

DICTIONARY

ABO incompatibility = This can occur when an infant's blood type is different from the mother's blood type and antibodies transferred from the mother to the infant leads to breakdown of the infant's red blood cells. This may cause the infant to have increased bilirubin in their blood leading to jaundice.

Acrocyanosis = This is a bluish discoloration to an infant's hands and feet that is a normal finding in the first few days or weeks of life.

Alveoli = These lung components are the sacs at the very end of the airways. When an infant breathes, oxygen travels down the airways of the lung into these open sacs and then enters the bloodstream. Surfactant coats the alveoli and helps the sacs to stay open.

Antibodies = Antibodies are proteins that are produced by the body to help the immune system identify foreign substances. Antibodies may be produced by a pregnant woman who has a different blood type from her baby. Some of these antibodies can sometimes enter into the baby's bloodstream during pregnancy and cause the baby's red blood cells to be broken down. If a large number of red blood cells are broken down, the baby may be at risk for a low red blood cell count and jaundice.

Apnea = This breathing pattern describes long pauses in an infant's breathing. Typically, this type of breathing may be associated with changes in an infant's vital signs. Apnea can lead to a decrease in an infant's heart rate, called bradycardia and/or a decrease in the baby's oxygen saturation, called a desaturation. Other terms used for these episodes are: brady, desat, or spell. Because this breathing pattern is commonly observed in preterm infants, it is sometimes referred to as "apnea of prematurity".

Arterial blood gas = This blood test measures how well the baby's lungs are working by calculating the amount of oxygen and carbon dioxide levels in blood from an infant's artery.

Asymmetric IUGR = This term describes an infant with a decrease in growth typically in the 3rd trimester (i.e., after 26 weeks' gestation). Because the infant's head size appears disproportionately larger compared with the infant's body size, this type of growth restriction is asymmetric. This type of IUGR is sometimes called "head sparing IUGR".

Attending physician = A neonatology attending, also known as a neonatologist, is a pediatrician who specializes in caring for infants.

Axillary temperature = A temperature that is taken under the infant's arm. The normal axillary temperature of an infant is 97.7°F – 99.4°F (36.5°C – 37.4°C).

Back to Sleep = The safest position for sleeping babies is to be placed on their backs, known as Back to Sleep.

Biliblanket = This soft blanket can be used to treat infants with jaundice. This blanket emits a blue fluorescent light that helps decrease the bilirubin level in a baby's body.

Bilirubin = Bilirubin is a protein found in red blood cells. When these cells naturally break down, bilirubin is released into the blood.

Blood culture = The blood culture is the best test to assess for a bacterial infection. In this test, a small amount of blood from a baby is placed on a culture plate. If bacteria are present in the infant's blood, bacteria will grow on the plate within 48 hours. The hospital laboratory can then determine which antibiotics can be used to treat the specific bacteria.

Blood gas = This blood test measures how well the baby's lungs are working by calculating the amount of oxygen and carbon dioxide levels in the infant's blood. The blood can be collected from an infant's vein (venous gas), artery (arterial gas) or heel (capillary gas). If a baby's lungs are not working well, the oxygen amount will be low and the carbon dioxide amount will be increased. This test can help determine the type of treatment that a baby will need.

Blood type incompatibility = This condition occurs when there are certain differences in blood types of a mother and her infant. This can lead to an increased amount of bilirubin in the baby's blood.

Bradycardia = This term describes a decrease in heart rate. It is sometimes known as a "brady". In preterm infants, bradycardia can occur suddenly, and is often associated with apnea or choking while feeding. The low heart rate can sometimes return to normal without any assistance. However, some infants require a tap on their body or a pause in feeding to cause the heart rate to return to normal. Before being discharged from the hospital, a preterm infant cannot have these bradycardia events for several days.

Caffeine = This medication is a variant of the kind of caffeine found in coffee and soda. It is used to treat preterm infants who have apnea of prematurity causing persistent spells or many episodes of bradycardia or desaturation. Caffeine helps infants to "remember to breathe" and take deeper breaths. It can be given to the baby by mouth, in a feeding tube, or in an IV.

Capillary blood gas = This blood test measures how well the baby's lungs are working by calculating the amount of oxygen and carbon dioxide levels in blood from an infant's capillary vessels. This blood is taken from a baby's heel.

Cardiopulmonary resuscitation (CPR) = This is a technique to assist a baby who is not breathing effectively or has a decreased heart rate. All infant care providers (parents, grandparents, nannies) who will be caring for a baby on a regular basis should receive instructions in infant CPR.

Cardiorespiratory monitor = This is a monitor that measures the functions of the infant's heart (i.e., "cardio") and lungs (i.e., "respiratory"). If an infant is admitted to the SCN or NICU, the baby will be placed on this monitor to continuously assess the infant's heart rate and breathing rate.

Car seat screening = car safety screen = This screening involves placing a baby in his/her own car seat for at least 90 minutes. During the screening, the infant's heart rate, oxygen level, and breathing rate are monitored.

Case manager = A case manager helps to manage insurance coverage in the hospital and coordinate discharge care.

Cephalohematoma = This is a blood collection under the infant's scalp that often occurs during the process of labor. This collection will resolve over a few days or weeks. If this collection is large, infants may be at greater risk of developing jaundice that requires treatment.

Chest tube = This small soft plastic drainage tube is placed through a small incision over an infant's rib. This tube is then connected to a gentle suction system to continuously drain air outside an infant's lung, known as a pneumothorax. When the infant's lung heals, the tube is removed.

Chorioamnionitis = This is a bacterial infection in the placenta or the amniotic sac that can lead to early labor.

Continuous positive airway pressure = CPAP = This device consists of small prongs or a tube placed in an infant's nose, which is connected to larger tubing. CPAP provides the infant's lungs with extra oxygen (if needed) and a small amount of constant pressure to help keep the small air sacs open.

Cyanosis = This is a bluish color to a baby's lips, tongue or skin. Cyanosis is a sign that the baby needs more oxygen. This is different from acrocyanosis (bluish color to the hands and/or feet), which does not require treatment.

Desaturation = This term describes a decrease in oxygen saturation. It is sometimes known as a "desat". Preterm infants can have a desaturation that occurs suddenly and may be associated with apnea or choking while feeding. The oxygen saturation can sometimes return to normal without any assistance. However, some infants require a tap on their body or a pause in feeding to cause the oxygen level to return to normal. Before being discharged from the hospital, a preterm infant cannot have any desaturation events for several days.

Dietician = A dietician, also called a nutritionist, works with the healthcare team to help ensure that babies in the SCN/NICU receive optimal nutrition.

Discharge summary = This is a written summary of an infant's hospital course.

Early Intervention Program = This program is determined by each state and helps to assess a baby's development and provide support until the child is 3 years old. Specialists in these programs include a speech therapist,

occupational therapist, physical therapist, developmental educator, and feeding specialist.

Endotracheal tube = This small, soft tube is placed through an infant's mouth or nose and into the trachea. It is sometimes referred to as "an ET tube" or a "breathing tube".

Exchange transfusion = This procedure is performed if a baby's bilirubin concentration is increasing very quickly or is extremely high, usually caused by a blood type incompatibility. In this procedure, an infant is given donated blood while some of the baby's blood is removed. By exchanging the infant's blood with different blood, the infant's bilirubin and antibodies that are destroying the infant's red blood cells can be removed.

Extubation = This procedure involves removing the endotracheal tube from the infant's windpipe or trachea.

Feeding specialist = In some SCNs/NICUs, a feeding specialist, trained in feeding and swallowing issues of preterm infants, is available. This clinician is sometimes known as a speech and language pathologist.

Feeding tube = This is a soft, flexible, plastic tube that passes from the nose or mouth into the stomach. This type of tube may also be called a gavage tube. If it is inserted from the mouth into the stomach, it is called an orogastric tube. If it is inserted from the nose into the stomach, it is known as a nasogastric tube.

Fellow = This physician is a pediatrician who is receiving additional training to become a neonatologist.

Gavage feeding = This temporary method of feeding allows an infant to receive milk by a feeding tube. If the tube is placed from the nose into the stomach, it is called nasogastric feeding. If the tube is placed from the mouth into the stomach, the feeding process is called orogastric feeding

Gavage tube = See Feeding tube

Glucose = This compound is a specific type of sugar that can be measured in the blood. Because preterm and growth-restricted infants are at risk of having low glucose, blood glucose concentrations are closely monitored in these infants soon after birth.

Grunting = This noise can be heard when a baby is having respiratory distress. This sound occurs during exhalation and is similar to low-pitched groaning. This is a sign that the infant is trying to keep his air sacs open.

Head ultrasound = In this study, a radiology technician places an ultrasound probe over the soft spot on top of a baby's head. A radiologist will then review the images to determine that the anatomy is normal and if the baby had any bleeding in the fluid chambers near the infant's brain or in the brain tissue. This test is indicated in an infant born less than 32 weeks' gestational age and may be indicated in an infant with a low platelet count, a bleeding abnormality, or severe growth restriction.

Hearing screening = Although most late preterm babies can hear normally, a small number of babies have some degree of hearing loss. Because it is difficult to detect hearing loss after a baby is born, all newborns in the United States have a hearing screen prior to discharge home. If the hearing screen results suggest that the baby has a possible hearing loss, further tests by an audiologist will need to be done. Some infants will have another hearing test after they are home.

Heart rate = HR = This vital sign represents the number of times that the heart beats during one minute. The normal heart rate of an infant ranges between 100 and 160 beats per minute. When an infant cries, the heart rate can increase to as high as 200 beats per minute. An infant's heart rate can also increase if the baby has an elevated temperature. Late preterm infants can have a decrease in their heart rate while having a bowel movement, during a pause in breathing, and while breastfeeding or drinking from a bottle.

Hematologist = A physician who specializes in treating disorders involving components of the blood, such as platelets, white blood cells, and red blood cells.

Hemolysis = This is a process that occurs when red blood cells are broken down and bilirubin is released into the bloodstream.

Hyaline membrane disease (HMD) = This condition is also known as respiratory distress syndrome (RDS) or surfactant deficiency. Preterm infants with HMD lack surfactant, which is a protein that coats the air sacs of the

lungs to help keep them open. If a baby does not have enough surfactant, some of the infant's air sacs can collapse and are difficult to re-open. In this case, the infant may need to be treated with CPAP, placed on a ventilator, or given artificial surfactant through a breathing tube.

Hyperbilirubinemia = This condition occurs when an infant has an increased amount of bilirubin in the blood.

Hypoglycemia = This condition occurs when an infant has a low blood glucose concentration.

Incubator = This device is a transparent, plastic, covered crib that provides extra heat to babies. Similar to a radiant warmer, a sensor placed on the baby's skin and connected to the incubator can be used to monitor a baby's temperature so that extra heat is provided when a baby needs it.

Intrauterine growth restriction = IUGR = This term describes babies who have not been able to grow to their fullest growth potential in utero. There are two types of IUGR: symmetric and asymmetric IUGR.

Intravenous catheter = This is a small plastic tubing that is placed in an infant's vein so that fluid or medications can be given into the bloodstream. This catheter can be placed in a vein in an infant's hand, foot, or scalp.

Intravenous fluid = IV fluid = This fluid is administered through an intravenous catheter and can contain glucose, water, electrolytes such as sodium or potassium, and other nutrients.

Intravenous immune globulin = IVIG = This compound can be administered into a baby's vein to slow down the process of red blood cell breakdown and decrease jaundice in infants with blood type incompatibility.

Intubation = This procedure involves placing a tube (known as an endotracheal tube) into the infant's windpipe or trachea. This tube then extends outside of the infant's mouth or nose to a longer piece of tubing that connects to a ventilator to provide breathing support to an infant.

Jaundice = This clinical condition describes a yellow coloring to an infant's skin. This happens because of an increased amount of a protein called bilirubin that collects in an infant's bloodstream. Because preterm infants tend

to produce more bilirubin and may have difficulty temporarily eliminating bilirubin, they are at increased risk for developing jaundice and needing treatment.

Lactation specialist = This clinician provides support to breastfeeding mothers. A SCN/NICU lactation specialist is trained to support mothers whose babies have been born prematurely.

Late preterm infant = A baby born just a few weeks early, between 34 0/7 weeks' gestation (i.e., 34 weeks and 0 days) to 36 6/7 weeks' gestation (i.e., 36 weeks and 6 days). Late preterm infants account for the majority of infants born preterm.

Leukopenia = This term describes an infant with a low white blood cell count. This condition may occur if an infant has an infection, is growth-restricted, or was born to a mother with high blood pressure.

Lumbar puncture = This procedure, also known as a spinal tap, helps determine if any bacteria is in an infant's spinal fluid. If the spinal fluid has a high white blood cell count or bacteria are identified in the culture, the infant will need to be treated with antibiotics for several weeks.

Metabolic disorder = This is a group of disorders whereby infants cannot easily break down fats, carbohydrates, or proteins.

Nasal cannula = This device consists of a small soft plastic tubing that is placed directly into an infant's nose to provide oxygen. When a baby is receiving supplemental oxygen by a nasal cannula, the baby is doing all the breathing on his/her own.

Nasal flaring = This finding on physical examination occurs when a baby's nostrils expand for a few seconds with each breath. This happens because the baby is trying to make as much room as possible for air to pass.

Nasogastric feeding = See Gavage feeding

Nasogastric tube = See Feeding tube

Neonatologist = This physician is a pediatrician who specializes in caring for infants.

Newborn screening = newborn state screen = This is a blood test that all babies have in the first few days of life. Preterm infants may need to have the test repeated during their hospital stay. This blood is then tested for many different diseases that are not apparent at birth but are treatable. Each state determines the specific tests that are obtained.

NICU = Neonatal Intensive Care Unit = This hospital unit provides care to infants who require close monitoring.

NICU nurse = This nurse has specific experience working with babies in the intensive care unit. One nurse typically cares for 1 to 4 babies at a time. In some units, a baby may have a primary care team of nurses who coordinate hospital care of the baby.

Nipple shield = This device can help many late preterm infants during breastfeeding because it helps them to draw the milk from the mother's breast more effectively. Most late preterm infants who require a nipple shield for initial feeding are able to outgrow their need for it at approximately 2 to 4 weeks after their due date.

Nurse practitioner = This nurse has received advanced education and training to care for babies in the SCN/NICU. The nurse practitioner's responsibilities include performing physical examinations, ordering diagnostic tests, performing clinical procedures, and prescribing medications. The nurse practitioner works directly with physicians to treat infants.

Nursing assistant = see Patient care assistant

Nutritionist = A nutritionist or dietician works with the care team to help ensure that babies in the SCN/NICU receive optimal nutrition.

Occupational therapist = This clinician works with the hospital team to assess an infant's developmental progress. An occupational therapist will provide information to parents about an infant's strength and muscle development.

Orogastric tube = See Feeding tube

Oxygen hood = This device consists of a large plastic shield that is placed over an infant's head to provide oxygen. When a baby is receiving supplemental

oxygen by an oxygen hood, the baby is doing all the breathing on his/her own. This device is sometimes called an “oxyhood”.

Oxygen saturation = This measurement represents the amount of oxygen carried by red blood cells in small blood vessels called capillaries. The oxygen saturation level can be measured by using a pulse oximeter. The oxygen saturation level can be abbreviated as Oxygen sat or O₂ sat.

Partial exchange transfusion = This procedure is used to treat an infant who has symptoms from polycythemia. In this procedure, an infant receives extra fluid through an intravenous line while some of the baby’s blood is removed.

Patient care assistant = This clinician, also known as a nursing assistant, helps nurses care for a baby. In the Newborn Nursery, a patient care assistant often measures vital signs and helps feed babies.

Pediatric resident = This physician is training to be a pediatrician.

Periodic breathing = This breathing pattern describes short pauses in breathing. Typically, this type of breathing is not associated with changes in an infant’s heart rate or oxygen level.

Persistence of the fetal circulation = This condition occurs when an infant takes longer to transition from the circulation of a fetus to the circulation of a newborn. Because it leads to a decrease in an infant’s blood flow to the lungs, affected infants may require extra breathing support. This condition is also called pulmonary hypertension.

Pharmacist = A pharmacist works with the SCN/NICU staff to provide the appropriate medications and intravenous fluids for babies.

Phototherapy = This light therapy is used to treat infants with jaundice. This treatment helps to convert the bilirubin in a baby’s body to a different type of bilirubin that is more easily excreted in a baby’s stool.

Physical therapist = A physical therapist helps to support the development of babies while they are in the SCN/NICU.

Physician assistant = Similar to neonatal nurse practitioners, physician assistants have received advanced training in newborn care. In the SCN/NICU, they have similar responsibilities as neonatal nurse practitioners, and work directly with physicians.

Pneumothorax = This condition occurs when one or more alveoli expands too much, creating a small hole that allows air to leak outside the sac. This displaced air collects outside of the lung, putting pressure on the lung and preventing the remaining air sacs from expanding. Infants can have a pneumothorax involving one or both lungs. A pneumothorax may lead to significant breathing difficulties until the air is either removed or reabsorbed by the infant's body.

Polycythemia = This term describes an infant with a high red blood cell count. This may cause the baby to appear redder. When the extra red blood cells break down, this can lead to a higher amount of bilirubin produced in an infant's blood resulting in jaundice. Some infants with polycythemia may need to be treated with a partial exchange transfusion.

Premature rupture of membranes = This condition occurs when a pregnant woman has leakage of amniotic fluid before the start of labor.

Preterm infant = A baby born less than 37 weeks' gestation. Preterm births account for approximately 11% of all births in the United States.

Pulse oximeter = This band-aid looking device most often is placed on a baby's toe, foot, palm, or wrist. It helps to measure a baby's need for extra oxygen by measuring the infant's oxygen saturation.

Radiant warmer = A baby is placed on this open bed that contains a mattress with a heater positioned several feet above the baby. A temperature sensor is placed on the baby's skin that is connected to the warmer so that the appropriate amount of continuous heat is provided to the baby. If a baby is cold, the radiant warmer will provide extra heat. As the baby warms up, the radiant warmer provides less heat. The radiant warmer makes it easy for hospital staff to observe and provide care to the baby while the baby stays warm.

Respiratory distress = This physical examination finding describes an infant who is working harder to breathe. There are 5 signs that a baby who has difficulty breathing may have: tachypnea, grunting, retractions, nasal flaring, and cyanosis.

Respiratory distress syndrome (RDS) = See Hyaline membrane disease

Respiratory rate = RR = This vital sign represents the number of breaths per minute that a baby takes on his/her own. A normal respiratory rate in an infant ranges between 40 and 60 breaths per minute. A late preterm infant can have a low breathing rate because of an immature breathing pattern. Alternatively, preterm infants can have a high breathing rate because of breathing difficulties.

Respiratory therapist = A respiratory therapist is a professional clinician who works with the hospital team to help provide extra breathing support to babies.

Retinopathy of prematurity = This condition occurs in preterm infants born less than 31 weeks' gestation and in a small number of growth-restricted infants. In this condition, infants have slightly irregular blood vessel growth in the retina. In most cases, retinopathy of prematurity identified in growth-restricted late preterm infants will resolve without treatment.

Retractions = These movements can be seen on a baby's chest when the muscles between the ribs or under the diaphragm are pulling inward. This is a sign that the baby is using a lot of effort to breathe.

Rounds = This meeting occurs each morning when physicians, nurse practitioners, physician assistants, nurses, and other clinical providers gather to discuss each infant's progress over the past 24 hours and then determine the medical plan.

Sclera = This is the white part of the eyes. If a baby develops jaundice, the sclera may appear yellow.

Sepsis = This condition describes a baby who is extremely sick with signs of an infection.

Shift = All hospital clinicians work in continuous blocks of time, known as shifts. Typically, one shift ranges between 8 and 12 hours.

Signout = During a shift change, the new care provider meets with the previous clinician to obtain medical information about a baby. This transfer of information from one clinician typically takes 10 to 20 minutes.

Skin-to-skin holding = This activity involves placing a baby directly onto a parent's bare chest. While in this position, a baby may wear only a diaper and a hat and be covered with a blanket or the parent's clothing. Often, the parents' body heat will be able to keep the baby warm.

Social worker = A SCN/NICU social worker, trained in mother and child health, provides support and counseling to families. This clinician also helps identify relevant community resources for families.

Special Care Nursery nurse = see NICU nurse

Spell = This term is often used by clinicians to describe the events associated with immature breathing. The term may refer to a decrease in heart rate, a decrease in oxygen saturation, or a pause in breathing.

Surfactant = This protein coats the air sacs of the lungs to help keep the sacs open. By keeping the sacs open, surfactant allows oxygen to enter the air sacs so it can be transported into the infant's bloodstream.

Surfactant deficiency = See Hyaline membrane disease

Symmetric IUGR = This term describes an infant with a decrease in growth beginning in the 1st or 2nd trimester (i.e., before 26 weeks' gestation). Because the baby is small throughout their entire body, this type of growth restriction is termed symmetric IUGR.

Tachypnea = This term describes a baby who is breathing fast. A tachypneic baby consistently breathes at a rate of more than 60 breaths per minute.

Temperature sensor or probe = This is placed on a baby's skin and is connected to a radiant warmer or isolette to measure the infant's temperature. This helps ensure that the warmer or isolette provides the appropriate amount of continuous heat.

Term infant = A baby who is born between 37 weeks' gestation and 42 weeks' gestation

Thrombocytopenia = This is the medical term for a low platelet count. This condition may occur if an infant has an infection, is growth-restricted, or was born to a mother with high blood pressure.

Trachea = This structure, also known as the "windpipe" is the large airway connecting the mouth to the lungs. If a baby needs breathing support from a ventilator, an endotracheal tube can be placed into the infant's trachea.

Transcutaneous bilirubin testing = This technique measures the amount of bilirubin in an infant's blood by using a probe placed on the infant's skin.

Transient tachypnea of the newborn (TTN) = This condition, caused by delayed removal of fetal lung fluid, can cause an infant to have tachypnea and increased work of breathing.

Transillumination = This technique involves placing a bright light directly onto the infant's chest wall. When air is present outside the lungs, the light shows this air under the skin. Transillumination can help to diagnose an infant with a pneumothorax.

TTN = See Transient tachypnea of the newborn

Tummy time = In this activity, parents place an awake infant on his/her stomach on a firm surface, placing themselves or a toy in front of the baby. This activity can be done 2 to 3 times each day for a short time (3 to 5 minutes) when both the observer and infant are completely awake and alert. When a baby falls asleep or the observer can no longer watch the baby, it is important to place the baby on his/her back. In addition to building strength in an infant's arms and neck, this activity can also help prevent a baby from getting a flat area at the back of the head.

Venous blood gas = This blood test measures how well the baby's lungs are working by calculating the amount of oxygen and carbon dioxide levels in blood from an infant's vein.

Ventilator = This device provides extra oxygen and some extra breaths with increased pressure to help inflate the infant's air sacs.

Warming lights = These lights are positioned over a baby to provide extra heat.