

Neonatal Intensive Care at Christiana Hospital

A guide for families



Specialized care for our tiniest patients.



CHRISTIANA CARE
HEALTH SYSTEM





What You Need to Know about the Neonatal Intensive Care Unit (NICU)

- 1. You are part of the team.** You are the most important people in the life of your baby. Your baby needs you to participate as a member of the team. Let the NICU staff know how you like to learn (audio, visual, written) about your baby's condition, and please provide your contact information (home, cell, work numbers). We like for you to spend as much time as possible with your baby and talk to the nurses and doctors about your baby's schedule, your goals and when your baby's care team meetings occur each day.
- 2. Who is taking care of my baby?** Your baby is cared for by a specially trained team. Our team includes: neonatologists, fellows, nurse practitioners, residents, nurses, social workers, respiratory therapists, speech therapists, occupational and physical therapists, pharmacists, lactation specialists, and other supporting people (see pages 3 and 4 for definitions). Our team will teach you to care for your baby while your baby is in the NICU. Because you are important in caring for your baby, please come to the NICU as soon and as often as you can. This way, you can get to know your baby and meet your team.
- 3. How do we, as parents, care for our baby in the NICU?**
 - Ask any question any time or multiple times.
 - Provide routine care such as taking temperature, changing diapers, bathing and weighing.
 - Console your baby during procedures and any time.
 - Provide skin-to-skin contact (kangaroo care, see page 11).
 - Hold or feed your baby when he or she is medically stable.
 - Bond with your baby and learn cues for what he or she needs.
 - Know your baby's diagnoses and the plan for each of these diagnoses.
 - Know the medicines your baby needs and understand the side effects.
- 4. How do I find out information about my baby?** Speaking with your baby's nurses and providers directly is the best way to receive information about your baby. The medical team will come as a group to your baby's bedside twice each day in a session called "rounds." Daily rounding involves you and your baby with the whole team at the bedside to develop a plan of care for the day. You will see the team using computers during rounding for viewing lab and test results, placing orders and for documenting. As a parent, we welcome you at rounds. We welcome your input, questions and concerns. You may call the NICU at **302-733-2400** and ask to speak with your baby's nurse. Your baby's nurse can provide you with updates on your baby and can help you arrange a time to speak with your baby's doctor or nurse practitioner when you need additional information. You can also view your baby from home through the babycam (see page 9).
- 5. When will my baby come home?** To go home, your baby needs to meet specific goals. See page 20 for a complete list of these goals.

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Scan this QR code to
visit our NICU online.

Welcome to the NICU

Dear Parents,

Congratulations on the birth of your new baby! Your baby is being cared for in the Christiana Care Neonatal Intensive Care Unit or NICU. This unit is providing the specialized care your baby needs at this time. Please take comfort in knowing that your baby is in the hands of a specially trained neonatal team.

As a parent, you are an important member of this team and we want you to be involved in the care of your baby as much as possible. Our NICU team will be providing exceptional care to your baby while we also help you to care for and bond with your baby. Communication between you and the neonatal team is very important. We encourage you to ask questions regarding your baby's care and to share your thoughts with the members of your baby's team.

We hope this handbook will help guide you through your baby's stay with us in the NICU and will address many of your questions and concerns. We ask that you keep this handbook at your baby's bedside as an easy resource for you and as a convenient place to jot down your notes and questions about your baby. Our staff will also use this guide as we share important educational information with you about the care of your baby.

On behalf of our entire NICU team, we welcome you to the NICU and we look forward to serving you and your family with respect, compassion and exceptional, family-centered care.

Sincerely,

**The Staff of the Christiana Care
Neonatal Intensive Care Unit**
christianacare.org/nicu
302-733-2400

Visiting Hours

Parents or guardians with a hospital support band are welcome at anytime. Please see our policy on page 5 for more information.

Au Bon Pain Café Bakeries (Lobby Level)

Mon. – Fri. 6 a.m. – 9 p.m.
Sat. – Sun. 6 a.m. – 8 p.m.

West End Café Hours (Lobby Level)

6:30 a.m. – 10 a.m.
10:30 a.m. – 1:30 p.m.
4 p.m. – 7 p.m.
11 p.m. – 3 a.m.

Complimentary filtered water is available in our NICU waiting room. Coffee, tea and snacks are available in the NICU waiting room when a volunteer is present. Food and drinks are not allowed inside the NICU.

Brew Ha Ha! (Main Lobby)

Mon. – Fri. 6 a.m. – 9 p.m.
Sat. – Sun. 6:30 a.m. – 6 p.m.

Glass Box Gift Shop (Main Lobby)

Mon. – Fri. 9 a.m. – 7 p.m.
Sat. – Sun. 11 a.m. – 4 p.m.

Chapel (Lobby Level)

Open 24 hours, for use by patients, visitors and staff.
Services: Sundays 9:30 a.m.

Welcome to the NICU

Dear Fellow NICU Parent,

You may be feeling overwhelmed as your baby's temporary home is the NICU. As you adjust to this situation, you are likely tired and worried about your baby's condition. You may feel guilty and alone, but don't worry, this is a normal feeling. You do have the strength to get through it.

The NICU medical team is specially trained to care for your baby. They provide the highest quality of care to more than a thousand babies every year. In addition, the team will support your family and encourage you to participate as a member of your baby's care team. They want you to bond with your baby by holding and feeding your baby, so he or she can grow stronger. Please ask questions and the care team will answer any of your concerns. Don't worry about asking a question more than once. Also, don't be afraid to let the staff know your thoughts. Partner with your care team because you are baby's best advocate.

Having a support person can be a great comfort while your baby is in the NICU. Two pairs of hands are there to assist in your baby's care. Keep in mind, though, that you are both under stress so remember to be patient and support each other. You both want the same thing for your baby, to grow strong and to come home to your family.

One of the most difficult parts of the NICU is wondering when your baby will come home. Sometimes it will seem that the goals for bringing your baby home are always changing. It is common for changes to occur, especially with premature babies. Be patient with yourself and the care team as you sort through this together to support your baby.

As a NICU parent you learn to celebrate your baby's progress toward even the smallest goals. You learn to watch your baby's cues, and you develop a strong feeling for what he or she needs. In the NICU, you develop these skills early on. Try to find moments of celebration in the NICU as your child progresses. They may be small (drinking more milk or an ounce gained) but each of these little victories is an important success for your baby. It is those milestones that will stand out in your memory as bright spots during this time.

To my fellow NICU parents, you and your baby are in the best of hands, here at Christiana Care. Your baby, and you, will receive skilled and compassionate care that will carry you through this time.

Wishing you strength on your journey,

**Amanda Sleeper,
mother of two NICU graduates**



Meet Your Baby's Health Care Team:

Chaplain: A professional providing emotional and spiritual support throughout the NICU experience.

Charge Nurse: Registered nurse who coordinates admissions, transports, staffing and patient assignments.

Lactation Specialist/Counselor: A professional with special training to help mothers with breastfeeding.

Licensed Practical Nurse (LPN): Works under the direction of an RN.

Neonatal Clinical Nurse Specialist: A neonatal nurse with advanced training who specializes in the care of premature babies. These nurses work under the supervision of the neonatologist.

Neonatal Nurse Practitioner (NNP): A nurse with a master's degree who has advanced training to care for sick and premature infants in collaboration with a neonatologist.

Neonatal Pharmacist: A professional with specialized training in medication therapies for premature babies.

Neonatologist: A pediatrician who has special training to care for sick and premature newborns.

Neonatology Fellow: A fully-trained pediatrician receiving advanced training to become a neonatologist and working under the direction of a neonatologist.

Nurse Manager: Managers provide leadership for the NICU and are available to discuss patient care, hospital services, and any issues/concerns regarding the care of your baby.

Occupational Therapist (OT)/Physical Therapist (PT): A health professional who evaluates and assists with range of motion and positioning and evaluates your baby's muscle development and how your baby's movements may affect milestones like sitting, rolling over and walking.

Commonly Used Terms You May Hear in the NICU:

Anemia – Not enough red blood cells.

Apnea – Breathing stops for more than 20 seconds.

Blood Gases – Checked for levels of pH, oxygen and carbon dioxide to assess the effectiveness of gas exchange.

Blood Sugar (glucose) – Checked for proper balance.

Bradycardia – Slow heart beat.

Bronchopulmonary Dysplasia (BPD) – A chronic lung disease often seen in premature babies that have been treated for respiratory distress syndrome (RDS).

Patient Care Technician (PCT): Assists nurses.

Pediatric Hospitalist: A pediatrician trained to care for newborns.

Phlebotomist: Staff members who perform lab work blood draws.

Postpartum Counselor: A professional providing emotional support and education to parents throughout the NICU experience.

Registered Dietitian: An expert in nutrition who works with the medical team to make sure your baby is getting all the nutrients needed for proper growth.

Registered Nurse (RN): Specially trained neonatal nurses who provide care or supervision of care for your baby at all times. Nurses work under the supervision of the neonatologist.

Resident: A doctor who is training in a medical specialty.

Respiratory Therapist: A professional with training in respiratory conditions who operates the medical equipment to care for babies with breathing problems.

Social Worker: A professional who helps you with emotional concerns for your baby in the NICU, helps you deal with financial needs and helps you get special equipment or caregivers when your baby is ready to go home.

Speech and Language Pathologist: A professional with training to help a baby with feeding challenges or problems.

Technicians: Staff members who perform tests such as x-rays and ultrasounds.

Unit Clerk: Clerks greet you as you arrive to the NICU and assist you with handwashing, locker use and procedures. They also screen visitors, answer phone calls and help maintain medical records.

Catheter – A small, thin plastic tube used to give or remove fluids.

C-PAP (continuous positive airway pressure) – Air given through two small tubes just inside the nose.

Developmental Care – Special attention to baby's stage of development and ability to tolerate activity.

Echocardiogram – An ultrasound study of your baby's heart.

Endotracheal tube – A small plastic tube used to connect baby's lungs to a "breathing machine" or ventilator.

Welcome to the NICU

Gavage feeding – A small tube in the nose or mouth that delivers food to the stomach.

High-frequency ventilation – A special “breathing machine” or ventilator that “breathes” for the baby at a very fast rate.

Hypoglycemia – Low blood sugar.

Incubator/Isolette – A clear plastic bed for baby with a special heating/warming system.

Intrauterine Growth Restriction (IUGR) – A condition in which a baby grows more slowly than expected before birth and is smaller than expected at birth.

Intravenous – Into a vein.

Intraventricular Hemorrhage (IVH) – Bleeding in the brain that is graded on a scale from least severe to most severe (I, II, III or IV).

Jaundice – Temporary yellow color of skin and eyes usually due to an immature liver.

Kangaroo care – A special way to hold a baby, skin-to-skin on Mom’s or Dad’s bare chest, covered in a blanket or shirt.

Macrosomia – A condition in which a baby is born with excessive birth weight of more than 4500g (9 pounds, 14 ounces).

Magnetic Resonance Imaging (MRI) – An advanced form of imaging that uses magnets to provide a detailed picture of tissues.

Mechanical Ventilator – A machine to help breathing; also called a respirator.

Meconium – Dark green, gooey stool, which is baby’s first bowel movement.

Nasal Cannula – A small, plastic tube that fits in your baby’s nose for the delivery of air and oxygen to help with breathing.

Necrotizing Enterocolitis (NEC) – A condition in which the bowel is damaged and bacteria from the bowel invades the damaged area.

Newborn Screening Test/Hereditary Metabolic Disease Screen (HMD) – A blood test for over 40 health conditions that affect how the body works. Early detection and treatment of these conditions is essential to the prevention of long-term problems.

Ophthalmologist – A doctor who specializes in the care and treatment of the eyes.

Oxygen – A gas needed for breathing.

Patent Ductus Arteriosus (PDA) – A common heart problem in premature babies in which a passageway between two blood vessels, the aorta and the pulmonary artery, fails to close properly after birth.

Peripherally Inserted Central Catheter (PICC) – A thin tube threaded from a small vein to a larger vein near the heart.

Persistent Pulmonary Hypertension of the Newborn (PPHN) – A condition in which babies do not have enough blood flow to their lungs.

Phototherapy/Bililights – A blue fluorescent light used to treat jaundice.

Pneumonia – A lung infection in which excess fluid is often seen in the lungs on x-ray.

Premature – Infants born before 37 weeks of gestation.

Pulse oximeter – Placed on baby’s foot or hand to measure oxygen in the blood.

Radiant warmer – A special bed with an overhead heater to keep baby warm.

Respiratory Distress Syndrome (RDS) – A serious breathing problem that mainly affects babies born prematurely. Babies with RDS lack a chemical called surfactant, which keeps the small air sacks from collapsing.

Retinopathy of Prematurity (ROP) – An eye disorder in babies born prematurely that can lead to vision loss or blindness.

Respiratory Syncytial Virus (RSV) – A virus that can cause severe breathing problems in very young babies.

Sepsis – A widespread infection in the blood.

Sudden Infant Death Syndrome (SIDS) – The unexplained death of a baby while sleeping.

Surfactant – A substance in the lungs that helps keep the small air sacks from collapsing.

Tachycardia – Fast heartbeat.

Tachypnea – Fast breathing rate.

Transient Tachypnea of the Newborn (TTNB) – A condition in which your baby may breathe faster than normal, may require oxygen and may make a grunting sound.

Ultrasound – A test that uses sound waves on the outside of the body to produce a picture of the inside.

Umbilical Catheter/Line (UVL/UAL) – Your baby’s umbilical cord has two arteries and one vein. These vessels can be accessed with small tubes/catheters to provide nutrition, fluids, medications and blood pressure monitoring. These catheters also provide a painless method of drawing blood from your baby.

X-Rays – Pictures of your baby’s lungs and internal organs that help your baby’s doctor plan treatment and monitor your baby’s progress. These images are produced with very low levels of radiation exposure.



Neonatal Visiting Policy at Christiana Hospital

We know you are the most important person in your baby's life and encourage you to be involved with your baby as much as possible. You and your support person are welcome 24 hours a day and will be given ID bands that should be presented at the front desk each time you visit.

To provide a safe and comforting environment, Christiana Hospital has set up the following guidelines for the neonatal intensive care unit (NICU).

Guidelines

For the health and protection of your baby, everyone must:

- Be healthy: free from fever, cough, colds or stomach virus symptoms and not have any open sores.
- Wash hands and forearms up to the elbows for two minutes before entering the NICU.
- Follow all infection prevention practices that may be important to the patient's condition (e.g. wear isolation gown, mask and/or gloves).

Important: Anyone who is sick cannot enter the NICU. Staff reserves the right to limit visitation in the best interest of infants, families, visitors or staff.

Parent, Guardians and Designees

Parents (or parental designee) are welcome in the NICU anytime. To protect everyone's privacy, please stay at your baby's bedside.

- Please continue to wear your parent identification bracelet until your baby is discharged to identify you as your baby's parent.
- We will ask for your bracelet number before giving out any information about your baby.
- The NICU staff will only give information to parents or parental designee.
- Parents will decide who is allowed to visit their baby.
- Only two people at a time are allowed at your baby's bedside.



Welcome to the NICU

- Parents can designate in writing up to four people, like grandparents or other significant person(s), who are allowed to visit without a parent present.
- Parents and guardians must remain at your child's bedside for confidentiality and infection control reasons.

NICU Siblings

Siblings are welcome between 9 a.m. and 9 p.m.

The NICU guidelines for siblings are our attempt to balance the emotional and psychosocial needs of the sibling with the infection prevention needs of your baby. Sibling time enhances bonding and improves the sibling's attachment to their new family member. The length of time should be planned according to the child's age and level of activity. Please adhere to the following guidelines:

- All siblings must have either had chicken pox or the vaccine more than six weeks before coming to the NICU.
- Before the first visit, provide a copy of a complete and current shot (immunization) record. Siblings must be current on vaccinations.
- Siblings under the age of 12 must be accompanied by an adult at all times. Staff cannot be responsible for sibling care or supervision. Up to two siblings may be at the bedside if accompanied by a parent.
- All children 12 years and under must wear a mask while in the NICU.
- Siblings who have been exposed to, or have had a rash, fever, cold, diarrhea, flu or other illness within the last week will not be allowed to enter the NICU.
- If your child is in isolation, no sibling time is permitted.
- If at any time the sibling's behavior becomes inappropriate for the NICU, we ask that you take the sibling out of the unit.
- During flu season, sibling time may be restricted for the safety of your baby.

Grandparents and Other Visitors

We allow only two people per baby at any one time in order to avoid crowding and excess noise for the babies. Once visitors are inside the unit, we ask that they stay at your baby's bedside for infection control and confidentiality reasons.

- Visitors are encouraged to visit during the hours of 9 a.m. to 9 p.m.

- Grandparents or another designated person may visit without parents once parents have given written consent and the individual has been issued a visitation band.
- Grandparents or other designated person cannot bring in other visitors.
- Only general information about the infant's condition will be shared with the grandparents or designated person.



Questions and Concerns

The entire NICU staff is here to help in caring for you and your baby. If you have questions or concerns, please ask to speak with the nurse leader.

NICU Routines

Exams/Teams/Rounds

- Your baby is examined every day by a neonatologist. He or she is present in the NICU 24 hours a day. Your baby's neonatologist will change every two weeks to help you benefit from the expertise of several members of our neonatology team.
- Your baby will be assigned to one of two medical teams, "blue team" or "gold team." Your baby's team meets twice a day at your baby's bedside during a session called "rounds." This rounding team is made up of a neonatologist, neonatal fellow, resident or nurse practitioner, pharmacist, respiratory therapist and NICU nurse.
- Morning rounds take place between 9 a.m. and 2 p.m. Evening rounds take place between 9 p.m. and 11 p.m. Rounds are completed by teams and not by the order of the room number. There is not a set time schedule for each baby but your baby will be seen during these hours every day. You are encouraged and welcome to participate in rounds.

NICU Contact Information

The NICU phone number is 302-733-2400. Please provide the mother's last name and ask to speak with your baby's nurse. Telephone updates will only be provided to parents. Once you are connected with your baby's nurse, you will be asked to provide identification numbers from your parent bracelet band. Please keep these parent bracelets throughout your baby's stay in the NICU.

Nursing Shift Change

Nursing shift change occurs from 7 – 7:30 a.m., 3 - 3:30 p.m., 7 - 7:30 p.m., and 11 -11:30 p.m. Please do not call during these times if at all possible so that your baby's nurse can communicate important information about your baby without interruption.

Hand Washing

Hand washing saves lives. Please follow the hand washing scrub procedure signs posted by the sinks outside the NICU and scrub before entering the NICU area. All jewelry and watches must be removed from hands and wrists prior to entering the NICU. Remember to clean your cell phone with a PDI wipe before entering the NICU. Be sure to wear gloves when handling PDI wipes. It is also very important for everyone to wash their hands or use provided hand wipes at your baby's bedside every time before touching your baby.



Your Baby's Care Times

Your baby will have routine care every 3 or 4 hours. During this time, your baby's nurse will examine your baby and you will have the opportunity to participate in caregiving activities such as diaper changes, measurement of body temperature, feedings and holding your baby. Ask your baby's nurse what time of day your baby will have these special care times each day.

Communicating Your Plans

Most of the time, your baby's nurse will be caring for more than one infant and family. There will be times when your baby's nurse will not be able to take phone calls but you are always welcome to leave a message for your baby's nurse with the unit clerk. There will also be times that your baby's feeding or care schedule will need to be changed. Be sure to communicate your plans with your baby's nurse so that care times can be coordinated with you whenever possible.

Welcome to the NICU

Overnight Family Rooms

Overnight family rooms are available upon request and are filled starting at 7:30 a.m. by telephone reservation to the NICU front desk 302-733-2400. You can also ask your baby's nurse to sign you up for a family room.

Family Waiting Area

The family waiting area located just outside the NICU is available for use by parents, siblings and visitors. Free, filtered water is available in this room. Food, drinks and water are not allowed at the bedside in the NICU but are allowed in the waiting room. Water is also allowed in the breast pumping rooms.

Lockers

Lockers are available just outside the NICU. Ask the unit clerk for help with the lockers.

Nurse Leader Rounding

A nursing leader will meet with you during your baby's stay to discuss your NICU experience, concerns and questions.

How to Receive Updates

You can receive an update about your baby 24 hours a day from your baby's nurse. You can also receive an update from a provider at any time by asking your baby's nurse to contact them or by talking with them during rounds.

Grandparents

Grandparents may visit alone once identified by parents. Only general information about your baby will be shared with grandparents. Updates about your baby's medical care can only be provided to parents. This protects the privacy of you and your baby.

Babycams

Our babycam's provide you with the opportunity to view your baby when you are not here. Your baby will have a unique username and password so you have control over who is allowed access to your baby's image. We try to keep the cameras on as much as possible, but the cameras are turned off any time a member of your baby's medical team is directly caring for your baby and when you are with your baby. Ask the unit clerk to help you get the babycam set up for your baby.

Photos and Videos

You are welcome to take photos and videos of your baby. Please do not take pictures or video of the staff or other babies in the NICU. If you would like to have a picture taken with a staff member, please ask for their permission.

Volunteer Cuddlers

Specially trained volunteers, called "Cuddlers," assist the nursing staff by comforting and holding stable infants. Your baby's nurse will help determine if your baby would benefit from a Cuddler.



Babycam – Helpful Hints for Parents

The babycam is available for you to view your baby during those times when you cannot be at your baby's bedside. Please understand that the camera system is not meant to replace your presence in the NICU but to provide reassurance when you are away from his or her bedside. Below are some hints and reminders developed by parents to ensure the babycam's safe and effective use.

- The intent of the camera is to be a comfort and connection for you and your family. If you find the camera creates anxiety and is a distraction, please let the staff know if you want the camera turned off.
- Be selective in sharing your password. If you share your password with family and friends, remind them to not pass it along to others. Friends and family should not call into the NICU when they have questions about what they may be seeing.
- The camera is mounted to one side of your baby's bed and should not be moved. During those times when you cannot see your baby's face, it is due to the safe care the medical staff provides in repositioning your baby's head.
- If your baby has a blanket over his or her incubator to protect them from ambient light, your view will be darkened.
- If your baby is under phototherapy, the color will be distorted.
- The camera will be off when you are at the bedside and when staff is caring for your baby.

There will be times when:

- Your baby has had a wet burp or spits up.
- Your baby has lost his or her pacifier.
- Eye patches may have slipped off.
- Phototherapy will be turned off.
- Your baby will not be available to view due to nursing or other medical care.

The care you see and experience when you are in the NICU is the same when you are home. Babies will burp, cry, move their eye patches and these are all natural baby responses. Your baby's medical plan of care may also change. Calling the NICU may actually take your nurse away from getting to your baby right away or take them away from providing other care such as preparing their feeding, drawing up a medication or caring for another critical baby. We ask for your patience during these times and please know that your nurse is providing great care to your baby.



Help With the NICU Experience



You Are Not Alone

Whether your infant is in the NICU for a brief or a prolonged period of time, it can be a very stressful and emotional experience. You may feel a range of emotions such as fear, grief, sadness, guilt or loss of control. As a team, we understand these challenges and will work together to alleviate your concerns and help you bond with your baby.

Emotional Support

We have a trained counselor to discuss these and any other stressors you may experience. Our counselor will contact you when your baby is about 2 weeks old. If your baby's stay is brief or you would like emotional support sooner, please call our counselor at **302-733-2241** or ask your nurse or social worker for assistance.

Postpartum Depression

Having an infant in the NICU, combined with other risk factors, puts our parents at higher risk for postpartum depression (PPD).

Our counselor is available to provide assessment, education and counseling regarding PPD or other emotional needs. She is available weekly to speak with

you in person or by phone and can connect you with community and hospital resources for ongoing support. Sometimes, simply developing a routine, communicating with friends and family and taking care of yourself through proper nutrition, exercise and rest can help parents cope better while their infant is in the NICU and after discharge.

March of Dimes

The March of Dimes sponsors the NICU Family Support Program, which offers special events for parents and siblings. Be on the lookout for these special activities. Notices will be posted near your baby's bedside.

Pastoral Services

Pastoral Services are available to you 24 hours daily. Your priest, minister, rabbi, imam or other spiritual caregiver is welcome to visit you and your baby. Christiana Care Health System focuses on the whole person. The chaplain focuses mainly on emotional and spiritual support.

Chaplains from Pastoral Services help support families with their emotional and spiritual well-being in a variety of ways. A chaplain can help through prayer, sacraments and other specific spiritual practices; help you deal with difficult issues; help you think through decisions about the care of your baby; and help you renew strength and hope. If you would like a visit by a chaplain, please have your nurse contact Pastoral Services.

Chapel

The chapel is located on the first floor off the main lobby and is available for quiet reflection. Chapel services are held at 9:30 a.m. on Sunday mornings. Call 302-733-1280 for further information.

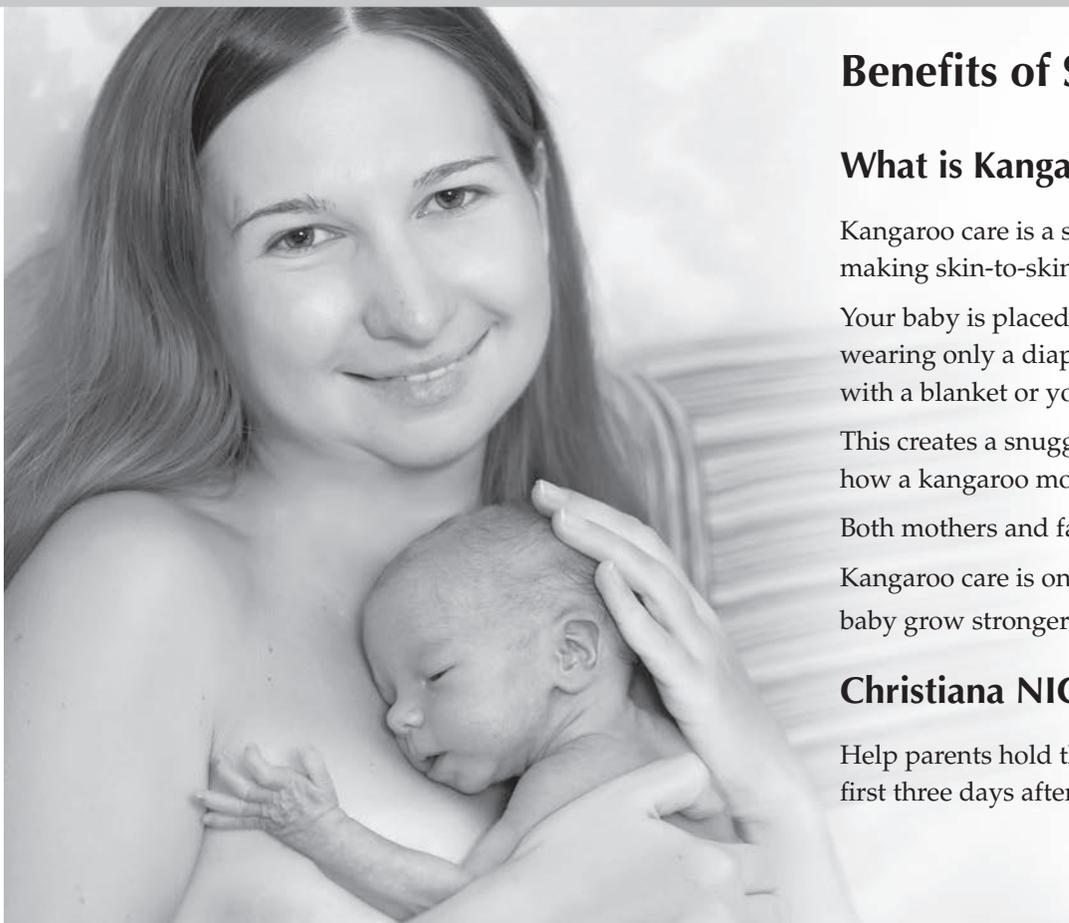
Language Services

Interpreter language services or phone interpretation is available to you 24 hours a day.

Social Work

Every baby in our NICU is assigned to one of our experienced medical social workers. They understand that having a baby in the NICU is not something you and your family ever expected. They provide emotional support, connect families with community resources and assist with coordinating discharge plans for your baby. If you do not already have their contact information, your baby's nurse can assist you in connecting with your social worker.

Caring for Your NICU Baby



Benefits of Skin-to-Skin Holding

What is Kangaroo Care?

Kangaroo care is a special way to hold your baby by making skin-to-skin contact.

Your baby is placed directly on your bare chest while wearing only a diaper. You then cover your baby's back with a blanket or your own clothing.

This creates a snuggly pouch for your baby, similar to how a kangaroo mom holds her young.

Both mothers and fathers can provide kangaroo care.

Kangaroo care is one of the best ways you can help your baby grow stronger and healthier while in the NICU.

Christiana NICU Goal:

Help parents hold their baby skin-to-skin within the first three days after birth.

Benefits of Kangaroo Care for Babies

- Helps keep them warm.
- Helps regulate their heart and breathing rate.
- Decreases pain.
- Decreases crying.
- Improves weight gain.
- Improves sleep.
- Decreases risk of infection.
- Decreases time in the hospital.

Benefits of Kangaroo Care for Parents

- Increases production of breast milk for mothers.
- Increases bonding with your baby.
- Gives you greater confidence to take care of your baby.

Many parents are nervous about starting Kangaroo Care.

Even if your baby has a breathing tube, needs oxygen or has IVs in their belly buttons, they may be ready to be held.

Sometimes there are medical reasons that prevent you from holding your baby right away.

Your baby's medical team will help decide when your baby is ready for kangaroo care and will help you hold your baby as soon as possible.

Tips for Kangaroo Care

- Wear a shirt or blouse that opens in the front.
- Mothers often remove their bras.
- Plan to hold your baby for about 45 minutes at a time.
- Relax and enjoy this bonding experience with your baby.

Please let your baby's medical team know if you have any questions about kangaroo care.

Caring for Your NICU Baby



How Physical and Occupational Therapy Can Help Your Baby in the NICU

Your baby may be seen by the NICU infant therapy team, which is comprised of occupational and physical therapists, as well as speech/language pathologists. We work in collaboration with the nurses to address appropriate muscular, visual and sensory system development, positioning and to provide education for you and the medical staff. We also complete car seat fittings and tolerance assessments when it is time for baby's discharge.

The speech and language pathologist will assess your baby's feeding readiness and will work on feeding skills as needed.

How does a therapist help your baby while in the NICU?

Our goal is for your baby to be happy and content and to rest peacefully. Your baby will show you that he/she is happy and ready for interaction by cooing, looking at you, smiling, sucking, being calm and alert, and showing relaxed arms, legs and face. Since your baby is early, however, he or she may be sensitive to touch, sounds, smells, etc. and will show you that he or she is unhappy through different stress signals. These stress signals can consist of saluting with arms, spreading fingers apart, frowning, grimacing or grunting, yawning, sneezing, hiccupping, arching of back and neck and pushing away, looking away, crying, and/or any alarms on the monitor.

Therapists help **teach your baby** to calm when stressed (and you can help them to calm) by giving your finger for your baby to hold onto, swaddling in the blanket with arms tucked in and hands to face, doing skin to skin, placing your hand against baby's feet so he or she can push, help bring your baby's hands to their mouth, and by giving the pacifier. It is important to watch your baby's responses when doing these things.

Therapists also may **help your baby's muscles** by doing exercise programs. You can also do the exercises with your baby, as guided by the therapist.

A speech therapist may help to **promote feeding readiness** by working on oral-motor skills (sucking) and tolerance for handling during tube feedings. The therapist can help you to read your baby's stress cues during feeding and provide safe feeding techniques. You can help your baby become ready for breast or bottle feeding by holding him or her during tube feedings, providing a pacifier during tube feedings, doing skin-to-skin during tube feedings and complete exercises as guided by your therapist.

Therapists work on **positioning** to encourage proper development. Your baby may be given special positioning equipment to provide boundary and containment for a womb-like environment while in the NICU. He or she may also have a specialty pillow to help keep baby's head nice and round and to prevent flat areas.

What are your baby's therapy needs as discharge approaches?

If your baby was born less than 37 weeks gestation or weighed approximately 5 pounds, your baby will need a **car seat fitting and tolerance assessment** before going home to make sure he or she is safe for car travel. There are also other, more specific, reasons for which your baby might require a car seat test. For the test, the NICU infant therapy team will appropriately fit your baby in the seat with proper supports and will monitor for at least 90 minutes to make sure there are no issues with breathing or heart rate. It is important to choose the right seat for your baby, so please consult with your therapist and refer to the car seat recommendation list we have provided. You should look for a seat that is approved for smaller babies (i.e., 4 pounds and up), has a narrower seat design, has a low shoulder strap position and multiple options for increasing the height of the strap, and has several options for positioning the belt buckle between the legs. You will be asked to bring the car seat and four receiving blankets in when your baby is close to discharge.

After discharge, how can you help your baby develop appropriately?

You can encourage your baby's motor and visual development through interaction and play time. Belly time during play is crucial for your baby to develop his or her muscles and to continue preventing flat areas on the head. **(Remember: belly to play, back to sleep).** You can also play with your baby while he or she is on their side and while sitting on your lap, looking at your face. You can help with visual development by holding toys in front of him/her to look at and follow with their eyes. We have provided an additional handout for developmental play ideas.

You can encourage feeding advancement by switching to a standard nipple if your baby is collapsing a slow flow nipple (if using) and beginning solids around six months of age (corrected age). If you have concerns about your baby's feeding, you can follow up with a pediatric speech therapist as an outpatient.

Your baby should show early language development through visual tracking, social smiles, eye contact and cooing. To help your baby work on these skills, you can talk/sing to your baby, read to baby, and make simple sounds, such as raspberries and babbling, for baby to imitate.

If you ever have any concerns regarding your baby's development, please contact your pediatrician (baby's doctor). He or she can be further evaluated by a therapist or at Child Development Watch.



For more information about your baby's therapy, contact the **Department of Rehabilitation Pediatric Therapy Team at 302-733-1037.**

Feeding Your NICU Baby



Your baby may not be able to be fed by a breast or bottle right away after birth.

Babies in the NICU are fed in many different ways. Your baby may be given nutrition through a vein, a feeding tube, a bottle or breast feeding.

Breast Milk and Pumping

Breast milk has many health benefits for your baby. Even if you do not plan to breastfeed, providing your breast milk is an important way that you can improve the health of your baby while in the NICU. Our lactation specialists and nurses are here to help you with any questions you may have about pumping, breastfeeding and breast milk.

Pumping rooms

- There are three lactation lounges in the NICU but you are welcome to pump at the bedside of your baby as well. Your baby's nurse will be happy to help you get a pump and set up a curtain for you.

When to pump

- Begin pumping as soon after birth as possible. You can get a pump and pump kit from your postpartum nurse or your baby's NICU nurse.
- Your pumping goal is 15 minutes on each side 8-10 times/day. You can pump both breasts at the same time. Try to pump every 2-3 hours. If you want a longer sleep time at night, cluster your day pumping closer together but don't go longer than 5 hours between pumping.
- Make sure one of your pumping sessions is in the early morning hours between 2 and 6 a.m. Your hormone levels will help produce more milk at this time.

Hand expression

Hand expression offers mothers the ability to express milk for their babies.

- Stimulate the breast with massage and nipple rolling.
- Gently grasp the breast with thumb and forefinger at the approximate location of where the baby's lips would be during a correct latch.
- Pull the breast back toward the chest wall.

- Using the forefinger and thumb gently compress and roll towards the nipple in a steady rhythm without sliding fingers along skin. *Important Note:* Milk may take a few minutes to flow.
- Rotate fingers around the breast to express all areas of the breast.
- Watch the "Hand Expression" video on the GetWell Network and talk to a lactation consultant about how hand expression can help you produce a full milk supply for your baby. Try hand expression before and after each pumping session to help you fully empty your breasts.

When Will Your Milk "Come In"?

Your milk may not come in for up to 5 days and sometimes longer when maternal medical conditions are present.

Once your milk comes in, your pumping goal is still 8-10 times/day but you need to **CHANGE YOUR PUMPING STYLE** as follows:

1. Pump until your milk flow slows to drops and then continue pumping another 5 more minutes. This may take 15-30 minutes. Try to hand express milk at the end of each pumping session to help empty the breast as much as possible. This tells your body to make more milk for your baby.
2. Begin pumping with the cycles short and fast. Once milk starts to flow, change the cycles to long and slow for the remainder of the pumping session.

How to Clean and Use the Breast Pump

What do I do before I pump?

The breast pump should have a paper tape on it showing you it is clean before you use it.

What steps do I need to do to get the pump set up?

1. Clean the space where you will lay your kit with a cleaning wipe.
2. Place clean paper towels on top of that spot.
3. Wash your hands for 15-20 seconds or use hand gel or hand cleaning wipes.
4. Put the pieces together and place the tubing on the pump.
5. Begin to pump your milk.

Pumping

- Ask your nurse for assistance with pumping the first time.
- Begin pumping as soon as you can, at least within the first six hours after birth.
- Suction should be strong but not painful.
- If pumping is uncomfortable, have your nurse check that the flange (funnel) size is correct.

What do I do when I am done pumping breast milk?

1. Take the kit pieces apart (don't forget the piece in the center).
2. Place pieces in the basin while in the hospital.
3. Rinse all kit pieces in cold water (don't wash the tubing that you put on the pump).
4. Next wash all the kit pieces with hot water and dishwashing soap (use the pink basin while in the hospital, not the shared sink in the pumping room or out in the hallway).



5. Put the kit pieces onto the clean paper towel to air dry or you can dry them off with clean paper towels. Don't put them away wet.

Do I have to sterilize the kit pieces at all?

Yes, **one time each day** you will need to sterilize the pieces of your kit that touch your breast or your breast milk. After you pump and clean the kit pieces with soap and water, you will sterilize the kit pieces by doing one of the below:

- Use the Medela "sterilization bag" in the microwave.
- Boil the kit pieces in water for 20 minutes.
- Place the kit pieces on the top rack of your dishwasher and use the sanitizing cycle.

After you are discharged, be sure to bring your pump kit with you to the NICU each time that you come so that you can pump in the NICU.

Feeding Your NICU Baby

Breast Milk and Pumping *continued*

Lactation Consultants

Lactation consultants are available to assist you with any breastfeeding questions or concerns. If you would like to have a visit from a lactation consultant, ask the clerk at the NICU front desk to place your name on the lactation visit list.

Milk Bank and Donated Breast Milk

Our NICU has a Milk Bank that specializes in the preparation and handling of mother's milk, donated human milk and specialty formulas. If you are unable to provide your breast milk to your baby or your baby requires feedings of breast milk before your milk is available, your baby's doctor may recommend the use of donated human milk for your baby. Donors for human milk are screened in a similar manner to blood donors. Donated milk is pasteurized and handled in a manner to ensure the milk is safe for your baby. Not all infants qualify for the use of donor milk. Talk to your baby's doctor if you have any questions about donated breast milk for your baby.

Breast Milk Storage:

Fresh: Refrigerator < 48 hours; while your baby is in the NICU.

Fresh: Refrigerator < 8 days; after your baby goes home.

Frozen: Deep freezer < 20 degrees to 4 degrees Fahrenheit: Up to 1 year.

Frozen: Refrigerator freezer: 3-4 months.

Thawed: Use within 24 hours.

Take Care of Your Body

Taking care of yourself helps your body make milk for your baby. Be sure to rest as much as possible, and eat healthy foods and drink water whenever you are thirsty.

Formula

If you choose to feed your baby with formula, our NICU offers one brand of formula and can make specialty formulas to meet the nutritional needs of your baby. Your baby's doctor will recommend an appropriate formula for your baby. Talk to your baby's doctor if you have any questions about your baby's formula.

IV Nutrition

Your baby will most likely be given nutrition through a vein when they first come to the NICU. Your baby's body needs time to recover from delivery just like you do. Your baby's nurse will talk with you about when feedings can start for your baby.

Tube Feedings

Your baby may need to start with small amounts of milk given through a tube called a gavage tube or feeding tube. This tube starts in your baby's mouth or nose and goes down to their stomach. The tube is taped into place on their chin or cheek and remains in place until your baby no longer needs tube feedings. This tube is soft and flexible and your baby will quickly adjust to having the tube in place.



Bottle Feeding

Your baby will not be ready to bottle feed until about 34 weeks of age. It is difficult for your baby to handle sucking, swallowing and breathing all at the same time. This takes practice and must be started slowly. Your baby's nurse will help you the first time that you bottle feed your baby. Your baby may need special feeding positions and a special technique, called "Pacing," while learning to bottle feed. Pacing is a technique that lets your baby take a few sucks on the bottle followed by lowering the bottle to remove milk from the nipple as your baby takes a short breathing rest. Your baby's nurse will help you learn everything you need to know about bottle feeding your baby.

Pacifiers

Pacifiers comfort your baby and help them to grow. Due to the separation of mother and baby, almost all NICU babies require the use of pacifiers and bottles at some point during their hospitalization.

Breastfeeding

When to Put Your Baby to Breast?

Put your infant to breast as soon as possible after birth. If your baby is unable to breastfeed or is too ill to breastfeed, ask your baby's nurse if skin-to-skin holding (kangaroo care) is appropriate for your baby. This skin-to-skin time with your baby will help increase your milk supply. Pump after kangaroo care to help increase your milk supply.

Once your baby no longer requires breathing support, you may be able to put your baby to breast during tube feedings. Your baby's nurse may recommend pumping your breasts prior to your baby's first feeding attempts as they learn to coordinate sucking, swallowing and breathing.

Milk Production Goals

Pump with a goal of producing a full milk supply by the time your baby is 2 weeks old. A full milk supply is 750-1050 mL/day or 25-35 oz/day. Keep a pumping log to help you keep track of how much milk you are making each day.

Your Baby's Belly

Newborn babies have very small bellies and need only a small amount of breast milk during their first several days of life. When your NICU baby is ready to try breastfeeding, offer your breast when you see feeding cues.

Feeding Cues

Your baby will let you know when he or she is hungry by showing you feeding cues. **This should be at least eight times in 24 hours.**

- Waking up.
- Licking lips, sticking tongue out.
- Turning his or her head when the cheek is touched (rooting).
- Hand-to-mouth activity, such as sucking fingers or hand.
- Crying is a late feeding cue. Feed your baby when he or she first shows feeding cues.

Below are life-size examples of how small your baby's belly is and how it grows over the first 10 days following birth.

Day 1 of Life*



Day 3 of Life*



Day 10 of Life*



**The approximate size of your baby's belly*

Feeding Your NICU Baby

Positioning and Latch

How Do I Get My Baby to Latch?

- Hold the breast so that your baby has enough room to latch.
- Hold your baby belly to breast (football hold) or belly to belly (cross cradle hold).
- Start with your baby's nose at your nipple.
- Wait for your baby's mouth to open.
- Bring your baby to your breast, not your breast to your baby.
- Any discomfort should go away after the first few sucks.

Signs of a Good Latch

- Wide lips.
- Lips are curled outward (lips tucked inward are frequently the cause of nipple pain).
- Strong tugging without pain.
- Tongue down.

If discomfort continues your baby may not be latched correctly. Detach your baby by putting your finger between your baby's gums. Please ask your nurse for help. Our nurses are specially trained to help families with breastfeeding.



Football Hold

Support your baby at your side, facing you. Your baby should be at breast height. The arm closest to your baby should support your baby with your hand holding the baby's head, neck and shoulders. Place a pillow under your arm for support. Sandwich your breast with your hand so that your thumb is across from your baby's nose.



Cross Cradle

Place your baby at breast level with your baby's chest and belly against your body. With the same hand as the side you are nursing on, sandwich your breast so that your thumb is across from your baby's nose. Your other hand will support your baby's head, neck and shoulders.

Engorgement of Breasts (Swelling)

Many moms find their breasts are firm and painful when their milk “comes in.” Here are some tips on how to make you more comfortable over the next 24 to 36 hours.

If you are breastfeeding:

- Try to feed your baby, pump, or hand-express at least eight times in 24 hours.
- Stand in a warm shower facing the water spray. This will help your milk to leak or “let down.”
- Wear a good supportive bra.
- Put ice packs wrapped in a towel over your breasts. You may do this for 20 minutes after you feed your baby or pump.
- If ice packs do not stop the pain, talk with your health care provider about taking pain medicine.
- Call your health care provider if you have or feel:
 - A fever higher than 100.2 degrees by mouth.
 - Chills.
 - Flu type feelings.
 - Red painful lump(s) in your breast that do not go away in 1-2 days.

Sore Nipples

- Be sure that the baby is latched onto the breast correctly.
- Be sure your pump kit is the right size for you.
- Use only water to wash your nipples.
- Apply breast milk to your nipples after each feeding and allow them to dry.
- Avoid nursing pads with plastic liners.
- Massage a small amount of purified lanolin to the nipple.
- The most frequent cause of sore nipples is improper latch. For help, you may want to contact the Breastfeeding Resource Center at 302-733-3360, 8:30 a.m. to 4 p.m., Monday through Friday.
- You can also call the Breastfeeding Helpline 24 hours a day at 302-733-4151. Leave a message and a lactation counselor will return your call as soon as possible.



B Breastmilk

S Scan Milk

A Ask Parent or Staff

F Feed Right Milk

E Every time

Discharge Planning

When is My Baby Ready to Come Home?

Your baby will be ready to come home when the following milestones are met:



- You have chosen a **pediatrician** for your baby.
- **Body temperature** is stable in an open crib.
- All **feedings** are accomplished with breastfeeding or bottle feeding.
- Your baby is gaining **weight** well ($\frac{1}{2}$ to 1 ounce a day or 15-30 grams a day).
- Your baby has not had any drops in **heart-rate** or **blood oxygen levels**.



- Your baby has been **off** of the medication, **caffeine**.
- Your baby is not requiring any antibiotics.
- You have completed a **discharge class**. (This class is offered weekly in the NICU and is taught by our nurses. Check at the NICU front desk or on your March of Dimes monthly calendar for the weekly schedule of classes).
- You have watched the **Safe Sleep, Fresh Air, Fresh Lungs** and **All Babies Cry** videos.
- Your baby has passed a **car seat challenge test**. This test is required for all babies who are born before 37 weeks of gestation. For this test, you will need:
 1. Car seat that is less than 6 years old and has never been in a car accident. *If your baby weighs approximately 5 pounds or less, make sure the car seat is designed for smaller babies.*
 2. Four receiving blankets.
 3. Please do not purchase any positioning devices for the car-seat. The receiving blankets will be used for positioning.
 4. This test takes at least 1½ hours to complete.



- If your baby needs to see a **specialist** after discharge, these appointments have been made and you are aware of the appointment times, the name of the specialist and the appointment location. For example, many premature infants require outpatient eye exams.



- Your baby has received the **immunizations** that are recommended before discharge. All immunizations require you to review the CDC (Center for Disease Control) information sheet. Talk with your baby's nurse or doctor if you have any questions about immunizations.
- Your baby's doctor may recommend **Synagis** for your baby before going home. Synagis is an injection that is given to your baby once just before going home and then once each month throughout the fall, winter, and spring months. Synagis helps prevent a severe infection from Respiratory Syncytial Virus (RSV). RSV is a common virus that infects almost all children by the age of two years. Synagis is not appropriate for all infants. Talk to your baby's doctor if you have any questions about Synagis.
- Your baby may be scheduled for **home health care visits**. If these visits are ordered by your baby's doctor, you will be contacted by the home health agency soon after discharge to schedule the appointment. Your baby's social worker can help with these arrangements and provide you with information about insurance coverage for this service.
- If your baby is going home on any **medications**, you will receive special training from your baby's nurse about the dosage, administration and side-effects of these medications.

Care of Your NICU Baby at Home

General Tips for All Parents:

Safe Sleep

- Always place your baby on his/her back to sleep.
- Do not place your baby on a waterbed, sofa, soft mattress or other soft surfaces.
- Do not let your baby sleep in bed with you.
- Dress your baby in loose, comfortable clothes. Your baby should be comfy in the same number of layers you would wear. If baby seems hot or cold but is otherwise acting normally, add a layer or take a layer away.
- Keep all soft things (stuffed animals, pillows, positioners) out of your baby's sleeping area.

Circumcision

- Gently wash penis with soap and water after each bowel movement.
- Put a small amount of Vaseline on the penis with each diaper change until it heals.

Cord Care

- Clean around your baby's cord daily with soap and water or if it looks dirty.
- Keep the cord dry.
- Do not use alcohol on the cord.
- Fold your baby's diaper away from the cord.
- The cord should fall off within 14 days.

Bathing

- Until your baby's cord falls off give your baby a sponge bath.
- After the cord falls off you may give your baby a tub bath.
- Babies do not need a bath every day, it can dry their skin.

Keep your Baby Safe

- Use the bulb aspirator to get rid of mucous or anything the baby spits into his or her mouth or nose in order to keep the airway open.
- Never shake your baby. All babies cry, ask for help if you need it. Shaking your baby can cause serious medical problems with your baby's body or brain.
- Do not let anyone smoke around your baby or hold your baby if they smoke without covering their clothes with a blanket.

- Limit exposure to infection. Avoid contact with people with colds, illness and fever blisters.
- Don't take your baby out into a large crowd until your baby's doctor tells you it is safe.
- Car seats are required by law and should be positioned in the back, rear facing. If a car seat fitting was done, follow the instructions given by Occupational/Physical Therapy. Rear-facing car seat is recommended for the first 2 years of life.
- Do not let anyone you don't know into your home without proper ID, including a home health care nurse.

Call Your Baby's Health Care Provider if:

- You have any questions about how to care for your baby.
- Your baby is having less than 6 wet diapers per day.
- Your baby has not had a bowel movement in 24 hours.
- Your baby's skin or the white of the eyes have a yellow color.
- Your baby has a temperature higher than 99.5°F/37.5°C or lower than 97.7°F/36.5°C.
- Your son had a circumcision and there is bleeding that will not stop after you use a cool cloth or gently press on the bleeding area.
- Your baby is difficult to awaken.
- Your baby vomits often or the vomit is green.
- You see signs of infection (eyes, circumcision, cord area, etc.), including redness, drainage, swelling, fever or a foul-smelling odor.

Call 911:

For any emergency such as:

- Blue color to your baby's skin (it is normal for hands and feet to have a slightly blue color for 1-2 days after birth – after that, NOT normal).
- Trouble breathing.
- Not breathing.
- Not moving and not waking up.

Care of Your NICU Baby at Home



Remember to never shake your baby.

If you feel overwhelmed because your baby is crying, place your baby in a safe place and call for help.

Basic Infant Care

Remember when holding your baby you should support his or her head and neck.

Remember to always keep one hand on your baby when you diaper or dress your baby on a changing table or high surface.

Crying

Crying is the only way your baby has to talk to you. Some crying is normal. **Babies cry to tell you when they are hungry, tired or just need to be held. You cannot spoil a newborn with attention.** Try to meet basic needs first. Is your baby hungry, wet or dirty, or too warm/too cold?

There are many ways to soothe a crying baby. Dr. Harvey Karp who wrote "Happiest Baby on the Block" lists five simple steps that you can take to help comfort your baby. These steps are also known as the 5 S's:

- Swaddling.
- Side/Stomach.
- Shhhhhing.
- Swinging.
- Sucking.

For more information about these five steps you can watch the "Happiest Babies" video on the GetWell Network, talk to your nurse, call Christiana Care Health System Parent Education and Lactation Services at 302-733-3360, or register for the "Happiest Baby on the Block" class at 302-733-2472.

If your baby is still crying try the following:

- Rock your baby in a rocking chair.
- Gently stroke the back of your baby's head.
- Talk or sing to your baby.
- Play soft music.
- Walk your baby in your arms or in a stroller.
- Take your baby for a ride in the car.
- Play rhythmic noise.
- Burp your baby.

Sometimes too much activity can make it hard to calm your baby. **Never bring your baby into bed with you to calm him or her.**

Bathing

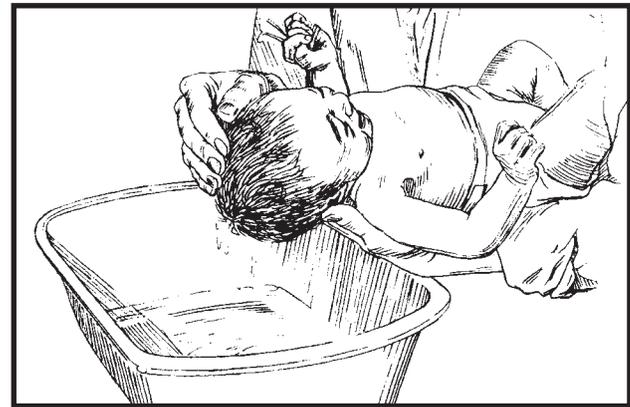
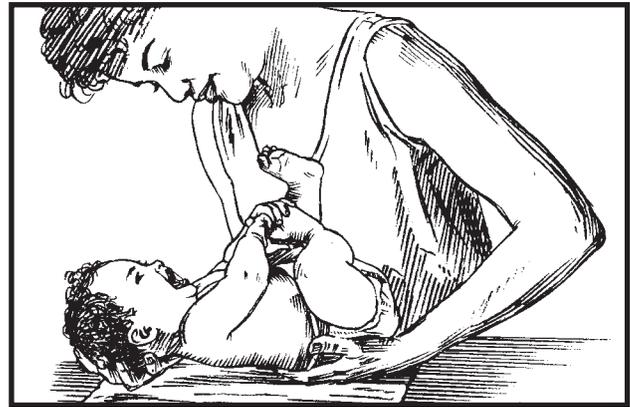
A sponge bath is all your baby needs until the cord comes off. If your baby is circumcised, you will need to continue a sponge bath until the penis has healed.

Basic things needed for bathing:

- Baby tub or dish tub and warm water, 90 – 100°F.
- Soft wash cloth.
- Plastic cup for rinsing.
- Gentle non-tearing baby soap, unscented.
- Two soft baby towels or two large towels.
- Diaper.
- Clothing.

Steps for the bath:

1. Lay your baby down on a soft towel.
2. Remove your baby's clothing.
3. Wipe your baby's eyes with a wash cloth and plain warm water. Wipe from the inner corner of the eye to the outer corner. Use a clean part of the wash cloth when you wash the other eye the same way.
4. Wash your baby's face, the outer part of the nose and the ears with the tip of the wash cloth. Never stick a cotton swab in the nose or the ear as this can hurt your baby.
5. Pick up your baby supporting the head and neck. **Be careful if your baby is wet, he or she will be slippery.** Wash your baby's head using a soft brush or wash cloth. Rinse the head well with warm water.
6. Clean around the umbilical cord with soap and water.
7. While supporting your baby's head and neck, wash the arms, the legs and then the belly. Be sure to wash the creases well around your baby's neck, belly and between the fingers and toes. Wash your baby's back. Take off the diaper and wash from front to back. Pat dry well and diaper your baby. Be careful; at times a baby will urinate on you during a bath or diaper change.



Care of Your NICU Baby at Home

Infant Safe Sleep Routine

Babies should never sleep in bed with anyone or anything, not even for naps.

Sleep Alone

Babies should NEVER sleep in a bed with anyone.

On Back

Babies should ALWAYS sleep on their backs.

Empty Crib

There should be NOTHING in the crib with your baby.

Smoke Free

Keep baby's environment SMOKE-FREE.

Content and permission to use from the Delaware Health and Social Services and Delaware Healthy Mother and Infant Consortium.



All babies born in Delaware are screened for more than 40 disorders including: cystic fibrosis, galactosemia, sickle cell anemia, hypothyroidism, and many others. This testing is known as newborn metabolic screening.

Newborn Screening Locations

For the second screening you may take your baby to any lab of your choice or to any of these locations, no appointment necessary.

Medical Arts Pavilion MAP 1 – Suite 100

4745 Ogletown-Stanton Road

Newark, DE 19718

302-733-6244

Monday- Friday: 6 a.m. – 5 p.m.

Christiana Hospital – Room 1E92D E Tower

Entrance at Center for Heart

& Vascular Health

Newark, DE 19718

302-733-1558

Monday- Friday: 7:30 a.m. – 4 p.m.

Health Care Center at Christiana HCCC

200 Hygeia Drive

4755 Ogletown-Stanton Road

Newark, DE 19718

302-623-0151

Monday- Thursday: 7 a.m. – 8 p.m.

Friday: 7 a.m. – 6 p.m.

Saturday: 7 a.m. – Noon

Wilmington Hospital

Patient Testing and Registration, Main Lobby

501 West 14th Street

Wilmington, DE 19899

302-320-6801

Monday- Friday: 7 a.m. – 4:45 p.m.

Saturday: 8 a.m. – Noon

Christiana Care Foulkstone Plaza

1401 Foulk Road, Suite 100 D

Wilmington, DE 19803

302-477-4510

Monday- Friday: 7 a.m. – 4:30 p.m.

Saturday: 8 a.m. – Noon

Christiana Care Middletown Emergency

621 Middletown Odessa Road

Middletown, DE 19709

302-203-1121

Monday- Friday: 7:30 a.m. – 4 p.m.

Saturday: 8 a.m. – Noon

(Use Lab phone to the right of the reception desk for service).

Christiana Care Concord Health Center

161 Wilmington-West Chester Pike (Route 202)

Chadds Ford, PA 19317

610-361-1270

Monday- Friday: 7 a.m. - 3:30 p.m.



Care of Your NICU Baby at Home

Newborn Metabolic Screening

Early detection of a disorder can mean a better chance of treating it. The newborn metabolic screening is a two-part test. The first part of the test is done while you are still in the hospital. A small amount of blood is taken from your baby's heel and put on a special test paper. The hospital sends the test to a specialized laboratory who sends the results to your baby's health care provider. If necessary, the health care provider will be notified immediately and will contact you to make necessary arrangements. **It is important that the hospital and your health care provider have the correct address and phone number so that you may be reached.** The second part of the test will need to be done when the baby is 7 to 28 days old.

Check with your health care provider if you have any questions or you may call the Delaware Division of Public Health at either 302-744-4544 or 1-800-262-3030. No baby will be denied screening.

Immunizations

The Centers for Disease Control and Prevention, American Academy of Pediatrics, American Academy of Family Physicians and Christiana Care Health System strongly recommend that all infants and children be immunized to protect them from life-threatening diseases. Immunizations save lives.

A few more tips:

- **The initial dose of hepatitis B vaccine.** All newborns should receive it prior to discharge from the hospital and some may require it soon after delivery.
- Vaccine schedules, especially for RV (rotavirus) and Hib (haemophilus influenzae type b), may vary depending on the brand your pediatrician uses in their office.
- Some vaccinations can be combined and given in one dose. Ask your pediatrician if they use combination vaccines.
- The influenza vaccine is given once annually just before or during flu season to all children 6 months and older.

Hearing Test

It is recommended that all babies have their hearing tested after birth. Christiana Care uses an automated auditory brainstem response (AABR) screening, which provides information about the inner ear (cochlea) and brain pathways for hearing. The AABR is performed by placing three small electrodes (stickers) on the head and neck. Small earphones send soft clicking sounds to their ears and a computer records the response. The computer determines if the baby has passed the assessment. Since no response is necessary, the baby can be restful or sleeping while it is performed.

Most babies pass their screening test before discharge from the hospital. If your baby fails their hearing test, there is a possibility of hearing loss. Your health care provider will help you arrange a repeat test 2-3 weeks after going home. If you have any questions, please call: The Delaware Division of Public Health at 302-744-4544/1-800-262-3030 or Christiana Care Health System Rehabilitation Services at 302-623-4050.

Immunization Chart

| Age | Immunizations* | Age Range | Date Given | Adverse Reactions |
|-----------------|----------------|------------------------------------------------|------------|-------------------|
| Birth - 1 month | HepB #1 | Birth | | |
| 2 months | HepB#2 | 1-2 months | | |
| | RV #1 | | | |
| | DTaP #1 | | | |
| | Hib #1 | | | |
| | PCV #1 | | | |
| | IPV #1 | | | |
| 4 months | RV #2 | | | |
| | DTaP #2 | | | |
| | Hib #2 | | | |
| | PCV #2 | | | |
| | IPV #2 | | | |
| 6 months | HepB #3 | 6-18 months | | |
| | RV #3 | | | |
| | DTaP #3 | | | |
| | Hib #3 | | | |
| | PCV #3 | | | |
| | IPV #3 | 6-18 months | | |
| | Influenza | 6-59 months, Recommended yearly | | |
| 12 months | Hib #4 | 12-15 months | | |
| | PCV #4 | 12-15 months | | |
| | MMR #1 | 12-15 months | | |
| | Varicella #1 | 12-15 months | | |
| | HepA** | 12-23 months; second dose at least 6 months | | |
| 15 months | DTaP #4 | 15-18 months | | |

* Immunizations listed above: Hepatitis B (HepB), Rotavirus (RV), Diphtheria/Tetanus/Pertussis Combination Vaccine (DTaP), Haemophilus influenzae Type b (Hib), Pneumococcal Vaccine (PCV), Inactivated Polio Vaccine (IPV), Measles/Mumps/Rubella Combination Vaccine (MMR), Hepatitis A (HepA).

** Two doses of HepA vaccine are needed for lasting protection. The first dose should be given between 12 and 23 months of age. The second dose should be given six to 18 months later. HepA vaccination may be given to any child 12 months and older. Children and adolescents who did not receive the HepA vaccine and are at a high risk should be vaccinated against HepA.

Care of Your NICU Baby at Home

Car Seat Safety

We highly recommend that you bring your car and car seat to have someone check the installation at a fitting station. Call 302-733-2472 for fitting stations. Certified technicians at these locations can teach you about correct installation. Most car seats are used incorrectly. Without correct installation, the car seat will not be able to protect your baby properly in the event of a crash.

Helpful tips:

- The American Academy of Pediatrics currently recommends keeping children rear facing until age two.
- The safest spot for your car seat is the rear center seat.
- Infants should be at a 30- to 45-degree angle.
- Do not add anything to your car seat unless it came with it.
- Be careful when using a used car seat. Make certain that it has not been in a crash and has not expired. Ask the previous owner for the owner's manual and be sure that all the pieces are there.



- All car seats have an expiration date.
- Attend a Christiana Care car seat class. You will learn the right way to put your baby in the car seat.
- You will be responsible for placing your baby in your car seat and fitting your car seat in the car when you leave the hospital.

Car Seat Safety Inspections

We want to help you keep your baby safe. Before bringing your baby home, we can teach you how to install your child safety seat here or at any of the inspection station locations listed below.

New Castle County:

Christiana Hospital
Women's Health Building
4755 Ogletown-Stanton Road
Newark, DE 19718
Call 302-733-2472 for an appointment.

Alfred I. duPont Hospital for Children
1600 Rockland Road
Wilmington, DE 19803
Call 302-651-5437 for an appointment.

Wilmington Division of Motor Vehicles
2230 Hessler Boulevard
New Castle, DE 19720
Call 302-434-3234 for an appointment.

Kent County:

Division of Motor Vehicles
415B Transportation Circle
Dover, DE 19903
Hours: Tuesday and Wednesday
Call 302-744-2749 for an appointment.

Sussex County:

Delaware State Police –Troop 7
18006 Coastal Highway
Lewes, DE 19958
Thursday only
Call 302-387-2324 for an appointment.



After Your Baby Comes Home, Call Your Doctor or Health Care Provider if:

- Your baby is not breastfeeding at least eight times in 24 hours.
- You think your baby is not having enough wet or dirty diapers.
- You do not hear swallows and do not feel strong tugging when your baby feeds.
- You have concerns about your baby's feedings.

Breastfeeding Support Resources

Christiana Care Health System Parent
Education and Lactation Services
302-733-3360

Christiana Care Breastfeeding Helpline
302-733-4151

Breastfeeding Coalition of Delaware
www.delawarebreastfeeding.org

La Leche League International
800-525-3243

Latin American Community Center
302-655-7338 ext. 7723

Westside Breastfeeding Counselor
302-655-5822

WIC Breastfeeding Peer Counselor
302-733-4151

Christiana Care Breastfeeding Support Group

Held Mondays from 2 – 3 p.m.
(except holidays) in the Women's
Health Building, Christiana Hospital
campus, room 1932.

Also held on Wednesday from 6 – 7 p.m.
(except holidays) in the Women's Health
Building, Christiana Hospital Campus,
room 1926.

Free to attend. Moms help other moms
with the guidance of a lactation consultant.

For more information visit
christianacare.org/parented



Care of Your NICU Baby at Home

Formula Preparation and Bottle Feeding

Kinds of Formula

Formula comes in different forms:

- **Powder:** A dry powder that is mixed with water to make formula.
- **Concentrated liquid:** A highly concentrated liquid that must be mixed with water to make formula.
- **Ready-to-feed formula:** Pre-made formula that comes in a can or a bottle. You do not add anything to it before feeding.

Before You Mix the Formula

Cleanliness is very important to help prevent your baby from getting an infection. Everything used to prepare a bottle of formula must be as clean as possible. Each time, take these steps:

- Always start by washing your hands with soap and warm water. Dry your hands with a clean towel. Make sure you are preparing formula on a clean, disinfected surface.
- Always check the formula expiration date. Never use expired formula.
- **The first time you use your bottles, nipples and rings,** place them in boiling water for five minutes. This eliminates any germs or dirt that are left on the bottle during manufacturing.
- Tap water and bottled water can all contain bacteria. There are different recommendations for preparing formula to minimize the chance that these germs cause illness.
- Many pediatricians (as well as the American Academy of Pediatrics) recommend using clean tap water to mix your baby's formula.

- Other experts recommend boiling your water for 1 minute, and then cooling it before using it to prepare formula. Talk to your baby's doctor about whether you should boil your water, and consider the information below when making this decision:
 - You will need to boil your water if your drinking water is dirty or you have been told it is unsafe. If you are unsure about the safety of your water, ask your Public Health Department or Water Department.
 - You will need to boil your water if you have well water.
 - You should strongly consider boiling your water if your baby is very young, was born prematurely, or has a health condition that weakens his or her immune system. Talk to your baby's doctor about special ways to prepare your formula in these cases.

How to Bottle Feed Your Baby

- Hold your baby close to your body. Make eye contact. This helps bonding.
- Cradle your baby so the head is higher than the stomach. Your baby should not be fed while lying flat, because it may cause him or her to choke.

You may have learned special feeding positions that helped your baby feed well in the NICU. These special positions, like side-lying and seated in your lap, may need to be continued at home. Talk to your baby's nurse about feeding questions.
- Hold the bottle at an angle. The liquid should completely fill the nipple. This will keep your baby from sucking in air. Swallowing air is uncomfortable.
- Stroke your baby's cheek or lower lip lightly with the nipple. This can get your baby to open his or her mouth. Then, slip the nipple into your baby's mouth. Sucking and swallowing should start. You might need to try different types of nipples to find the one your baby likes best.
- Try to burp your baby halfway through a feeding. Then, just start feeding again.
- Let your baby tell you when he or she is done. Your baby's head might turn away. Or, your baby's lips might push away the nipple. It is OK if your baby does not finish the bottle.
- Each feeding may take 20-30 minutes. It is normal for your baby to finish eating and continue to want to suck. This does not always mean your baby is hungry. Babies like to suck because it comforts them. Consider offering your baby a pacifier, which is also recommended to reduce the chance of Sudden Infant Death Syndrome.
- Burp your baby again when the feeding is done.



Helpful References



Community Health Library

The Junior Board Cancer Resource Library offers:

- Comfortable, multimedia resource center.
- Hours: Monday - Friday, 8:30 a.m. - 5 p.m.
- Location: Helen F. Graham Cancer Center & Research Institute, Room 1106 (East), Christiana Hospital, Newark, Delaware, 302-623-4580, medlibcon@christianacare.org
- Courtesy shuttle from E Tower lobby.
- Access to two computers with Internet access, color printer and copier.
- A librarian can help you find the information you need.
- Consumer health books and newsletters.
- Music, relaxation, and exercise CDs and DVDs.
- Free library card with a picture ID (items can be borrowed).

Selected web sites about premature babies:

Christiana Care Neonatal Intensive Care Unit
www.christianacare.org/nicu

National Library of Medicine – Premature Babies Portal
(links to many informative web sites)
www.nlm.nih.gov/medlineplus/prematurebabies.html

National Institute of Child Health and Human Development – Preterm Labor and Birth: Overview
www.nichd.nih.gov/health/topics/preterm/Pages/default.aspx

Nemours KidsHealth – A Primer on Premies
kidshealth.org/parent/growth/growing/preemies.html

March of Dimes – Understanding Your Premature Infant
(includes several modules that introduce you to many aspects of caring for a preemie)
www.marchofdimes.com/modpreemie/preemie.html

The Health Library at Wilmington Hospital
Wilmington Hospital, Room 1N69
Wilmington, Delaware
302-428-2201

Helpful References

Helpful Telephone Numbers

For information and referrals to health and human services

Delaware 2-1-1 including information about services for children and families, such as subsidized childcare, Public Assistance and Medicaid; Help Me Grow is part of 2-1-1.

Monday-Friday 8 a.m. - 8 p.m.....2-1-1

For support and information about parenting challenges

Child, Inc. provides direct services such as shelters, domestic violence treatment programs, specialized foster care, prevention programs such as parenting classes and assistance, and community advocacy for children and their families.800-874-2070

New Castle County.....302-762-8989

Domestic Violence Hotline 302-762-6110

National Child Abuse Hotline 800-4-A-CHILD

Runaway Youth Hotline302-762-6373

Contact - 24-hour helpline for anyone under stress. Trained listeners can offer support and make referrals to community agencies.

New Castle County.....302-761-9100

Kent and Sussex Counties.....800-262-9800

For information about the services available for children with developmental delays and disabilities

Parent Information Center of Delaware identifies community services, helps families solve problems and offers emotional support. PIC has a library of resources and offers informational workshops.

Toll Free888-547-4412

New Castle County.....302-999-7394

Delaware Family Voices Family to Family Health Information Center provides families with children with special health care needs tools to make informed decisions, advocate for improved policies, build partnerships and serve as a resource on health care.

Toll Free877-235-3588

New Castle County.....302-669-3030

For information on children's evaluations or services related to a developmental delay or disability

Child Development Watch evaluates and coordinates services to young children, birth to age 3.

Toll Free800-671-0050

New Castle County.....302-283-7240

Toll Free800-752-9393

Kent and Sussex Counties.....302-424-7300

Child Find is a program, available in all school districts that identifies children three and older who are in need of special services. Visit their web page for the phone number of the Child Find Coordinator or Special Education Supervisor in your district.....www.dmpkids.com/delaware-child-find-services

Delaware's Maternal and Child Resourceswww.dethrives.com

For help in finding a doctor

Medical Society of Delaware

For people with insurance302-366-1400

For people with NO insurance.....302-224-5190

For information about immunizations800-282-8672

For legal assistance

Community Legal Aid Society, Inc. provides free legal assistance to disabled, low-income and elderly citizens in civil areas of law. Voice/TTY available in each office.

New Castle County302-575-0660

Kent County302-674-8500

Sussex County302-856-0038

For help in finding and using child care

Children and Families First

New Castle County302-658-5177

Kent and Sussex Counties (Toll Free).....800-220-3092

For information about the Women, Infant and Children (WIC) Nutrition Program

WIC Nutrition Program provides participants with nutritious foods and nutrition education. Pregnant, post-partum and breastfeeding women, infants and children up to their fifth birthday are eligible if they qualify.

Toll Free800-222-2189

For information on specific health conditions

March of Dimesmarchofdimes.org/complications/common-conditions-treated-in-the-nicu

*Content in this section was provided by Delaware Health and Social Services
Birth to Three Early Intervention System and University of Delaware Cooperative Extension.*

Helpful References

Other Important Telephone Numbers

| | |
|-------------------------------------------------------------------------------------|--------------|
| Christiana Care Billing Dept. (Patient Financial Services) | 302-623-7440 |
| Christiana Care Birth Records | 302-733-2391 |
| Christiana Care Breastfeeding Resource Center | 302-733-3360 |
| Christiana Care Outpatient Lab (E tower) | 302-733-1558 |
| Christiana Care Outpatient Lab (MAP 1, Suite 100) | 302-733-6244 |
| Christiana Care Outpatient Pharmacy | 302-733-2182 |
| Christiana Care Parent Education and Lactation Services/Car Seat Fitting Station | 302-733-2472 |
| Christiana Care Center for Women's Emotional Wellness | 302-733-6662 |
| Christiana Care Psychiatric Crisis Help Line | 302-320-2118 |
| Delaware Motor Vehicle (DMV) for Car Seat Fitting Stations | 302-434-3234 |
| Domestic Violence Hotline | 302-762-6110 |
| Hudson State Services Center | 302-283-7500 |
| Office of Child Advocate | 302-255-1730 |
| Paternity Testing – Kent Family Court | 302-672-1000 |
| Paternity Testing – New Castle Family Court | 302-255-0300 |
| Paternity Testing – Sussex Family Court | 302-855-7400 |
| Poison Control | 800-222-1222 |
| Smoking Cessation – Delaware Quit Line | 866-409-1858 |
| Social Security Administration | 866-667-7221 |
| Women Infants and Children (WIC) | 302-283-7570 |

For more information, visit christianacare/baby.

Telephone numbers may change without notice.



All About Me

My Birth Information

My Name: _____

My Birthday: _____ My Birth Weight: _____ My Birth Length: _____

My Birth Head Circumference: _____ My Gestational Age at Birth: _____

My Medical Team: (Gold/Blue) _____

My Family

My Parents: _____

My Family's First Language: _____

My Family's Favorite Way to Communicate: Writing Talking Reading
 Phone Interpreter In-Person Translator Daily Updates Weekly Updates

Etc... _____

More about My Family: _____

My Siblings:

My Pets:





All About Me

My Family's Dreams and Goals for Me: _____

My NICU Team

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

My Visitors

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |



Weight Conversion Chart – Pounds, Ounces, Grams/Grams to Pounds

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 0 | 454 | 907 | 1361 | 1814 | 2268 | 2722 | 3175 | 3629 | 4082 | 4536 | 4990 | 5443 |
| 1 | 28 | 482 | 936 | 1389 | 1843 | 2296 | 2750 | 3203 | 3657 | 4111 | 4565 | 5018 | 5471 |
| 2 | 57 | 510 | 964 | 1417 | 1871 | 2325 | 2778 | 3232 | 3685 | 4139 | 4593 | 5046 | 5500 |
| 3 | 85 | 539 | 992 | 1446 | 1899 | 2353 | 2807 | 3260 | 3714 | 4167 | 4621 | 5075 | 5528 |
| 4 | 113 | 567 | 1021 | 1474 | 1928 | 2381 | 2835 | 3289 | 3742 | 4196 | 4649 | 5103 | 5528 |
| 5 | 142 | 595 | 1049 | 1503 | 1956 | 2410 | 2963 | 3317 | 3770 | 4224 | 4678 | 5131 | 5585 |
| 6 | 170 | 624 | 1077 | 1531 | 1984 | 2438 | 2892 | 3345 | 3799 | 4252 | 4706 | 5160 | 5613 |
| 7 | 198 | 652 | 1106 | 1559 | 2013 | 2466 | 2920 | 3374 | 3827 | 4281 | 4734 | 5188 | 5642 |
| 8 | 227 | 680 | 1134 | 1588 | 2041 | 2495 | 2948 | 3402 | 3856 | 4309 | 4763 | 5216 | 5670 |
| 9 | 255 | 709 | 1162 | 1616 | 2070 | 2523 | 2977 | 3430 | 3884 | 4337 | 4791 | 5245 | 5698 |
| 10 | 283 | 737 | 1191 | 1644 | 2098 | 2551 | 3005 | 3459 | 3912 | 4366 | 4819 | 5273 | 5727 |
| 11 | 312 | 765 | 1219 | 1673 | 2126 | 2580 | 3033 | 3487 | 3941 | 4393 | 4848 | 5301 | 5755 |
| 12 | 340 | 794 | 1247 | 1701 | 2155 | 2608 | 3062 | 3515 | 3969 | 4423 | 4876 | 5330 | 5783 |
| 13 | 369 | 822 | 1276 | 1729 | 2183 | 2637 | 3090 | 3544 | 3997 | 4451 | 4904 | 5358 | 5812 |
| 14 | 397 | 850 | 1304 | 1758 | 2211 | 2665 | 3118 | 3572 | 4026 | 4479 | 4933 | 5386 | 5840 |
| 15 | 425 | 879 | 1332 | 1786 | 2240 | 2693 | 3147 | 3600 | 4054 | 4508 | 4961 | 5415 | 5868 |

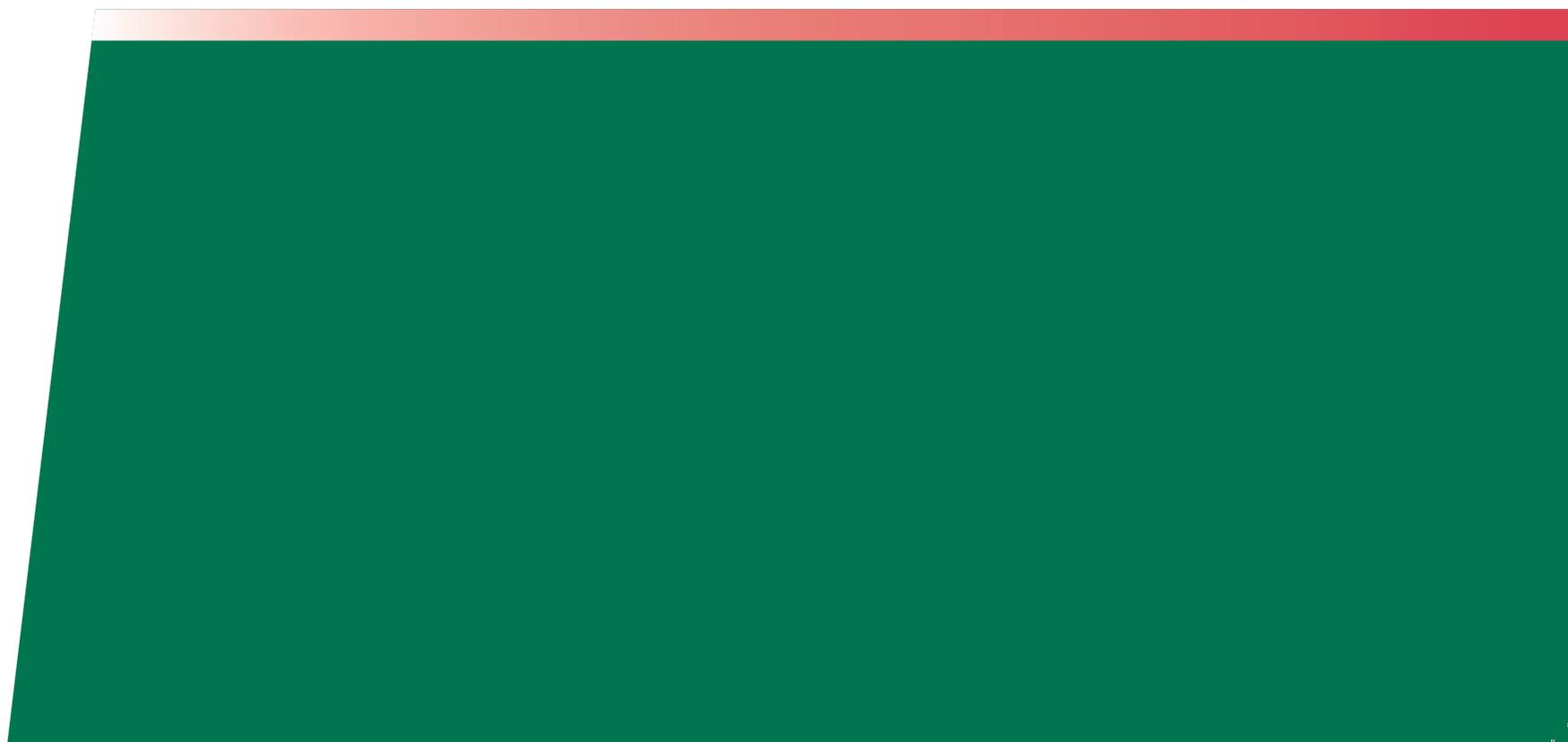
Body Temperature Conversion Chart – Fahrenheit (F) to Centigrade (C)

| F | C | F | C | F | C | F | C |
|------|------|-------|------|-------|------|-------|------|
| 95.0 | 35.0 | 98.0 | 36.7 | 101.0 | 38.3 | 104.0 | 40.0 |
| 95.2 | 35.1 | 98.2 | 36.8 | 101.2 | 38.4 | 104.2 | 40.1 |
| 95.4 | 35.2 | 98.4 | 36.9 | 101.4 | 38.6 | 104.4 | 40.2 |
| 95.6 | 35.3 | 98.6 | 37.0 | 101.6 | 38.7 | 104.6 | 40.2 |
| 95.8 | 35.4 | 98.8 | 37.1 | 101.8 | 38.8 | 104.8 | 40.4 |
| 96.0 | 35.6 | 99.0 | 37.2 | 102.0 | 38.9 | 105.0 | 40.6 |
| 96.2 | 35.7 | 99.2 | 37.3 | 102.2 | 39.0 | 105.2 | 40.7 |
| 96.4 | 35.8 | 99.4 | 37.4 | 102.4 | 39.1 | 105.4 | 40.8 |
| 96.6 | 35.9 | 99.6 | 37.6 | 102.6 | 39.2 | 105.6 | 40.9 |
| 96.8 | 36.0 | 99.8 | 37.7 | 102.8 | 39.3 | 105.8 | 41.0 |
| 97.0 | 36.1 | 100.0 | 37.8 | 103.0 | 39.4 | 106.0 | 41.1 |
| 97.2 | 36.2 | 100.2 | 37.9 | 103.2 | 39.6 | 106.2 | 41.2 |
| 97.4 | 36.3 | 100.4 | 38.0 | 103.4 | 39.7 | 106.4 | 41.3 |
| 97.6 | 36.4 | 100.6 | 38.1 | 103.6 | 39.8 | 106.6 | 41.4 |
| 97.8 | 36.6 | 100.8 | 38.2 | 103.8 | 39.9 | 106.8 | 41.6 |

Note: C = (F-32) x 5/9.

Centigrade temperature equivalents rounded to one decimal place by adding 0.1 when second decimal place is 5 or greater.

The metric system replaces the term "Centigrade" with "Celsius" (the inventor of the scale).





CHRISTIANA CARE
HEALTH SYSTEM

Women's Health Services

P.O. Box 1668
Wilmington, DE 19899
302-733-1000

christianacare.org/nicu

Christiana Care is a private, not-for-profit regional health care system that relies in part on the generosity of individuals, foundations and corporations to fulfill its mission. To learn more about our mission, please visit christianacare.org/donors.