infant receives (both IV and by mouth), as well as the amount of urine the baby makes

Intralipid – IV fat preparation given for nourishment and growth

Intravenous (IV) – fluid given directly into a vein

Intubate – placing a tube in the trachea (windpipe) to help the baby breathe with a ventilator

Isolette – an enclosed bed that is heated to keep the baby warm

IV pump – a machine that controls the rate and amount of IV fluid given

Jaundice – yellow coloring of the skin or eyes caused by a build-up of bilirubin in the bloodstream

KUB – an x-ray of the baby's abdomen (stomach and intestines)

Lanugo – fine, downy hair seen mostly on premature babies; though it usually covers the entire body, it is most noticeable on the shoulders and back

Leads (electrodes) – three probes attached to the baby; white is placed on the right, black is placed on the left, and green is placed on the leg with the cables leading to a machine that monitors and records heart and breathing rates

Lumbar puncture (LP) – removal of a small amount of spinal fluid to check for the presence of blood or infection

Meconium – baby's first bowel movements, usually dark green and pasty

Meconium aspiration – condition caused when the baby inhales meconium during or before birth; may lead to pneumonia

Milia – small white or yellow, "pimple-like" bumps on the baby's skin, usually on the nose or chin, which will go away without treatment

Mongolian spots – bluish spots over the lower back or buttocks that may be present at birth, usually on dark-skinned infants

Nasal cannula – a low-flow oxygen delivery system that provides blended air and oxygen to the nose of a baby who is breathing on his or her own; a humidifier is attached to the nasal cannula helps prevent nasal dryness

Nasal cannula (High-Flow) – this cannula allows the provider to adjust a higher flow of blended air and oxygen; it is attached to a heater that provides warmth and humidity to the baby's nasal passage

Nasal flaring – when the baby's nostrils open widely with breaths, an indication of trouble breathing

Nasal Continuous Positive Airway Pressure (NCPAP) – a machine that provides a continuous flow of pressure to the baby breathing on his or her own by placing prongs in the baby's nose and connecting them to a ventilator; the provider can adjust the amount of blended oxygen and have the machine provide warmed humidity to the baby's airway

Necrotizing enterocolitis (NEC) – infection of the intestines caused by bacteria and/or decreased blood flow to the intestine

NIMV (also called NIPPV) – a mechanical ventilation method that provides continuous positive airway pressure to keep a lung from collapsing between breaths (like NCPAP) and provides airway pressure for each mechanical breath

NPO – code for "nothing by mouth"

Oxygen – a gas essential for human life, this is carried by the blood from the lungs to the tissues; concentrated oxygen may be given through an ambu bag, ventilator, hood, nasal CPAP or prongs

Oxyhood – a clear plastic dome that fits over the baby's head and provides extra air and oxygen for the baby to breathe; like the nasal cannula, this is also attached to a heater that provides warmth and humidity to the baby's airways

Patent ductus arteriosus (PDA, duct, open duct) – a blood vessel opening near the heart which did not close after birth

Phototherapy (also called bili light) – fluorescent lights placed over the baby to treat jaundice

PICC line – Peripherally Inserted Central Catheter (also called PERC line), used for long-term administration of IV fluids and medications

Plastic wrap – sometimes placed over the warmer to help keep the baby warm

Pneumothorax – air leak from the lungs to the space between the lung and ribcage

PO – code for "by mouth"

Premature infant – infant born before 37 weeks gestation

Pulse oximeter – a probe with a red light that is used to detect how much oxygen is in the blood

Retractions – signs of difficulty breathing, noted by inward pulling (retracting) of the chest muscles that causes an indentation of the middle of the chest between the ribs

Room air – air around us, which contains 21% oxygen

Rounds – times each day when the medical, nursing and social work staff discuss each baby's progress and make decisions regarding his or her care

Saline Lock – an IV that is clamped off and used intermittently for medication

SaO2 (sats) – measure of oxygen in the blood; in most cases, a reading on a pulse oximeter of 82 or higher can be expected

Seizure – abnormal, increased electrical impulses in the brain that may cause jerking movements, rolling back of the eyes, sucking motions and stiffening of the arms and legs

Septic workup – group of tests used to determine if an infection exists; consists primarily of a lumbar puncture, blood counts, blood culture and urine culture

Spell – an event when your baby's heart rate, respiratory rate, or oxygen saturation triggers a monitor alarm that requires an intervention

Suctioning – removal of mucus in the trachea (windpipe), nose, mouth or stomach with a catheter

Surfactant – medication that helps the lungs expand (open) more easily

Tachycardia – heart rate more than 170 beats per minute while resting

Tachypnea – sign of respiratory difficulty noted by a rapid rate of breathing, usually more than 60 to 70 breaths per minute

Transcutaneous monitor (TCM, combi unit) – a skin probe that measures oxygen and carbon dioxide in the blood instantly and continuously

Umbilicus – belly button

Umbilical catheter – a very thin plastic tube placed in a blood vessel in the umbilicus to give fluids, obtain blood samples and monitor blood pressure

Umbilical arterial catheter (UAC) – thin plastic tubing placed in an artery in the umbilicus to give fluids, obtain blood samples and monitor blood pressure

Umbilical venous catheter (UVC) – thin plastic tubing inserted into the vein in the umbilicus to give fluid and monitor pressure

Vein – blood vessel that carries unoxygenated blood to the heart

Ventilator (respirator) – a machine that helps babies having difficulty breathing on their own; babies are connected to the ventilator (or breathing machine) by an endotracheal tube placed into the windpipe (or trachea) through the mouth or nose; the ventilator can provide various amounts of oxygen and warmed humidity for the baby's airway

Vital signs (vitals) – pulse (heart rate), respirations (breathing rate), temperature and blood pressure

Warmer (radiant warmer) – an open bed that uses radiant heat to keep the infant warm; warmer temperature is automatically regulated by a heat probe placed on the infant

X-rays – pictures of the inside of the body that help with diagnosis

Notes