Common health conditions treated in the NICU

anemia (uh-NEE-mee-uh)

What it is: A blood condition in which the body doesn't have enough red blood cells (part of the blood that brings oxygen to different parts of the body) or the red blood cells are too small. Babies born too early often have anemia.

Treatment: Treatment includes giving the baby iron supplements (a product that can make up for certain nutrients that you don't get enough of in the foods you eat) and medicines that help her make more red blood cells. If the anemia is really serious, the baby may need a blood transfusion. A blood transfusion means having new blood put into a baby's body.

apnea (AP-nee-uh)

What it is: A breathing problem in which a baby stops breathing for more than 15 seconds. Babies born too early often have apnea. A baby with apnea may take a long breath, then a short one, then pause for 15 to 20 seconds before starting to breathe again. This breathing problem can cause a slow heart rate, called bradycardia. NICU staff may talk about apnea and bradycardia as A's and B's.

Treatment: NICU staff put sensors on the baby's chest. These sensors do not hurt the baby. They send information about his breathing and heart rate to a monitor. If the baby stops breathing, an alarm beeps. A nurse helps the baby start breathing by providing mild, moderate or vigorous stimulation and moving the baby into another position. If the problem is severe, the doctor may give the baby medicine or use equipment to help him breathe.

birth defects

What it is: Health conditions that are present at birth. They change the shape or function of one or more parts of the body. Birth defects can cause problems in overall health, in how the body develops or in how the body works. The most common birth defects are heart defects, cleft lip and cleft palate, Down syndrome and spina bifida.

Treatment: Treatment is different depending on the birth defect. Look up your baby's birth defect in this section for more information. If the birth defect isn't listed in the booklet talk to your baby's health care provider.

bradycardia (bray-dee-KAR-dee-uh)

What it is: An unhealthy, slow heart rate often caused by interrupted breathing called apnea. Babies born too early often have bradycardia. NICU staff may talk about apnea and bradycardia as A's and B's.

Treatment: NICU staff put sensors on the baby's chest. These sensors do not hurt the baby. They send information about his breathing and heart rate to a monitor. If the baby's heart rate is too slow, an alarm beeps. A baby with bradycardia may get medicine or breathing support.

bronchopulmonary dysplasia (bron-koh-PUHL-moh-nair-ee diss-PLAY-zhuh)

What it is: Also called BPD or chronic lung disease. A long-term lung problem. Premature babies (born before 37 weeks of pregnancy) who have a serious breathing problem called respiratory distress syndrome (also known as RDS) and full-term babies (born between 39 weeks and 40 weeks, 6 days) who have infections (illnesses caused by some viruses, bacteria or other germs) like pneumonia can get BPD.

Treatment: Treatment includes giving the baby oxygen from a continuous positive airway pressure machine (also called CPAP, a machine that helps a baby breathe) or a mechanical ventilator (a machine that breathes for a baby when he is not breathing on his own or needs help breathing) to help him breathe. Babies also can get medicine to help them breathe.

chromosomal conditions (kroh-muh-SOHMuhl kuhn-DI-shuhnz)

What it is: Health conditions caused by a problem in one or more of a baby's chromosomes. Chromosomes are the structures in a person's cells that hold genes. Genes store instructions for the way the body grows and works. Genes are passed from parents to children.

Each child born with a chromosomal condition is different. A child with one of these conditions may have intellectual disabilities (problems with how the brain works that can cause a person to have trouble or delays in learning, communicating, taking care of himself or getting along with others) or physical defects, or both. Or a child may not have any serious problems. The condition depends on which chromosomes are affected and how.

Treatment: Many babies may need speech therapy (to help them talk), occupational therapy (to help them learn to do activities like holding things and feeding themselves), and physical therapy (to help improve their strength and coordination). These children are often eligible for early intervention programs in their first year. There are no cures for most chromosomal conditions.

cleft lip and cleft palate (kleft lip and kleft PAL-it)

What it is: Cleft lip is a health condition that is present at birth (also called birth defect) in which a baby's upper lip doesn't form completely and has an opening in it. Cleft palate is a birth defect in which the roof of the baby's mouth (called the palate) doesn't form completely and has an opening in it. In some cases, a baby can have both a cleft lip and a cleft palate. Babies with cleft lip or cleft palate can have trouble feeding.

Treatment: In most cases, surgery can fix the condition. For cleft lip, surgery often is done around 6 to 12 weeks of age. For cleft palate, surgery is done around 9 to 18 months of age. Some babies need more than one surgery to fix the condition. Many babies need speech therapy to help with feeding problems.

coarctation of the aorta (koh-ark-TAY-shuhn of the ay-OR-tuh)

What it is: A heart defect present at birth in which the aorta (the large artery that sends blood from the heart to the rest of the body) is too narrow for the blood to flow well.

Treatment: Sometimes doctors can open up the aorta. They put a thin tube into the aorta that has a small balloon at the end. Once in place, the doctors put air into the balloon to help open the aorta. Other times a baby needs surgery to fix the condition.

congenital diaphragmatic hernia (kuhn-JEN-uh-tuhl dye-uh-fra-MAT-ik HUR-nee-uh)

What it is: A birth defect (health condition present at birth that changes the shape or function of one or more parts of the baby's body) in which a baby is born with an opening in the diaphragm, the large muscle that separates the chest and stomach area. The stomach and intestines (parts of the body that digest food and absorb liquids and salts) move through the opening and push upward into the chest. Once there, they crowd the lungs and keep them from developing in a healthy way.

Treatment: Surgery puts the stomach and intestines in the right place and closes the opening in the diaphragm. The baby will likely get breathing support. Some babies need to be on extracorporeal membrane oxygenation (also called ECMO). ECMO is a machine that takes blood from a baby's body, puts oxygen into the blood and sends the blood back into the body.

Cytomegalovirus (sye-toh-MEG-uh-loh-vy-ruhs)

What it is: Also called CMV. An infection a person gets from a virus. If a pregnant woman is infected with CMV, the virus can be passed to her baby. CMV can cause problems including hearing loss, vision loss, intellectual disabilities (problems with how the brain works that can cause a person to have trouble or delays in learning, communicating, taking care of himself or getting along with others), lung problems and seizures (sudden change in the brain's electrical activity).

Treatment: Babies with CMV should be checked regularly by a provider for hearing and vision loss. A baby with severe CMV may get medicine. Most babies with CMV will grow up healthy.

Down syndrome

What it is: Also called Trisomy 21. A chromosomal condition (when a baby has a problem in one or more of his chromosomes) that includes a combination of birth defects. Birth defects are health conditions that are present at birth and change the shape or function of one or more parts of a baby's body. A baby with Down syndrome may have some degree of:

- Intellectual and developmental disabilities (problems with how the brain works that can cause a person to have trouble or delays in physical development, learning, communicating, taking care of himself or getting along with others)
- Certain facial features
- Heart defects (problems with the heart that are present at birth)
- Hearing and vision problems

Treatment: Some babies may need speech therapy (to help them talk), occupational therapy (to help them learn to do activities like holding things and feeding themselves), and physical therapy (to help improve their strength and coordination). There is no cure for Down syndrome.

feeding problems

What it is: Not being able to breastfeed or bottlefeed right away. A baby may have feeding problems if:

- He's born before he's able to coordinate the suck and swallow and breathe pattern.
- He's too weak or sick
- He has a birth defect (a health condition present at birth that changes the shape or function of one or more parts of the baby's body) that makes it hard to breastfeed or bottlefeed.

Treatment: Treatment includes giving liquids and nutrients (like vitamins and minerals, that help the body stay healthy) through a tiny needle placed in a vein (a blood vessel that brings blood back to the heart) in the baby's hand, foot, arm or scalp. The baby may also be fed through an umbilical catheter (a thin tube that goes into the baby's umbilical cord and into the belly button). When a baby gets food through a tube like this, it's called intravenous feeding.

As soon as the baby is strong enough, he is fed breast milk or formula through a feeding tube. The tube is placed through the nose or mouth into the baby's stomach or intestines (parts of the body that digest food and absorb liquids and salts). This is called gavage feeding. The baby is fed this way until he can breastfeed or bottlefeed. A speech and language therapist or occupational therapist can help the baby learn to breastfeed or bottlefeed.

If the baby can't breastfeed or bottlefeed for a long time, a surgeon (a doctor who has special medical training in doing surgery and other procedures) may need to put a gastrostomy tube into the stomach. The baby can get breast milk, formula and medicine through this tube.

galactosemia (guh-lak-toh-SEE-mee-uh)

What it is: A genetic condition (a condition caused by a gene that's changed from its regular form) in which a baby's body can't break down the sugar in any kind of milk, including breast milk and cow's milk. A baby with this condition can get brain damage or even die if she eats or drinks milk products.

Treatment: All babies have a newborn screening test for galactosemia. Newborn screening checks for serious but rare and mostly treatable conditions at birth. It includes blood, hearing and heart screening. A baby with galactosemia gets a special formula that is not made with milk of any kind.

gastroesophageal reflux (gass-troh-ee-sof-uh-JEE-uhl REE-fluks)

What it is: Also called GER or reflux. A feeding problem that happens when food in a baby's stomach comes back up during or after feeding. Most babies spit up once in a while, but some do it a lot. It often happens to babies who were born prematurely (before 37 weeks of pregnancy).

Treatment: Most babies outgrow this condition in a few months. To lower the chances of spitting up, the baby can be held upright during feedings and for a short time after feedings.Sometimes a baby may get medicine.

gastroschisis (gass-trohs-KEE-siss)

What it is: When a baby's intestines and sometimes other organs, are outside of the baby's belly. Intestines are parts of the body that digest food and absorb liquids and salts.

Treatment: Surgery can put the baby's organs back in place and close the opening in the baby's belly. Some babies don't have enough space in their body for all of their organ's to be put back with the first surgery. If this happens a mesh sack, called a silo, is placed over the organs outside of the body. The organs go into the body over several days and surgery is done to close the opening.

Group B streptococcus disease (groop bee streptoh-KOK-uhs duh-ZEEZ)

What it is: Also called group b strep. An infection that a woman can pass to her baby during birth. A baby with this condition may have a fever, a hard time breathing, a hard time eating and may have a blue-ish color to her skin.

Treatment: The baby will get antibiotics (medicines that kill infections caused by bacteria) to treat the infection. Babies with a more severe case may need other procedures to treat the infection.

heart valve abnormalities (hart valv ab-nor-MAL-uh-teez)

What it is: When a baby's heart valves are too narrow, closed, blocked or don't close properly so blood can't flow smoothly. A heart valve is part of the heart that opens and closes with each heartbeat.

Treatment: Sometimes doctors can open up the valve. They put a thin tube into the heart valve that has a small balloon at the end. Once in place, the doctor puts air into the balloon to help open up the valve. Other times, surgery is needed to fix the valve.

herpes simplex (HUR-peez SYM-pleks)

What it is: Also called HSV. A virus that a woman can pass to her baby during birth or during pregnancy. Herpes can cause serious health conditions. A baby with herpes may have blisters on his body, trouble breathing, jaundice (when the baby's eyes and skin look yellow and his liver isn't fully developed or isn't working) and bleed easily. If untreated it can cause problems with many different organs including the brain and spinal cord (a bundle of nerves that carries signals between the brain and the body), liver (an organ that helps digest food, store energy, and remove harmful substances from the body), lungs and kidneys (an organ that remove waste products and excess fluid from the body).

Treatment: Babies with HSV will receive medicine through an IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine). If treatment is started early, many of the long-term effects can be managed.

hydrocephalus (hye-droh-SEF-uh-lus)

What it is: A buildup of fluid inside a baby's head that causes brain swelling. It means "water on the brain." This can happen during pregnancy or after a baby is born. Sometimes hydrocephalus can be caused by another condition like spina bifida (a birth defect that affects the lower back and, sometimes, the spinal cord).

Treatment: Treatment includes surgery to reduce the buildup of fluid on the brain. A thin plastic tube (called a shunt) is placed in the baby's brain to move the extra fluid to another location in the body. If a baby has hydrocephalus because of a blockage, surgery is done to fix the problem.

hyperglycemia (hye-pur-gly-SEE-mee-uh)

What it is: When a baby has high blood sugar levels after birth.

Treatment: A blood test is done to check the baby's blood sugar level. If the baby has high blood sugar levels, the provider gives him less glucose than usual through his IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine) and may give him insulin.

hypoglycemia (hye-poh-gly-SEE-mee-uh)

What it is: When a baby has low blood sugar levels after birth. Sick babies, babies born prematurely and babies born to mothers with diabetes (a condition in which there is too much sugar in the blood) have their blood sugar levels checked regularly.

Treatment: Feeding the baby with a sugar solution through an IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine) helps prevent and treat this condition in the NICU.

hypoplastic left heart syndrome (hye-poh-PLASS-tik left hart SIN-drohm)

What it is: A serious heart defect present at birth in which parts of the left side of the heart don't develop the right way. In babies with this condition, the left side of the heart can't send enough blood to the body. This means the right side of the heart has to work harder to keep blood moving to the lungs and the rest of the body. The right side can do this extra work for a while. But over time, the right side of the heart begins to fail.

Treatment: Babies with this problem may need help breathing with a mechanical ventilator (a machine that breathes for a baby when he is not breathing on his own or needs help breathing).

They also need medicines and surgery. There are two main types of surgeries. One is a series of three surgeries to create normal blood flow in and out of the heart. The other is a heart transplant in which the baby's damaged heart is taken out and replaced with a healthy heart.

hypothyroidism (hye-poh-THYE-roid-iz-uhm)

What it is: A condition in which a baby's thyroid gland isn't working well or is missing. The thyroid gland makes hormones (chemicals made by the body) that control things like how fast the heart beats and how quickly the body uses calories. Babies born with this condition may have a puffy face, have trouble feeding, have poor muscle tone and be very sleepy.

Treatment: All babies have a newborn screening test for hypothyroidism. Newborn screening checks for serious but rare and mostly treatable conditions at birth. It includes blood, hearing and heart screening. Providers use medicine to treat this condition. After starting the medicine, babies get blood tests to make sure their thyroid hormone levels are normal. If treatment begins in the first month after birth, most babies develop and grow in a normal way. If untreated, this condition can lead to problems with intellectual abilities and growth.

hypoxic ischemic encephalopathy (hye-POKS-ik is-KEE-mik en-sef-uh-LOP-uh-thee)

What it is: Also called HIE. This condition happens when a baby's brain or body doesn't get enough oxygen and blood. It can happen during pregnancy, labor, birth or after birth.

Treatment: For serious cases, a cooling blanket or cap can help to bring the baby's temperature down. This treatment helps reduce or prevent problems that can happen when there isn't enough oxygen getting to the baby's brain.

intrauterine growth restriction (in-truh-YOO-tur-in grohth ri-STRIK-shuhn)

What it is: Also called IUGR. When a baby grows more slowly in the uterus than usual and is smaller than normal at birth.

Treatment: Most of the time, IUGR is diagnosed during pregnancy using an ultrasound test (a test that uses sound waves to take pictures of the inside of the body). A baby with this condition may get a high calorie formula to help her gain weight and may be put in an incubator (a clear plastic bed) or radiant warmer (an open bed with an overhead heating source) to keep her warm.

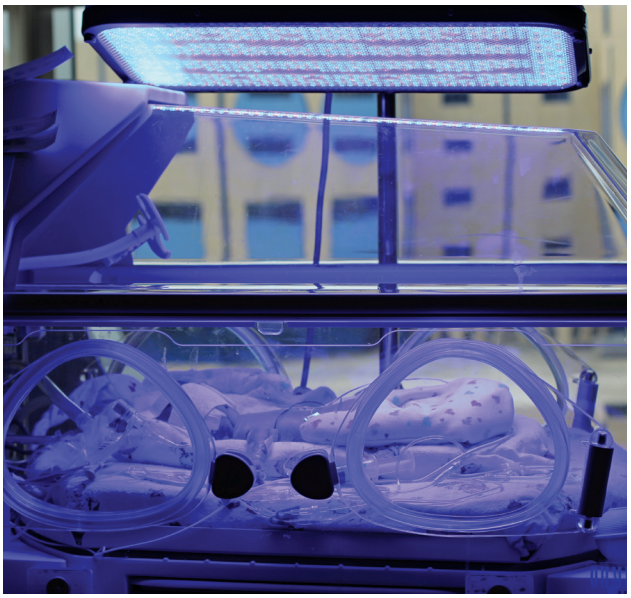
intraventricular hemorrhage (in-trah-ven-TRIK-yoo-lar HEM-ur-ij)

What it is: Also called IVH. A condition in which there is bleeding in a baby's brain. This condition is most common in premature babies (born before 37 weeks of pregnancy) who weigh less than 3 1/3 pounds. Most of the time, the bleeding happens in the first 4 days after the baby is born. In serious cases, the bleeding causes fluids to build up in the baby's brain.

Treatment: Providers use ultrasound (a test that uses sound waves to take pictures of the inside of the body) to check for bleeding in the brain. If bleeding is found, it is graded from 1 to 4, with 4 being the most serious. Most brain bleeds are mild (called grade 1 and grade 2), get better without treatment and usually do not cause lasting problems. Treatment for more serious bleeding problems, may include putting a tube (called a shunt) in the baby's brain to relieve pressure by draining built-up fluid.

jaundice (JAWN-diss)

What it is: When a baby's eyes and skin look yellow. A baby has jaundice when his liver (an organ that helps digest food, store energy, and remove harmful substances from the body) isn't fully developed or isn't working.



Treatment: A baby gets a blood test to check for jaundice. The test measures the amount of bilirubin in the baby's blood. Bilirubin is a yellowish waste that forms when red blood cells break down. In most cases, jaundice goes away without treatment and doesn't hurt the baby or cause pain. For moderate to serious jaundice, the doctor may treat the baby with phototherapy. This treatment uses special lights called bili lights that reduce the amount of bilirubin in a baby's blood. These bright lights are placed over the baby's incubator (a clear plastic bed where a baby is put to keep warm); the baby wears eyeshields to keep the light out of his eyes. Sometimes phototherapy is done using a pad or blanket made with special lights that's placed underneath or wrapped around the baby.

If the jaundice does not get better, then the baby may need an exchange transfusion. This means small amounts of the baby's blood is taken out and replaced with blood from a donor to reduce the bilirubin.

macrosomia (mak-roh-SOH-mee-uh)

What it is: When a baby is born weighing more than 9 pounds, 14 ounces (4,500 grams). Often babies this large are born to mothers who have diabetes (a condition in which there is too much sugar in the blood).

Treatment: A baby's provider checks her for low blood sugar (called hypoglycemia). If the baby has hypoglycemia, she's fed a sugar solution through an IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine) to help increase her blood sugar.

meconium aspiration syndrome (muh-KOH-nee-uhm ass-puh-RAY-shuhn SIN-drohm)

What it is: Meconium is a baby's first bowel movement (also called stool or poop). Sometimes babies pass their first stool while still in the uterus or during birth. If this happens, the baby may breathe in some of the stool in the amniotic fluid (fluid around the baby in the womb). This can block the baby's airways and make it hard for her to breathe.

Treatment: Treatment includes suctioning out the meconium and giving the baby oxygen. Babies with a more serious case may need antibiotic medicine to treat any infections (an illness caused by some viruses, bacteria or other germs) and a machine called a mechanical ventilator to help them breathe.

medium-chain acyl-CoA dehydrogenase deficiency (MEE-dee-uhm-chayn as-eel-co-a dee-hye-DRUH-juh-naze dee-FI-shuhn-see)

What it is: Also called MCAD deficiency. A genetic condition (a condition caused by a gene that's changed from its regular form) that stops the body from changing certain fats to energy. Babies with this condition may eat foods that their bodies can't break down and use. It can cause serious health problems, such as:

- Hypoglycemia (low blood sugar)
- Seizures (a sudden change in the brain's electrical activity)
- Breathing problems
- Problems with their liver (an organ that helps digest food, store energy, and remove harmful substances from the body)
- Brain damage, coma and sudden death

Treatment: All babies have a newborn screening test for MCAD. Newborn screening checks for serious but rare and mostly treatable conditions at birth. It includes blood, hearing and heart screening. Treatment includes working with a medical specialist, such as a medical geneticist, who is an expert in treating this condition and a dietician who can tell parents which foods are safe for their baby. Babies who get early and careful treatment can live healthy lives. The goal of treatment is to prevent long-term problems.

necrotizing enterocolitis (NEK-roh-tyezeeng en-tuh-roh-koh-LYE-tiss)

What it is: Also called NEC. When a baby's intestines (parts of the body that digest food and absorb liquids and salts) are damaged and don't get enough blood. The intestines can become inflamed or in serious cases, develop a hole (also called perforation). When this happens bacteria can infect the damaged area and cause serious health problems. Babies with NEC may have trouble feeding and swelling in their belly. This condition mostly affects premature babies (born before 37 weeks of pregnancy).

Treatment: Babies with this condition are treated with antibiotics (medicine that kills infections caused by bacteria) and fed through an IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine) until the intestines get better. Sometimes a provider does surgery to remove the damaged part of the baby's intestines.

neonatal abstinence syndrome (nee-oh-NAY-tuhl AB-stuh-nentz SIN-drohm)

What it is: Also called NAS. NAS is a group of conditions caused when a baby withdraws from certain drugs he's exposed to in the womb before birth. NAS is most often caused when a woman takes drugs called opioids during pregnancy. Examples of opioids include prescription pain medicine like codeine and oxycodone and a street drug like heroin.

Signs and symptoms of NAS can be different for every baby. Most happen within 3 days (72 hours) of birth, but some may happen right after birth or not until a few weeks after birth. They can last from 1 week to 6 months after birth.

Signs and symptoms may include:

- Body shakes (tremors), seizures (convulsions), overactive reflexes (twitching) and tight muscle tone
- Fussiness, excessive crying or having a high-pitched cry
- Poor feeding or sucking or slow weight gain
- Breathing problems, including breathing really fast
- Fever, sweating or blotchy skin

Treatment: Treatment for a baby with NAS may include:

- Taking medicine to treat or manage withdrawal symptoms
- Getting fluids through an IV (also called intravenous line, a small tube put in a baby's vein to give fluids or medicine) to prevent dehydration (a condition that occurs when the baby is losing more fluids than he is taking in)
- Drinking a higher-calorie baby formula to help him grow

patent ductus arteriosus (PAT-uhnt DUK-tuss ar-tuh-ree-OH-suss)

What it is: Also called PDA. When part of a baby's heart doesn't close normally after birth, causing problems with blood flow. In a healthy baby before birth, much of the blood goes through a passageway (called the ductus arteriosus) between blood vessels and doesn't go through the lungs. This passageway closes soon after birth so that blood takes the normal route from heart to lungs and back again. If a baby has PDA, the passageway doesn't close and blood doesn't flow correctly. PDA is the most common heart condition in premature babies (born before 37 weeks of pregnancy).

Treatment: In some cases, medicine can help close the passageway. If medicine doesn't work, the baby may need surgery to close it.

persistent pulmonary hypertension of the newborn (pur-SIS-tuhnt PUHL-moh-nair-ee hye-pur-TEN-shuhn)

What it is: Also called PPHN. A breathing problem in which a baby can't get enough oxygen because he doesn't have enough blood flowing through his lungs. When most babies are born, the blood vessels in the lungs relax and open up so the blood can flow through. Once the blood flows well, it can pick up more oxygen. For babies with PPHN, the blood vessels don't relax and the blood doesn't flow well. When this happens the blood can't pick up enough oxygen.

Treatment: Treatment includes using a machine, called a mechanical ventilator, to help the baby breathe and giving the baby nitric oxide. This gas helps blood vessels in the lungs relax so more blood can flow through.

phenylketonuria (fen-uhl-kee-toh-nur-ee-uh)

What it is: Also called PKU. A genetic condition (a condition cased by a gene that's changed from its regular form) in which a baby's body can't break down an amino acid called phenylalanine. Amino acids help build protein in your body. Without treatment, phenylalanine builds up in the blood. This can cause serious health problems, including intellectual disabilities (problems with how the brain works that can cause a person to have trouble or delays in learning, communicating, taking care of himself or getting along with others).

Treatment: All babies have a newborn screening test for PKU. Newborn screening checks for serious but rare and mostly treatable conditions at birth. It includes blood, hearing and heart screening. Early treatment can help babies live healthy lives. A baby with PKU needs to begin to eat foods that are low in phenylalanine within the first 7 to 10 days after birth and continue for the rest of his life. A dietician can tell parents which foods are safe for their baby.

During the first year, a baby with PKU gets a blood test each week to check levels of this amino acid. After that, he may have blood tests once or twice a month throughout childhood.

pneumonia (noo-MOH-nyuh)

What it is: A lung infection common in premature (born before 37 weeks of pregnancy) and other sick newborns. A lung infection is an illness in the organ that takes in oxygen from the air and delivers it to the bloodstream. Viruses, bacteria or other germs cause infections. Signs of pneumonia include trouble breathing, changes in breathing rate and having more frequent episodes of apnea (when a baby stops breathing for 15 seconds more more).

Treatment: To check for pneumonia, a doctor listens to the baby's lungs and does a chest X-ray (a test that uses small amounts of radiation to take pictures of the inside of the body) to check for an infection and fluid in the lungs. The doctor may insert a tube into the baby's airway to take a sample of fluid to check for bacteria or a virus. Treatment includes antibiotics (medicine that kills infections caused by bacteria). Some babies need help to breathe until the infection clears up.

pneumothorax (noo-moh-THOR-aks)

What it is: A breathing problem that happens when air from the lungs leaks out into the space between the lungs and chest wall. Once it leaks out, the air can't get back into the lungs for normal breathing. Premature babies (born before 37 weeks of pregnancy), and babies who breathe in meconium (a baby's first bowel movement) may get this condition.

Treatment: Small leaks may not cause problems or need treatment. Larger leaks may cause serious problems, like collapsed lungs. If the baby has a larger leak, the provider places a needle or thin tube (called a catheter or chest tube) in his chest to remove the air that has leaked into the chest.

premature birth

What it is: A birth that happens too early, before 37 weeks of pregnancy. Babies born too early may have more health problems or need to stay in the hospital longer than babies born on time. They also may have long-term health conditions that can affect their whole lives.

Treatment: Treatment depends on each individual baby and the health conditions she has. It is important to take a baby born prematurely for regular checkups with her health care provider to make sure she is healthy and her development is on track.

respiratory distress syndrome (ress-puhrah-TOR-ee diss-STRESS SIN-drohm)

What it is: Also called RDS. A serious breathing problem that happens more often in premature babies born before 34 weeks of pregnancy. Babies with RDS don't have enough surfactant in their lungs. Surfactant is a substance that helps prevent the lungs from collapsing at the end of each breath. Babies with RDS may need help to breathe.

Treatment: One treatment for RDS is giving a baby surfactant to help the lungs work properly. Another treatment uses the continuous positive airway pressure machine (also called a CPAP, a machine that helps a baby breathe), which sends air into the lungs through small tubes put in the baby's nose or windpipe.

retinopathy of prematurity (ret-in-OPuh- thee of pree-muh-CHOOR-uh-tee)

What it is: Also called ROP. When blood vessels in a baby's eyes don't develop the right way. ROP happens most often in premature babies born before 30 weeks of pregnancy. It can cause bleeding and scarring that harm the eye. Sometimes ROP causes damage to the eye's retina (the lining at the back of the eye that sends images of things someone sees to their brain) and affects vision. Vision loss may be mild to severe.

Treatment: An ophthalmologist (eye doctor) checks a baby's eyes for signs of ROP. Most mild cases get better without treatment, and there is little or no vision loss. In more serious cases, the doctor may use a laser or other treatments to help fix bleeding and scars. These treatments help protect the baby's eyes.

sepsis (sep-siss)

What it is: A serious blood infection (an illness of the blood caused by some viruses, bacteria or other germs). Many babies have trouble fighting off germs that cause sepsis.

Treatment: If a baby has problems controlling his body temperature, high or low blood sugar levels, breathing problems or low blood pressure (the force of blood that pushes against the walls of the arteries), NICU staff may do lab tests and X-rays (a test that uses small amounts of radiation to take pictures of the inside of the body) to check for sepsis. Providers give antibiotics (medicines that kill infections caused by bacteria) to a baby with sepsis.

septal defects (SEP-tuhl DEE-fekts)

What it is: Heart defects present at birth in which there's a hole in the wall (called a septum) that divides parts of the heart. Because of this hole, the blood can't flow the way it should, and the heart has to work extra hard. If the hole is between the upper two parts of the heart, it's called an atrial septal defect (also called ASD). If the hole is between the lower two parts of the heart, it's called a ventricular septal defect (also called VSD).

Treatment: Small holes may heal by themselves. Other holes need to be fixed by inserting a device through a tube (called a catheter) into a large vein (a blood vessel that brings blood back to the heart) or by surgery.

sickle cell disease (SIK-uhl sel duh-ZEEZ)

What it is: Also called SCD. A genetic disease that causes red blood cells to be shaped like a "C." Red blood cells are the part of blood that brings oxygen to different parts of the body. In a healthy person, red blood cells are round and flexible. They flow easily in the blood. A person with SCD has red blood cells that are stiff and can block blood flow. This can cause pain, infection (an illness caused by some viruses, bacteria or other germs), organ damage and strokes (when blood supply to part of the brain is interrupted or reduced).

Treatment: All babies have a newborn screening test for SCD. Newborn screening checks for serious but rare and mostly treatable conditions at birth. It includes blood, hearing and heart screening. There is no one best treatment for babies with SCD. Some babies with SCD are mostly healthy, and others need special medical care. Treatment is different for each baby depending on her symptoms. She may be treated with pain medicine and antibiotics (medicines that kill infections caused by bacteria). She may need a blood transfusion to put new blood into her body.

spina bifida (SPYE-nuh BIF-i-duh)

What it is: A birth defect (health condition present at birth that changes the shape or function of one or more parts of the baby's body) that affects the lower back and sometimes the spinal cord. Part of the spinal cord often is exposed at birth in babies with spina bifida. A spinal cord is a bundle of nerves that runs down the middle of the back. It carries signals between the brain and the body. Spina bifida is an example of a neural tube defect, also called NTD. NTDs are birth defects of the brain and spinal cord.

Treatment: Some cases are mild and don't need treatment. More serious cases require surgery soon after birth. Even with surgery, babies with this condition may have lasting disabilities, like problems walking and going to the bathroom. These babies often need physical therapy to help strengthen their legs and feet.

temperature regulation problems

What it is: When a baby has trouble staying warm. Babies who are born too small or prematurely (before 37 weeks of pregnancy) often don't have enough body fat to help them stay warm.

Treatment: Babies in the NICU stay in an incubator (a clear plastic bed) or under a radiant warmer (an open bed with an overhead heating source) right after birth to help them stay warm. A tiny thermometer taped to the baby's belly monitors her temperature and controls the heat. The baby can grow faster if she maintains a normal body temperature, which is most often 98.6 F (37 C).

Tetralogy of Fallot (teh-TRAHL-uh-jee of fa-LOH)

What it is: A heart condition present at birth in which heart defects keep the right amount of blood and oxygen from getting to the lungs. This causes the baby's skin to turn blue (called cyanosis). It may cause growth problems for a baby.

Treatment: Most babies have open-heart surgery to fix the defects. Some babies have a different kind of surgery to put a thin tube (called a shunt) into the heart. The shunt helps increase blood flow to the lungs.

transient tachypnea of the newborn (TRANS-ee-uhnt ta-KIP-nee-uh)

What it is: Also called TTN. When a baby has trouble breathing after being born. Babies with TTN breathe faster than normal, and they may make a grunting sound.

Treatment: Providers use blood tests and X-rays (a test that uses small amounts of radiation to take pictures of the inside of the body) to check for TTN. Treatment includes providing oxygen, using a mask or a continuous positive airway pressure machine (also called CPAP) to help the baby breathe better. The CPAP machine sends air into the lungs through small tubes put in the baby's nose or down his windpipe. Once TTN goes away, most babies get better quickly and don't have other breathing problems.

transposition of the great arteries (trans-puh-ZI-shuhn of the great AR-tur-eez)

What it is: When the two arteries that carry blood to the heart and from the heart to the rest of the body are reversed so the body doesn't get enough oxygen.

Treatment: Surgery can correct the position of the arteries.