

Welcome to the NICU

A resource for parents and caregivers



Guided by you · Doing it right · Depend on us www.prhc.on.ca



NICU Location and Contact Information

1 Hospital Drive, Peterborough ON, Canada K9J 7C6

705-743-2121 x. 5073

NICU direct line: 705-876-5073

Call us any time to speak with your baby's nurse. Let us help you plan for your visits. We love knowing when you are planning to come.

When admitted to the NICU, your baby will be assigned a unique ID number. Always use your baby's name and unique ID number when calling about your baby.

PHOTO CREDITS:
PRHC Foundation, 2022 and Julia & Jamie Bragg





What is the NICU?

Welcome to PRHC Neonatal Intensive Care Unit (NICU). We are a Level IIB NICU.

We are here to support you and your baby (or babies) in need of specialized care. We provide care to preterm and term newborns with a variety of different health conditions and needs.

Which babies get admitted to NICU?

Preterm and term newborns with a variety of different health conditions and care needs.

Babies are admitted for monitoring and treatment for a number of reasons, including breathing and circulation, low birth weight, blood sugar, temperature instability, feeding concerns, seizures, sepsis/infection, and other health conditions requiring a higher level of observation and care.

Babies born at home, midwifery centres, or other hospitals without NICU services may need to come to our NICU for monitoring and treatment.

Some babies, requiring an even higher level of specialized care, may need to be born at - or temporarily sent to a different hospital, but many are able to come to our NICU when they are a little older, bigger, or more stable.

NICU terminology

Each baby's time spent in the NICU will look a little different. It all depends on their diagnosis or reason for being in the NICU.

Vital signs	Body temperature, heart and breathing rate, oxygen saturation and blood pressure are recorded on the baby's chart. We use a cardiac monitor to view your baby's vital signs on a screen. An alarm will ring if the readings are not within the normal range. False alarms are common and can happen when the baby wiggles or the lead falls off.
Physical examination	Checking your baby over from head to toe to make sure everything is working as it should be and they are growing like they should be.
Lab work	Sampling your baby's blood can tell us a lot about their breathing and other body systems. It can also check for signs of illness and infection. Less commonly, we take samples of your baby's urine, stool and spinal fluid.
Medications	Some babies will need antibiotics or other medications to help them. Some babies may need blood or blood products, but this is rare.
X-ray	A picture that shows the bones and organs of the body. They are used to check on the condition of the baby's heart, lungs and bowel. X-rays can be used to help confirm the proper location of tubes or lines the baby may need.

Diagnositic tests	Special tests such as ultrasound, EEG, ECHO, and ECG/EKG can tell us information about your baby's heart, brain and other organs.
IV line	A small catheter placed a short distance into a vein to provide fluid and/or medications. Babies can have IVs in their scalp, hands, arms, legs, or feet. These sites are rotated regularly.
Respiratory support	Ventilators, CPAP machines and other medical devices that provide oxygen can be used to help your baby breathe.
Eat, sleep, console	Parents are welcomed and encouraged to take part in normal baby activities, including feeding, diapering, bathing, dressing, and cuddling with your baby. We will work to support you and help you learn how to care for your baby. Every baby will be cared for by the nurses and doctors with warmth, tenderness, and affection. We love babies!

What about me?

It is important that you spend time bonding and caring for your baby, but it is also essential that you rest and care for yourself (eat drink, rest, pain medication etc.). The nurses will try to help you balance spending time with your baby and completing these tasks.

Use the whiteboard in your room or tell the postpartum team when you are heading to the NICU. This will help them keep track of you and help them find you for care if they need to.

What if the postpartum team needs me while I am in NICU?

Your nurse, OB/GYN, doctor or midwife may call or visit the NICU to speak with you, or you may be asked to return to your room briefly.

What if my baby's NICU team needs me while I am on A6 or discharged?

Your baby's nurse or doctor may call or visit A6 to speak with you, or you may be requested to come to the NICU. We may also call you at home or on your cell phone after discharge. Please make sure we have updated contact information.

Note: our caller ID reads private number.





Your baby's care team

Caring for special babies requires a special team of people.

NICU nurses are registered nurses (RN) with specialized knowledge of NICU babies. Your nurse helps organize your baby's day and helps you navigate your NICU journey.

The **pediatrician** is your baby's doctor. They plan and oversee your baby's care. Your baby may have the same doctor each day, or they may have a doctor with a rotating schedule, with a different doctor each week. This is called the "POW" – pediatrician of the week.

Registered Respiratory Therapists (RRT) support your baby's breathing.

Speech Language Pathologists (SLP) support your baby in learning how to feed.

Dieticians manage your baby's nutrition needs.

Lactation Consultants support pumping and breastfeeding.

Social Worker is available to offer support, resources, and practical help to families.

When can I talk to my baby's doctor?

The Pediatrician is your baby's doctor. You will often meet your baby's doctor during or soon after your delivery.

For transfer patients, your baby's doctor will reach out to you by phone or in person as soon as your baby is settled into the NICU. Rounds is when the care team discusses your baby's needs and plan of care. You are welcome to take part, share information, and

ask questions. The timing of rounds varies, but usually happens once per day in the morning. Rounds may not happen at the same time each day during your visit. Your nurse may be able to give you an idea of timing.

Your doctor may choose to call you with updates, or you may be able to request a call.

Your nurse is also able to communicate with you on behalf of the doctor and vice versa.

Equipment in the NICU

NICU babies require specialized equipment. Every baby is different and may require different equipment to support their care.

Specialized beds called **incubators or isolettes** allow us to keep your baby warm and safe while allowing us access to them to provide care and support.

A **cardiac monitor** is used to track and record information about your baby's breathing and circulation.

A **syringe pump** is used to administer feeds, medications and IV fluids.

Ventilators, CPAP machines and other medical devices to help your baby breathe.

As you sit with your baby, you will notice beeping noises, alarms, and flashing monitors. Your baby's care team is trained to know what these numbers and alarms mean and how to respond to them if action is required.

Incubator	A type of bed that is closed on all sides to keep your baby warm and safe.
Continuous Positive Airway Pressure	A device that is put over your baby's nose to help them breathe. It is also called "CPAP."
Phototherapy	A type of light that is used to help break down bilirubin in your baby's blood.
Umbilical Catheter	A type of IV that is in your baby's umbilical cord to give your baby fluids, nutrients or medications.
Nasogastric Tube	A small tube that is put in your baby's nose or mouth and goes down into their stomach. It helps to feed your baby breast milk or formula.
Pulse Oximeter	A wire that is attached to your baby's foot or wrist to monitor the amount of oxygen in their blood.
Central Venous Catheter	A type of IV inserted into a larger vein to give your baby fluids, nutrients, or medications.
Cardiac Monitor	Wires attached to your baby's chest are hooked up to a screen that monitors your baby's heart rate, breathing rate, and oxygen in their blood.
Peripheral Intravenous Catheter	A type of IV that is in your baby's hand, arm, foot or scalp to give your baby fluids, nutrients, or medications.



 $_{6}$

NICU visiting policy

Children under the age of 10 are not allowed to visit in the NICU.

Only two (2) visitors are allowed in the NICU at a time.

NICU visitors are welcome 24 hours a day, including during shift change, physician rounds, and during most procedures.

Mask Up! Face masks remain mandatory for all visitors and staff in our NICU.

Stay home if you are sick! If you are unwell, you will not be allowed to visit and will be asked to wait until they are feeling better to resume visiting.

Entering the NICU

The NICU is a "locked unit." The doors need to be opened by a staff member or using a NICU pin code. Do not share your NICU pin code with anyone else, including your visitors.

Upon entering, wash your hands.

Connect with your baby's nurse for updates.

Your baby may not tolerate extra handling outside of certain times. Your nurse will help you plan for these times so that you can make the most out of your visits.

We want you to hold and handle your baby as much as is safe/beneficial for them. Parents are encouraged to talk, sing, read, hand-hug, cuddle and provide care to their baby.

We will support you with feeding, diapering, dressing, bathing, learning about, and bonding with your baby.

Sleeping when your baby is in the NICU

If you are still a patient, you will sleep in your patient room on the maternity floor.

If you are discharged home before your baby, you may need to return home to sleep while you wait for your baby to be ready for discharge.

Being discharged without your baby can be difficult. Please talk to us about how you are feeling and we will do our best to support you.

Care-By-Parent rooms are short-stay rooms, just outside the NICU that allow discharged parents/caregivers to stay overnight to provide care for their babies in the NICU.

We make sure that these rooms are shared fairly among the different families that use them.

There are limited rooms, and they may not always be available. At times, we have a waiting list.

If a room is available, and you would like to use it, you may be able to use it that same day.

Care-by-parent rooms

Care-By-Parent rooms are short-stay rooms, located just outside the NICU. They allow discharged parents/caregivers to stay overnight to provide care for their babies still in the NICU.

We do our best to ensure the rooms are shared fairly among the families that want or need to use them.

There are only a small number of these rooms, and they may not always be available. At times, we have a waiting list.

If a room is available, and you would like to use it, you may be able to use it that same day. If a room is not available, you may need to wait for one to become available or for another family to be asked to leave one.

If you have already been in one of the rooms for a night or two, you may be asked to leave to allow other families a chance to use it. You would then go back on the waiting list.

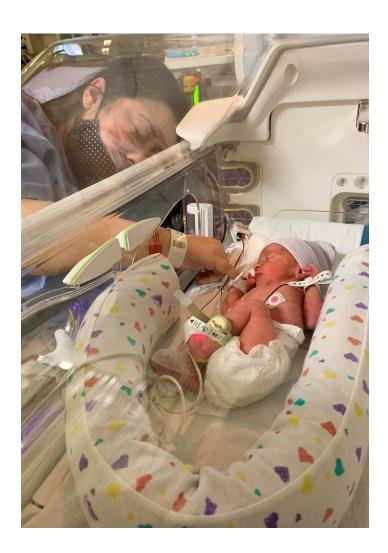
Decisions about who may use a Care-By-Parent room and for how long are made based on parent/caregiver factors, as well as baby factors. Ask your nurse for details.

You may be asked to hold off until your baby is older, bigger, more stable, or closer to discharge. The goal of Care-By-Parent is to keep families close together, but also specifically to allow babies to be cared for by their parents. If your baby isn't ready for this yet, we may ask you to wait a little longer, if there are other families who need the rooms too.

If you are staying in a Care-By-Parent room, it is important to know that you are responsible for providing your own food, medication, personal care items. You are no longer a patient and will no longer be receiving meal trays, medication and nursing or medical care.

We will help you plan for your visits. You will be expected to do a large amount of your baby's care including feeding, diapering, bathing, dressing, and cuddling.

There are also certain rules and expectations for you that the nurses can explain to you. If you do not follow these rules and expectations you may be asked to leave.



 $_{3}$

Breastfeeding support in NICU

If you choose to breastfeed, we are here to support you. Breastmilk is good for your baby and helps them grow.

Our nurses and lactation consultants are here to help you with pumping and breastfeeding.

We teach hand-expression and pumping.

We provide pumping, storing and feeding supplies.

We have electric breast pumps and breastfeeding pillows for use at no charge.

We provide hands-on breastfeeding support as you and your baby learn.

We can provide donor breastmilk to eligible babies.

Family-centred care

Family-centred care puts babies and families at the center of the circle of care.

You are the most important person for your baby.

You are your baby's voice, source of comfort - warmth - affection, advocate, and a vital part of your baby's care team.

Parents and caregivers are welcome 24 hours a day.

Parents and caregivers are encouraged to take an active role in their baby's care. We will support you with feeding, diapering, dressing, bathing, learning about, and bonding with your baby.

We want you to hold and handle your baby as much as is safe/beneficial for them. We want you to talk, sing, read, hand-hug, hold/hug/cuddle, and provide care to your baby.

As babies become more stable and increasingly ready for discharge, more parent involvement is encouraged as we help you to prepare for your baby going home.

When will my baby be discharged?

Every baby is different, and every discharge plan is different.

Signs of readiness for discharge may include age, weight, stable cardiorespiratory status, no apnea/bradycardia for several days, stable blood sugars, good feeding with good weight gain, good temperature control, and a safe discharge plan that will allow for follow up in the community.

We want you to feel ready to go home and will ensure you have the information and skills you need to feel safe, confident and ready to take your baby home.

Additional information

You will be asked to consent to medical treatments and care on behalf of your baby. We will tell you what we would like to do and ask your permission to do it.

The doctors and nurses are here to support and care for you and your baby. Ask us questions and tell us what would help you the most. We want you to feel safe and help you learn and grow.

We know this is a scary time, but it is also a special time and we feel honoured and privileged to help you celebrate it.

Take lots of pictures and videos of your baby, but please do not take pictures/videos of staff without their permission. Never take pictures/videos of other babies or families in the NICU. Please be mindful of your baby and others. Limit volume of electronic devices and place cellphones on vibrate if possible.

Ask us about virtual visiting.

Translation/interpretation services are available 24/7.



NOTES:

Glossary

We use many medical terms in the NICU. Here are some you may come across during your stay with us; you are always welcome to ask questions about anything you hear. A special thank you to Sunnybrook Health Science Centre. This glossary of NICU terms was taken and adapted from their NICU Resources page.

ANEMIA

A low number of red blood cells in the blood.

ANTIBIOTICS

A type of medication used to treat a suspected or confirmed bacterial infection.

APGAR SCORE

A number given at one and five minutes of age that measures the baby's condition based on heart rate, breathing, muscle tone, activity level and colour.

APNEA

The premature baby has an immature brain, and this means baby may occasionally forget to breathe and may require stimulation (a gentle rub on the back) to remind them. This is common and usually subsides by 34-35 weeks, as baby matures.

ASPIRATION

The direct result of inhaling any breastmilk, formula, or body secretions into the lungs.

CARDIAC MONITOR

This monitor shows the heartbeat on a special computer screen. An alarm rings if the readings are not within the normal limits. False alarms are common and usually happen when the baby wiggles or a lead falls off.

COMPLETE BLOOD COUNT (CBC)

A blood test done for several reasons, including to determine if an infection may be present and to see whether or not the baby is anemic.

CENTRAL LINE

A special IV catheter used to give fluid, medication or nutrition to the baby; includes long lines or PICCs and UVCs. It can stay in for an extended time period, if needed.

CHEST TUBE

A tube surgically inserted through the baby's chest wall into the space around the lungs to reopen a partially or totally collapsed lung.

CORRECTED AGE

The age of a baby from the due date, not the birth date.

CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)

A CPAP s a type of respiratory support used to deliver constant air pressure into a baby's nose, which helps the air sacs in the lungs stay open and helps prevent apnea.

CYANOSIS

Dusky, bluish color of the skin, lips, and nail beds caused by having too little oxygen in the blood.

DESATURATION (DESATS)

When the oxygen level in the blood falls below the set value on the saturation monitor. Acceptable levels of oxygen vary depending upon the baby's age, and the monitor alarm limits are set accordingly.

EDEMA

Also known as "puffiness"; this is swelling due to extra fluid under the skin.

ENDOTRACHEAL TUBE (ETT)

A soft plastic tube placed into the baby's mouth or nose and into the windpipe (trachea) to help with breathing.

GESTATIONAL AGE

The number of weeks a woman is pregnant; the age at which a baby is born.

GLUCOSE

A type of sugar in the blood. Different types of glucose monitoring are done but the most common is done using a glucometer at the bedside.

HEEL STICK

A method of getting blood from a baby's heel.

HUMAN MILK FORTIFIER (HMF)

A powder added to breast milk to give it extra calories and nutrients.

EHYPOGLYCEMIA

Low blood sugar.

INTERSTITIAL

Refers to an IV that is no longer in the vein and must be restarted.

INCUBATOR

A heated and humidified bed specifically for babies in the NICU.

INTRAVENOUS (IV)

A small catheter placed a short distance into a vein to provide fluid and or medications. Babies can have IVs in their scalp, hands, arms, legs, or feet. These sites are rotated regularly.

INTRAVENTRICULAR HEMORRHAGE (IVH)

IVH is bleeding into the fluid-filled areas (ventricles) surrounded by the brain.

INTRA-UTERINE GROWTH RESTRICTED (IUGR)

When a baby's growth slows or ceases while it is in the uterus.

JAUNDICE (HYPERBILIRUBINEMIA)

The yellow color seen in the skin usually during the first two (2) weeks of life, due to the buildup of broken-down blood cells.

LAB WORK

This is a collective term for any blood samples that a baby may need taken from them.

LARGE FOR GESTATIONAL AGE (LGA)

Baby born who is larger than or above the 90 percentile for that gestational age.

LUMBAR PUNCTURE

A small needle is placed in the baby's lower back using sterile technique to get a very small amount of spinal fluid for specialized testing.

ELECTROLYTES (LYTES)

The measurement of sodium, potassium, chloride in the baby's blood. The results of this test help the medical staff treat the baby.

MECONIUM

The first stools (poop) passed by a baby. These stools can last for several days and are thick, sticky and black.

MURMUR

A "whooshing" sound of blood going through the heart and surrounding blood vessels. It is detected by using a stethoscope and listening to the heartbeat on the chest or back. Murmurs are common in premature babies. They can be a sign of a PDA or other heart problem, or they can be benign.

NASOGASTRIC TUBE/OROGASTRIC TUBE (NGT/OGT)

This tube is placed through the nose or mouth to the stomach and is secured with tape. It is a way to feed the baby and to release built up air and gas in the stomach.

NECROTIZING ENTEROCOLITIS (NEC)

A serious bowel condition that can arise unexpectedly in premature infants in the NICU. Babies with it can have bloating, blood in stools, and feeding intolerance; they can become very sick.

NEONATAL ABSTINENCE SYNDROME (NAS)

Conditions caused when a baby withdraws from certain drugs they were exposed to in the womb before birth.

NPO

Nothing by mouth (not feeding).

OXYGEN

An odourless, colourless gas needed by all body cells. The air around us, also called room air is 21% oxygen. If needed, a baby can be given up to 100% oxygen. We can give oxygen by using nasal prongs (low flow), nasal prongs/nasal mask (high flow), or using devices like CPAP or a ventilator.

PARENTERAL NUTRITION

IV nutrition solutions that contains nutrients to help a baby grow. It may be used when a baby is not able or is just starting to feed.

PATENT DUCTUS ARTERIOSIS (PDA)

The ductus is a blood vessel that keeps the blood away from the lungs before a baby is born because the lungs are filled with fluid. Usually, the ductus closes shortly after birth. If the ductus stays open (or patent) it may interfere with normal blood flow, heart and lung function. The PDA may be treated with medication or surgery if necessary.

PHOTOTHERAPY (BILI LIGHTS)

A special blue light used in the treatment of some types of jaundice. Eye shields are placed over the baby's eyes to protect them from the light.

PNEUMONIA

Infection in the lungs.

PNEUMOTHORAX

A collection of air in the space between the lung and the chest wall, but outside the lung.

POST MATURE

A baby born after 42 weeks gestation.

PREMATURE

A baby born before 37 weeks gestation.

RESPIRATORY DISTRESS SYNDROME (RDS)

A condition seen in premature babies or babies with immature lungs. These babies don't have enough surfactant, a substance that allows the lungs to work properly. Surfactant therapy sends surfactant down a tube into the lungs, which helps makes the lungs more flexible and eases ventilation.

RETINOPATHY OF PREMATURITY (ROP)

Abnormal growth of blood vessels in the eye that is most common in babies who were born very premature. Babies will have their eyes examined for ROP if they meet criteria.

OXYGEN SATURATION (SAT)

A term that describes the amount of oxygen in the blood.

SATURATION ("SAT") MONITOR

A monitor that shows the amount of oxygen in the blood. The small monitor is placed around a baby's foot or hand/wrist and can be easily identified by the red light. The light does not produce heat.

SEPSIS

An infection that occurs in the blood. If there is any question that an infection may be developing, blood samples are drawn (culture, CBC) and antibiotics are started.

SEPTIC WORK-UP

Includes blood drawn for CBC, and blood culture. If the baby is very ill the medical team may also request that spinal fluid or urine be obtained and sent for culture.

SMALL FOR GESTATIONAL AGE (SGA)

A baby born who is smaller than or below the 10 percentile for that gestational age.

TACHYCARDIA

A heart rate that is faster than the average range. The average range for premature babies is 120-160bpm and 90-140bpm for full term babies.

TACHYPNEA

A breathing rate that is faster than the average range. The average range for premature babies is 40-60 breaths per minute and 30-60 breath per minute for full term babies.

UMBILICAL VENOUS CATHETER (UVC) or UMBILICAL ARTERIAL CATHETER (UAV)

A soft, clear catheter placed into the blood vessels in the umbilical cord. This line is used to give fluids and medications.

ULTRASOUND

A procedure that uses sound waves to produce a picture of the baby's internal organs. A series of head ultrasounds are often done on premature babies or on the advice of the medical team.

UMBILICUS

The belly button or cord. The cord clamped at birth and dries up and falls off after a short time. The umbilical vessels can be used to insert arterial and venous catheters.

VENTILATOR ('VENT')

A machine used to help a baby breathe. The machine connects to the ETT or NPT.

VITAL SIGNS

Temperature, heart and breathing rate and blood pressure that are recorded on the baby's chart.

VITAMIN K AND ERYTHROMYCIN

Medications that are given to babies soon after birth. A vitamin k injection is given to help baby's blood to clot normally; erythromycin eye ointment is used to help prevent eye infections

X-RAYS

A picture that shows the bones and organs of the body. They are also used to check on the condition of the baby's heart, lungs and bowel. X-rays are also used to help confirm the proper location of tubes or lines the baby may need.

NOTES:			
		•	•



Guided by you \cdot Doing it right \cdot Depend on us www.prhc.on.ca

