terms you will hear | @in the special care nurseries

MUCUS

Fluid secreted by the nose and trachea.

MURMUR

An extra heart sound, not necessarily indicative of a heart abnormality.

NASAL CANNULA

A device that fits in the nose to deliver a controlled amount of oxygen, helping the baby breathe.

NECROTIZING ENTEROCOLITIS (NEC)

A serious condition that causes inflammation of the bowel. Treatment includes withholding feeds, giving I.V. fluids and antibiotic therapy.

NEONATE

The medical term for a newborn.

NEONATOLOGIST

A physician who specializes in the diagnosis and treatment of sick and premature newborns.

NERVOUS SYSTEM

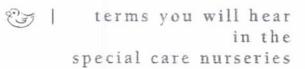
The part of the body that includes the brain, spinal cord and nerve pathways that sends nerve impulses throughout the body.

NEUROLOGIST

A physician who specializes in the diagnosis and treatment of disorders of the nervous system.

NEUROSURGEON

A physician who specializes in surgery involving the nervous system.



NICU BED

An open bed with an overhead warmer that allows for complete accessibility to the baby while keeping his temperature constant.

OPEN CRIB

The type of bed used in the regular newborn nursery. When your baby's condition is stable and does not require additional heat, humidity or oxygen, he will be placed in an open crib.

OPHTHALMOLOGIST

A physician who specializes in the anatomy, physiology, diseases and treatment of the eye.

OUTPUT

Fluids and solids that leave the body in the form of urine and stool.

OXYGEN

A gas that's essential to the physiological processes necessary for life.

OXYHOOD OR OXYGEN HOOD

A small, clear plastic hood placed over the baby's head to provide the proper amount of warmed, humidified oxygen to breathe.

PDA (PATENT DUCTUS ARTERIOSUS)

A vessel in the heart that is necessary while the baby is in the mother's womb and typically closes soon after delivery.

PERIPHERAL ARTERIAL LINE (PAL)

A small plastic catheter placed into an artery in the arm or leg, from which blood samples are taken and blood pressure is monitored.

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# PHOTOTHERAPY (LIGHT THERAPY)

A method of lowering high levels of bilirubin in newborns by exposing their skin to bright lights.

#### PNEUMOTHORAX

A collection of air around the lung, causing the lung to deflate or collapse. This condition is treated with a chest tube (see page 32).

#### PREMATURE OR PREEMIE

A baby born before the end of the 37th week of pregnancy.

#### PULMONOLOGIST

A physician who specializes in the diagnosis and treatment of diseases of the lungs.

#### PULSE OXIMETER

A small light sensor that measures oxygen levels in the blood; usually attached to a finger or a toe.

#### RADIOLOGIST

A physician who interprets X-rays and other imaging studies for diagnosis and treatment.

#### RED BLOOD CELLS

Cells in the blood that are responsible for carrying oxygen and carbon dioxide to and from body tissues.

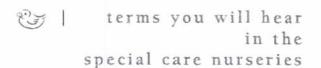
#### REFLUX GASTROESOPHAGEAL

Return flow of partly digested formula and secretions from the stomach to the esophagus.

# RESPIRATIONS

The medical term for breaths. The normal rate of respirations for babies is 40 to 60 times per minute.

4.0



# RESPIRATORY DISTRESS SYNDROME (RDS)

A respiratory disease affecting primarily premature babies who lack surfactant within the lungs (a substance that keeps the air sacs from collapsing and sticking together). RDS can be mild to severe, with therapy ranging from use of a short-term oxyhood to longer-term ventilator therapy.

# RETINOPATHY OF PREMATURITY (ROP)

A disease of the retina of the eye in the premature baby that causes rapid, abnormal growth of the blood vessels.

#### RETRACTIONS

A "sucking in" appearance of the chest as the baby breathes, indicating difficulty breathing.

#### SEPSIS OR SEPTIC

An infection in the blood or other body tissue; may be treated by antibiotics.

#### STOOL

Feces; the result of a bowel movement.

## SUCTIONING

The procedure of removing secretions from the nose, mouth or ET tube (see page 33).

#### SURFACTANT

A substance formed in the lungs that helps prevent them from collapsing when exhaling. Surfactant can be given to the premature baby in the treatment of RDS during the first few days of life.

#### TACHYCARDIA

A faster-than-normal heart rate.

# TRANSCUTANEOUS (TC) MONITOR

	A monitor that determines the baby's oxygen and carbon dioxide levels of the blood.	
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terms you will hear in the special care nurseries



#### THRUSH

A superficial yeast infection inside the mouth.

#### TRANSFUSION

The process of giving the baby extra blood as needed.

#### TRANSILLUMINATION

A procedure involving placement of a small light source on the baby's chest to detect a pneumothorax.

#### TUBE FEEDING

Feeding via a tube, when the baby is unable to take a bottle or breastfeed.

#### ULTRASOUND

A technique using high-frequency sound waves to produce a picture of body tissues.

UMBILICAL ARTERIAL CATHETER, UMBILICAL VENOUS CATHETER (UAC, UVC)

A plastic catheter inserted into the artery and vein in the baby's umbilicus (navel); used for giving fluids, calories or medications; withdrawing blood samples and monitoring blood pressure.

## VITAL SIGNS

Temperature, heart rate, respirations and blood pressure.

#### X-RAY

A one-dimensional photograph of an organ or bone.

A PARENT'S GUIDE TO THE SPECIAL CARE NURSERIES AT PIEDMONT HOSPITAL

general progress chart

DATE	COMMENT	
		100
Photo services		
	7	

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Babies in the Special Care Nurseries often have many ups and downs before they are ready to go home. Here is a place to keep track of your baby's progress while he is in the Hospital.



# INFORMATION FOR PARENTS KANGAROO CARE

The goal of kangaroo care is to promote physical contact between you and your baby, as well as facilitate mother-infant and father-infant bonding. This may also help alleviate any fears and anxieties you may have about your premature baby.

Kangaroo care promotes the positive effects of touching and cuddling and is a good alternative to conventional holding. Kangaroo care also provides your baby with the opportunity for non-nutritive sucking which may increase the expression of breast milk.

# When is Kangaroo care started?

- 1. Kangaroo care may be started when your baby is stable. This means that your baby will no longer be on the ventilator, has no arterial catheters, is not being given any medications to treat low blood pressure and is no longer on the minimal stimulation protocol. Any episodes of apnea or bradycardia must also be infrequent before kangaroo care is started. There is no minimal weight that a baby must achieve before kangaroo care is started.
- 2. Babies who require oxygen or nasal CPAP may still be eligible for Kangaroo Care.
- 3. Kangaroo Care will begin with 30 minutes once a day. If tolerated, Kangaroo Care may gradually increase to 30 minutes 3 times a day or 1½ hours twice a day.
- Kangaroo Care is done at the baby's bedside. Privacy is provided by pulling the curtains around the baby's bed. The cardiac monitor and pulse oximeter will remain on the baby during kangaroo care.
- 5. Your baby's vital signs will be taken prior to beginning kangaroo care and again when the baby is returned to the isolette. The baby's temperature will be taken every hour to make sure he or she does not become cold.
- 6. Once you are comfortable holding the baby, the nurse may step away to allow you to have private time with the baby. Your baby's nurse will remain close by during kangaroo care.
- Kangaroo Care may be attempted half an hour before a feeding, during a feeding or after a
  feeding if reflux is minimal or improved with Kangaroo Care. Discuss this with your baby's
  nurse and doctor.

#### Reason's why Kangaroo Care may be placed on hold:

- 1. If your baby's gastroesophageal reflux becomes worse during or after feedings.
- 2. If your baby has an increased oxygen requirement.
- 3. If your baby has had an increase in apnea, bradycardia or desaturations.
- 4. If the baby was unable to maintain a temperature during previous Kangaroo Care. Kangaroo Care will be placed on hold for three days and then reattempted.
- 5. If your baby has had an extremely stressful day (i.e. procedures, difficulty with feedings, many exams, lab work blood draws.)
- 6. If a pattern of poor weight gain develops.



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# SPEECH AND LANGUAGE DEVELOPMENT GUIDELINES 1 TO 4 YEARS

Read each statement for your child's age group and indicate yes or no.

- All Yes's: Your child is developing hearing, speech and language in the typical way.
- 1-2 No's: Your child may have delayed hearing, speech and language development.
- 3 or more No's: Your child needs professional help.

AGE	HEARING AND UNDERSTANDING	COMMUNICATING AND SPEAKING	
1-2 Years	<ul> <li>Uses speech or non-crying sounds to get and keep attention</li> <li>Imitates different speech sounds</li> <li>Speaks one or two words ("bye-bye," "dada," "mama," "no"). although they may not be clear</li> </ul>	Says more words every month  Speaks some one- or two-word questions ("Where kitty?", "Go bye-bye?")  Puts two words together ("more cookies," "no juice," "mommy book")  Uses many different consonant sounds at the beginning of words	
2-3 Years	Has a word for almost everything  Uses two- and three-word "sentences" to talk about and ask for things  Puts two words together ("more cookie," "no juice," "mommy book")  Uses many different consonant sounds at the beginning of of words	Has a word for almost everything  Uses two- and three-word "sentences" to talk about and ask for things  Speech is understood by familiar listeners most of the time  Often asks for or directs attention to an object by naming it	
3-4 Years	Talks about activities at school or friends' houses  Usually talks easily without repeating syllables or words  People outside the family usually understand child's speech  Uses many sentences containing four or more words	Talks about activities at school or at friends' houses Usually talks easily without repeating syllables or words People outside the family usually understand child's speech Uses many sentences containing four or more words	
Voice sounds clear like other children's  Uses sentences that gives lot of details (e.g., "I like to read my books.")  Tells stories that stick to a topic  Communicates easily with other children and adults  Says most sounds correctly, except a few, such as l, s, r, v, z, j, ch, sh, th  Uses adult-like grammar		<ul> <li>Voice sounds clear like other children's</li> <li>Uses sentences that give lots of details (e.g., "I like to read my books.")</li> <li>Tells stories that stick to a topic</li> <li>Communicates easily with other children and adults</li> <li>Says most sounds correctly, except a few, such as l, s, r, v, z, j, ch, sh, th</li> <li>Uses adult-like grammar</li> </ul>	



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# SPEECH AND LANGUAGE DEVELOPMENT GUIDELINES NEWBORN TO 12 MONTHS

Read each statement for your child's age group and indicate yes or no.

- All Yes's: Your child is developing hearing, speech and language in the typical way.
- 1-2 No's: Your child may have delayed hearing, speech and language development.
- 3 or more No's: Your child needs professional help.

AGE	HEARING AND UNDERSTANDING	COMMUNICATING AND SPEAKING	
NEWBORN	Listens to speech     Startles or cries at noise     Awakens at loud sounds     Ceases activity at a new sound	Makes "pleasure" sounds	
1-3 MONTHS	<ul> <li>Turns to you when you speak</li> <li>Smiles when spoken to</li> <li>Seems to recognize your voice and quiets, if crying</li> <li>Stops activity to pay attention to an unfamiliar voice</li> </ul>	<ul> <li>Repeats the same sounds often (cooing, gooing)</li> <li>Cries differently for different needs</li> <li>Smiles when he sees you</li> <li>Repeats the same sounds often (cooing, gooing)</li> </ul>	
4-6 MONTHS	<ul> <li>Responds to "no" and changes in tone of voice</li> <li>Looks around for the source of new sound (e.g., doorbell, vacuum, dog)</li> <li>Notices toys that make sounds</li> <li>Pays attention to music</li> </ul>	<ul> <li>Babbling sounds more speech-like, with many different sounds, including p, b and m</li> <li>Tells you (by sound or gesture) when he wants you to do something</li> <li>Makes gurgling sounds when left alone and when playing with you</li> </ul>	
7-12 MONTHS	<ul> <li>Enjoys games likes peek-a-boo and pat-a-cake</li> <li>Turns and looks when you call his name</li> <li>Listens when spoken to</li> <li>Recognizes words for common items like "cup," "shoes" and "juice"</li> <li>Begins responding to requests ("Come here," "Want more?")</li> </ul>	<ul> <li>Babbling has both long and short groups of sounds, such as "tata," "upup," "bibibi"</li> <li>Uses speech or non-crying sounds to get and keep attention</li> <li>Imitates different speech sounds</li> <li>Speaks one or two words ("bye-bye," "dada," "mama"), although they may not be clear</li> </ul>	

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AGE (MONTHS)	PROGRESSION OF LIQUIDS AND FOOD	ORAL-MOTOR SKILLS	DEVELOPMENTAL SKILLS
0-4	Liquid	Suckle on nipple	Head control acquired
4-6	Purees	<ul> <li>Suckle off spoon at first</li> <li>Suckle → Suck</li> </ul>	Sitting balance     Hands midline
6-9	Purees Soft chewables	Cup drinking     Vertical munching     Limited lateral tongue movements	Reach, pincer grasp     Assists with spoon     Begins finger feeding
9-12	Ground food Lumpy purees	Cup drinking independently     Grasps food with whole hand	Refines pincer grasp
12-18	All textures	Lateral tongue action emerges     Straw drinking	Increased independence for feeding     Scoops food, brings to mouth
18-24	More chewable food	Rotary chewing     Decrease in food intake by 24 months	Increased independence for feeding     Scoops food, brings to mouth
24+	Tougher solids	Increase in mature chewing for     "tougher" solids	Total self feeding Increase in use of fork Total cup drinking

Courtesy of Dr. J. Arvedson, Speech-Language Pathology, Children's Hospital of Buffalo

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