GOOD BEGINNINGS
and all of the families who graciously allowed us to photograph their infants
and share in these tender moments of their lives
in order to help the parents who would follow them through the NICU.

Photographs by:

Dorothy Williams
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Cover Photos: Front -- Spencer at age 2 months (born at 24 weeks, 665 grams)
Back -- Spencer at age 7 years
# Table of Contents

- Introduction .................................................. 3
- Family Centered & Developmentally Supportive Care ............... 5
- CRADLE Club .................................................. 6
- Transport of Babies ........................................... 7
- People You Will Meet in the NICU ................................ 9
- Staying Close to Your Baby ..................................... 12
- What You Can Do To Help Your Baby ............................. 14
- Your Baby's Nourishment ....................................... 17
- Some Common Problems of Babies in the NICU ................... 22
- NICU Equipment and Procedures ................................ 29
- Research in the NICU .......................................... 34
- How Much Care? .................................................. 35
- If You Have a Concern or Problem ................................ 36
- Keeping Yourself and Your Family Well .......................... 38
- Financial Help .................................................... 40
- Good Beginnings ................................................ 41
- The Pathway Home .............................................. 43

## Appendices

- Glossary of Terms Used in the NICU .............................. 48
- Promoting Your Baby's Development ............................. 54
- Services Available To All Parents ................................ 56
- Some of the People on Our Team .................................. 57
- Metric Conversion Charts ........................................ 58
- Graph of Baby’s Weight ......................................... 59
- Notes ................................................................ 60
- Maps ................................................................ 61
Welcome to the world of parenthood! Even though some of the aspects of your baby's birth and first meeting are probably not what you expected, we want to extend our congratulations and best wishes for the time ahead. Every baby -- no matter how small or fragile -- deserves a loving welcome. Your introduction to the world of parenting your new baby will have some very special aspects to it. We want to help you in any way we can.

This booklet will guide you through many of the concerns shared by the parents of sick or premature babies. We understand this is a difficult time for you and you're not sure what to expect. We encourage you to talk to the medical staff. They are the experts, and they believe that your active involvement is an important part of your baby's care.

The NICU is a protected environment designed for close observation and specialized care of sick or premature babies. Special equipment is used to monitor each baby's condition at all times. Highly-trained physicians and nurses watch over the babies' progress and treatment 24 hours a day. Nurses are available to respond quickly to the babies' physical and other needs. In addition to providing specialized medical care to babies, the staff are also available to talk to parents about the condition of their baby. They not only care for your baby -- they also care about him, and about you.

The NICU is divided into several rooms. There are six "Bays" and two special care rooms. Babies may be moved between the rooms based on medical and nursing needs. Support areas include a lactation room, a parent suite for overnight stays (for special circumstances or for "rooming in" before a baby is discharged), a parent resource room, and offices and meeting rooms.

In this booklet we will refer to your baby as "he" and to nurses as "she". This is simply for convenience. It is not meant to exclude parents with new daughters nor to ignore the contributions of our fine male nurses.

* Newborn
Our Philosophy

We believe that the parent is not a visitor, but is the most essential and constant member of the infant's care team. It is therefore important that the health care team and family collaborate in an effort to create a consistent and nurturing environment for the infant. When parents are active and equal participants, confidence and increased family involvement will be achieved. By promoting parents as active and equal participants, we strive to a greater self-confidence and empower them to assume their rightful role as primary care givers.

Mission Statement

At Cedars-Sinai Medical Center we are committed to meeting the special needs of newborns and their families in a safe, trusting, and nurturing environment. Our mission is to provide the highest quality of care which is not limited to diagnosis and treatment of disease, but also to the promotion of a wellness in mind, body, and spirit of the infant as well as the family.
The Approach of Family Centered and Developmentally Supportive Care

This approach provides babies with the best place we can offer in which to grow and develop. Sound, lighting, positioning, and handling are important. Much has been learned about the importance of these aspects in recent years, and this has helped to guide our practices. The care of each baby is special to meet his needs. Your baby’s nurses and the OT/PT team can help you learn more about the plan for your baby. This may include less times of handling, special ways to keep him in comfortable positions, and learning his own "signals" which tell us when he is ready to interact. Our approach is adjusted to provide the best care possible.

Our care entails not only meeting the medical needs of the patients, but also the emotional needs of their parents. Nursing personnel are working very hard to maintain and improve this standard which promotes the role and participation of families in the NICU.

We encourage primary team nursing with the same group of nurses caring for your baby. Parent participation is important. Regular meetings with your neonatologist can be arranged by your social worker. We also offer parent support meetings and breastfeeding help. Discharge planning is started early, and you may room in with the baby prior to going home.

Efforts are made to allow parents to be with their baby any time of the day or night, except during change of shifts. We also encourage visiting of siblings, other family members, and friends per visiting rules.

Babies’ brothers and sisters often have many questions. With simple, honest answers, and a chance to see the baby, most will adapt well and be ready to welcome the new baby home.

Because children are often exposed to colds and other illnesses, immunizations must be up to date, and careful hand washing and screening are done before they enter the NICU.
The CRADLE Club

CRADLE Club is the name we use to describe very low birth weight babies and their nursing team. The CRADLE Club consists of babies in their first 2-3 weeks of life who weigh less than 1,000 grams or 2 pounds 4 ounces at birth, and/or 28 weeks gestation or less at birth. The CRADLE Club also includes a team of specially trained nurses who care for your baby.

CRADLE Club care will begin immediately after birth for the best results. CRADLE Club babies are more delicate than many of the other babies. We plan their care for their special needs.

Too much handling may cause too much stress for a very small baby. A "minimal stimulation" bedside card may be placed on your baby’s incubator. This helps keep unnecessary touching to the least amount possible while providing what your baby needs.

Your CRADLE Club Nurse will teach you how to care for your baby so you both have the best experience possible.
Neonatal Transport Team

A special team brings babies to Cedars-Sinai 24 hours a day, seven days a week from other hospitals. The team has a doctor, nurse and respiratory therapist who specialize in care of the sick newborn. We know it is hard to be separated from your baby right after birth. We will do everything we can so you are aware of how your baby is doing until you can visit at Cedars-Sinai. If you can’t visit right away, you may ask the staff if pictures can be sent to you. If you are not able to visit, you may also ask if another family member could visit, if you wish.
People You Will Meet in the NICU

The babies in our unit are cared for by a team of doctors, nurses, and therapists. All are specially trained to care for the sick newborn and are highly qualified to care for your baby. There is always a staff nurse responsible for his care and a charge nurse to oversee each shift. In the NICU, a neonatologist is available 24 hours a day to oversee your baby’s care. Each baby’s care will be managed by a neonatologist. Many other people with other skills and specialties will be taking care of you and your baby in the N.I.C.U. Some of them are listed below:

Nursing Staff

Your Baby’s Nurse: a specially trained R.N. (registered nurse) who will deliver nursing care to your baby. The R.N. works 12 hour shifts.

Clinical Nurse IV (CN IV): a nurse who oversees and supervises the care given to each baby. There is usually one CN IV for each shift (day and night). CN IVs serve as the Charge Nurses. They are available to assist nurses, doctors and parents in problem solving and planning.

Charge Nurse: a nurse who is “in charge” of the nursing care during a shift and assists doctors and parents in problem solving and planning.

Clinical Nurse Specialist: a nurse with an advanced degree in nursing of the newborn. She educates and oversees major changes in nursing care. She also discusses and gives care in special clinical situations.

Discharge Coordinator: a nurse who plans for discharge with the family and health care team. This helps make everyone ready when the baby goes home. She makes sure teaching has been completed, and works with hospital staff and home health agencies. She arranges for the parents to room-in and for home care, community services and Infant Progress Clinic.

NCT: Unit Secretary (Nursing Care Technician)

Nurse Manager: a nurse who is primarily a manager. The nurse manager has 24 hour responsibility of nursing for the NICU Her schedule is flexible, and she may be reached by the Charge Nurse after hours. She assists nurses, doctors, and parents in problem solving and planning.

Primary Nurse Team: a team of nurses who cares for a baby who is expected to be in the NICU a long time. The team plans for the baby’s nursing care.

Logistics Technician (Log Tech): staff who care for the supplies and tidiness of the NICU.

What unifies this group of people is their desire to nurture fragile life to strength, to transform tenuous life to tenacity. I am convinced that this takes a very special person, and that is how I view each member of the NICU staff.

– NICU Mom
Medical Staff

**Neonatologist**: a pediatrician who takes care of sick or premature newborns.

**Neonatal Fellow**: a pediatrician receiving more training in the care of sick newborns.

**Pediatrician**: a medical doctor trained in pediatrics.

**Pediatric Resident**: a medical doctor training in pediatrics.

**Neonatal Nurse Practitioner** (NNP): a registered nurse with Master’s Degree training in neonatology. The NNP does exams and procedures under the supervision of the neonatologist.

**Medical Student**: a person who has completed the first two or three years of medical school, learning clinical care of children and newborns. Not yet a licensed medical doctor.

**Consulting Physician** (Cardiologist, Neurologist, Ophthalmologist, etc): A medical doctor trained in some area other than pediatrics.

Other Members of the Team

**Social Worker**: a clinician with a Master’s degree who helps families with their feelings about having a tiny or sick baby. They also help with community resources and financial concerns.

**Case Manager**: a staff member who works with insurance agencies and helps with discharge and home care plans.

**Parent Liaison** (Parent-to-Parent Coordinator): a member of the NICU team who has had her own infant in the NICU. She helps with parent-to-parent support programs.

**Respiratory Therapist**: a licensed person trained in the management of breathing disorders, treatments, and procedures, oxygen and ventilators. Referred to as an RT or RCP (Respiratory Care Practitioner).

**Occupational/Physical Therapist** (OT/PT): is a person who has special training in growth and development of infants. She does exercises that help improve development and muscle control. This helps with feeding skills.

**Technician** (X-Ray, EEG, EKG, Ultrasound, etc.): a person who performs specific tests ordered by the doctor.

**Transport Coordinator**: a nurse who oversees the entire neonatal transport program, which brings sick babies into the NICU from other hospitals.

The staff project and maintain such a matter-of-fact perspective on such a radical and traumatic situation, that we parents can continue to face our nightmare, but keep our hope.

– NICU Parent
**IPC Coordinator**: a nurse who will help plan developmental follow-up for some babies.

**Chaplain**: a pastor, priest, minister, or rabbi who offers spiritual care to families.

**Volunteers**: people who give their time to help in the NICU – greeting, answering phones, and assisting the nursing staff. All volunteers receive an orientation and training by the hospital Volunteer Services Department and the supervisors in the NICU. "Cuddlers" help the nurses when a baby needs extra holding and comforting, when parents are not available. Parent-to-Parent volunteers support NICU families by telephone and other programs.

**Parents**: You too, are members of your baby's team. As parents, you are the most important people in your baby's life. There will be many different staff with your baby to provide care. However, you are the only ones who will remain absolutely constant. By being here as often as you can, your baby will come to know your touch and face. (He already knows your voice.) You will get to know him, too: what seems to comfort him most, what he likes and dislikes. We hope you will share these thoughts with us so we can all give him personalized care. Don't ever feel that your presence, calls or questions are an inconvenience to the staff. Remember, they not only care for your baby -- they also care about him, and about you.
Staying Close To Your Baby

Telephone Calls (310) 423-4451

You may call at any time (except during change of shift, 7-8 a.m. and p.m.) to ask how your baby is doing. The secretary at the desk will connect you with the nurse who is caring for your baby. On occasion, your baby's nurse may be busy and may not be able to answer the phone right away. If this happens, you may wait, call back in a few minutes, or leave your number so the nurse can call you as soon as she is free. If you wish to speak to the doctor, let your baby's nurse know, and she will have the doctor speak to you or return the call if he or she is not available.

Personal cell phone are not allowed inside the NICU. If you need to use the telephone while visiting your baby, you may use the phone in the Parent Resource Room for local calls. Public telephones are available for all other calls.

Visiting

You will find a map to Cedars-Sinai Medical Center at the back of this book on page 61. The NICU is on the fourth floor in the North Tower. Signs from the North Tower elevators will show you to the unit. Please bring your parking ticket with you so we can validate it. With validation (for parents only), the parking rate is less. Parking passes (for two weeks or a month) may also be purchased. Ask your social worker about other discounts.

We welcome and encourage you to be with your baby any time of the day or night. The exception is the nurse’s change of shift, from 7-8 a.m., and 7-8 p.m. During certain emergency situations, you may be asked to leave the room temporarily.

Others may visit your baby with you during normal hospital visiting hours, with no more than two visitors at the bedside at any time. One of the parents must be present with visitors. Grandparents, with permission from the parents, may visit alone. Only immediate family members may touch or hold the baby. We realize this may seem strict, but your baby is very open to infection and this rule is for his protection. Space for staying overnight on the unit is limited. If you have a need to stay near your baby overnight, please check with the charge nurse to see if there is space available. We do not have child care services and ask that you do not bring young children with you without someone to watch them while you visit.

When you arrive, you will be shown how to do a careful wash of your hands and arms. This is a very important measure to help avoid unnecessarily exposing your baby to germs. You may be given a cover gown to wear over your clothes in some cases. While with your baby, please remember to keep your hands free from contact with anything except your baby. (This includes hair, face, pockets, etc.). When you leave your baby’s bed, be sure to wash your hands again, before leaving the NICU. If you have more than one baby in the NICU, you will need to wash your hands before going to your other baby’s bed, and again after visiting the other baby.

The baby’s brothers and sisters may visit with you. Prior to the first visit, you will need to bring the immunization record for the brother or sister. For each visit, an infection screening card must be completed. If they have
recently been exposed to, or have, any infectious disease, the visit should not take place. A rash, runny nose, fever, earache or exposure to measles or chicken pox could be very dangerous to your baby. Please speak to the doctor or nurse before bringing your children for their visit. During seasons when there are more colds and flu, the visiting policy may be further restricted.

**Photographs**

Families often find it comforting to have a picture of the baby if they are unable to visit for a while. Some parents feel more comfortable waiting until the baby is at home before starting to document his growth. Others, as you can see from the pictures displayed on the walls in our hallways, start taking pictures right from the beginning. Whatever you decide, members of the health care team are ready to help. When you do wish to take pictures, ask for assistance. The nurses will be able to position the baby and move tubes, lines, etc., to make the viewing easier. Use of an electronic flash is permitted, but is often unnecessary. For fire safety, flash bulbs and cubes are not permitted. Some families also like to document the baby's progress with videotapes. Good Beginnings can be of assistance to you if you have no camera available. Pictures -- whether still photos or videos -- should only be taken of your own baby and family. Please avoid taking pictures which include other babies or any other people.

**Privacy**

For your privacy, we do not give information about your baby to anyone. Please have your family and friends call you at home so that the NICU phones can be kept free. We ask that you do not repeat anything you might overhear about another baby. Please respect others’ privacy by staying only at your own baby's bedside while you are in the NICU.

**Safety and Security**

Your baby’s safety and security at the Medical Center is important to us. The following procedures were designed with this in mind.

1. Your baby will initially wear identification bands on the ankle. Each identification band includes the hospital number and the mother’s last name. These bands will remain on your baby during the entire stay at the Medical Center unless prevented by your baby’s condition.

2. Both the baby’s mother and father (or significant other) must wear a hospital identification badge (or band) at all times while in the NICU.

3. All staff who interact with you or your baby will have their Cedars-Sinai identification badge displayed. Do not release your baby to anyone who is not wearing their Cedars-Sinai badge.

4. Upon discharge, one of the baby’s bands is removed to verify identification. This band will remain with the baby’s medical record.

5. We would like to remind you that it is state law that all children be restrained in a federally approved car seat whenever traveling in an automobile until reaching 6 years or 60 pounds.

Handwashing is the most important way to protect your baby from infection.
What You Can Do
to Help Your Baby

*Your Presence*

One of the most important things you can do for your baby is to be there as often as possible. He knows your voice, and will get to know your touch and what you look like. Just as important, you will learn all the gestures, wiggles, and noises that make him unique. Although there are times when minimal handling and other stimulation is best for the baby, we encourage you to touch and stroke him, talk, and even sing to him when he is ready for it. Soon you will know what comforts him and his ways of indicating that he is tired or wants to be left alone. The staff can help you find more information about this subject. As your baby's condition improves, the nurses will help you to do more of his care. Before he goes home, you will be holding, feeding, dressing and bathing him. At the beginning, it is not uncommon for parents to feel hurt and angry that the staff provides most of his care. Please feel free to ask the nurse what you can do for your baby whenever you visit. Remember, nothing we do can replace your presence.

*Skin-to-Skin Holding*

Parents are often eager to actually hold their baby. In most cases, when a baby is stable, he can be held. There are many benefits, both to the baby and the parent, in holding. Babies are often very comfortable when being held against your skin, with a blanket or shirt covering the two of you. Ask your doctor when your baby is ready for this. Your baby’s nurse will help you to get the baby out of the bed and settled comfortably against your chest. This kind of holding, sometimes referred to as "kangaroo care," can be done by either the mother or the father.

*Things You Can Bring*

You may bring a small toy and a picture of your family for the baby's bed. Babies respond especially well to black and white shapes and faces. They also enjoy sounds. Music is often soothing. Music boxes or a small tape recorder with recorded lullabies or a tape of your voices can be placed near the baby's bed.

While in the incubator or warming bed, your baby usually will not be dressed. This way, he can get the full benefit of the heat and we can watch him closely. When he is well enough, we will help you bundle him in a T-shirt, hat and blankets so you may hold him outside the incubator. If you would like to bring him something to wear, please ask your nurse to suggest a style that will be appropriate for him. She can recommend where to find his size, even if he is very tiny.

Please do not bring anything very precious. We try to make sure nothing gets lost, but cannot guarantee it.
**Blood Donations**

Your baby may require one or many small blood transfusions. With the doctor's written order, your family or friends can donate blood to be given to your baby through Cedars-Sinai's "Directed Donor" program. It takes at least 48 hours to test this blood to see if it is a good match for your baby. All donated blood, direct or not, is carefully screened. A blood donor recruiter can discuss the directed donor program with you. She may be contacted at (310) 423-2414. Blood donations can be made by calling the Cedars-Sinai Blood Donor Facility at (310) 423-5346 for an appointment. Any blood donations are greatly appreciated.

**Providing Your Baby's Milk**

If you had planned to breast feed your baby, you still can! Breast milk has many advantages for almost all babies, sick or well, tiny or big. Breast milk can be collected and stored until your baby is ready to eat. For more information about this, please see the section “Breastfeeding” on page 18.

**Staying Informed**

Talking with your baby's nurse and doctor will provide you with the most up-to-date information. The staff are happy to talk with you and welcome your questions. They understand that there is a lot to understand all at once and are glad to go over information again and again. Please ask questions as often as you need to understand your baby's situation. It is a good idea to schedule a time to speak with the doctor on a regular basis -- maybe every week or two if your baby will be here for some time. Your social worker can be helpful by arranging meetings with the doctors. Ask to meet in an office away from the bedside, so that you and the doctor will not be distracted.

If you are at your baby’s bedside during the doctors’ rounds, you may join them for the discussion about your baby. The doctors will be discussing other babies in the room; therefore, ask them to let you know when they will be discussing your baby.

Sometimes, parents enjoy reading about some of the information discussed in the NICU. You may want to read the stories of other families' experiences. Good Beginnings has compiled a library with a variety of these materials. If you would like to use some of these resources, let the parent liaison, your social worker, or the charge nurse know. There is often more than one approach to the care of your baby. Therefore, be sure to discuss any questions you may have with your baby’s medical team.
Your Baby's Nourishment

Your baby's nutritional needs are an important concern when he is in the NICU. It is essential for your baby to have good nutrition for growth and development. It is normal for all babies to lose weight in their first week of life. Premature or sick babies may lose weight for even longer. Your baby will be weighed once or twice a day. Daily weights may fluctuate slightly up and down. It is more important to focus on the weight gain over several days. Because the doctors and nurses will record weights in grams (metric weight), there is a chart at the back of this book to help you convert grams to pounds and ounces.

Feeding by Bottle, Tube, or IV Fluid

Initially, many babies in the NICU may not be ready or may be unable to feed by breast or bottle. Intravenous (IV) fluids are often the first source of nutrition for a special care baby. These fluids usually contain water, protein, fat, carbohydrates, vitamins and minerals to meet your baby's nutritional needs. A computerized program has been developed by our neonatologists to ensure that each baby's special needs will be met.

There are several ways to give IV fluids. A very small IV needle may be placed just under the baby's skin into a vein in the hand, foot, or scalp. Once in place, the baby cannot feel this. Although an IV in a scalp vein means having to shave a patch of hair, this is often the most stable place for it. Your baby's hair will grow back and we will try to save a lock of hair for you. Babies who require IV fluids for longer periods of time may require a small plastic tube (catheter) to be placed in a larger vein or artery. This may be done through the umbilical cord (which has three blood vessels), through a catheter placed in the upper chest area, or through a catheter in the arm, leg, or scalp. These are sometimes referred to as central lines or percutaneous lines.

When your baby is ready to begin feeding, he will start with small, frequent amounts and gradually advance. If he is still very small, breathing too quickly, or recuperating from a serious illness, his feedings may be given by tube. A small plastic tube is passed through his mouth or nose and into the stomach. This method of feeding is referred to as oral-gastric (OG), naso-gastric (NG) or gavage feeding (PG feeds). It is very common for premature or sick babies to "not tolerate" their feedings from time to time. By this we mean that they do not completely digest the milk given them. When this happens, feedings will be decreased or stopped temporarily. This is distressing to parents, but be reassured that with time it will resolve.

When he is ready, we will help you bottle feed your baby. Once feedings are going well and your pediatrician feels the baby is ready, he may nurse at the breast.

Having the IV placed in our daughter's scalp turned out to be one of the best decisions we made for her while she was in the NICU. Since the tiny veins in her limbs could not sustain an IV for more than 24 hours, she was getting stuck with a needle every day, sometimes more. That painful process became difficult for the whole family to endure, and we lived in constant dread of IV failure. The scalp IVs were a great relief because they lasted 3-4 days and spared our daughter a lot of pain.

–NICU Parents
Breastfeeding

More mothers are choosing to breast feed their babies today that ever before. Breast feeding is considered the preferred method of infant feeding by health care professionals. Infants in the NICU who are fed their mothers’ milk can especially benefit from its special qualities. Breast milk helps protect infants from infection, respiratory disease, allergies, and ear infections. It is easier for an infant’s immature system to digest. There are also special fats in the breast milk that may help an infant’s brain and eyes develop.

Mothers who choose to breast feed benefit, as well. Many mothers feel that this is a unique way that they can contribute to the care of their infant, something that only they can do. It also helps many mothers feel more connected with their baby, and less stressed.

Some mothers may still be undecided about breast feeding when their infant is born. In this case, it’s possible to give breast feeding or pumping a try, and make a final decision after a week or two. A woman’s body is most ready to start making milk right after delivery. For this reason, it sometimes helps to start pumping right away, knowing that it can be discontinued at any time. Whether a woman decides to express milk for a short time or breast feed for several months, breast milk is an important part of her baby’s care.

The NICU team is available to answer questions about infant feeding and help parents make a well-informed feeding choice. Parents are given support in their choice and help with reaching their goals.

Mothers who decide to breastfeed are assisted throughout their infant’s stay by the lactation (breast feeding) consultant staff. This assistance has several stages.

The lactation consultants meet with mothers soon after the infant’s arrival to begin education. This first stage includes:

1. How to use electric breast pumps
2. Proper cleaning of pumping equipment
3. Storing and transporting breast milk
4. Maintaining a good milk supply
5. Breast care

As infants progress, lactation consultants are involved with helping mothers learn to handle their infant. This second stage may include:

1. Skin to skin care
2. Suckling at the emptied breast

Skin to skin care (also called kangaroo care) is an excellent way to get acquainted with your baby. It is the first step toward breast feeding. This
can be done as soon as the infant’s condition is stable. Many mothers find their milk production increases after skin to skin care. It can be done while the baby is being gavage fed.

Suckling at the emptied breast can be done when the infant has been extubated and is stable. This is also called non-nutritive sucking. The mother first empties her breasts completely with the breast pump. The infant is then placed at the breast to smell and taste the milk for the first time. This is a "getting acquainted" session, and the infant is not expected to take an actual feeding. Doing this during a gavage feeding calms and soothes the infant. It also helps digestion and improves weight gain. Having the infant suckle at the emptied breast can also help increase a mother’s milk supply.

The third stage of breast feeding usually starts when the infant is about 32-33 weeks of adjusted age, although babies are ready at different times. Readiness depends on the infant’s general condition and ability to coordinate sucking, swallowing and breathing. When infants have less endurance or energy, they may be given your milk through a tube in their nose called a gavage tube or nasogastric tube. Then they may progress to one feeding a day by breast or bottle. The number of feedings by mouth each day gradually increases as the baby matures. The lactation consultants will help you learn to position the baby at the breast and latch correctly. Mothers are encouraged to practice breast feeding between appointments with the lactation consultants. Your baby’s nurse can make an appointment with the consultants when your baby is ready, or if you have questions about breast feeding or pumping.

Breast feeding mothers are encouraged to eat a diet of healthy foods and nutritious snacks between meals. Drinking water or juice when you are thirsty is also important. Your social worker can give you information about getting a meal tray for breast feeding mothers from the hospital.

Most medications are safe to use while you are breast feeding. This includes pain medication prescribed by your doctor after delivery. Be sure to let your baby’s doctor or nurse know if you are taking any medication. This includes prescription, over-the-counter medication and herbal supplements.

NICU mothers who deliver their baby at Cedars-Sinai Medical Center are given a hospital-grade electric breast pump to use during their hospital stay. This type of pump is best for stimulating the hormone that makes milk. It is more effective than battery operated or hand pumps. A double collection kit allows mothers to pump both breasts at the same time, which helps milk production. Information on renting a pump for home use is also provided. The Lactation Education Center is a full-service breast feeding store with breast pumps to rent or buy. It is located on the 3rd Floor North, Room 3202. Mothers who are eligible can borrow

Meals for breast feeding (or pumping) mothers are available through the hospital. Taking time out to share a meal time with other mothers can help in feeling less alone, as well as in ensuring that you take care of yourself.
an electric breast pump from WIC. Your social worker can give you a prescription and help you contact WIC to arrange for a pump.

Mothers are encouraged to begin pumping as soon as possible, ideally within 12 hours of delivery. You should pump every 3 hours, with a 4 to 5 hour sleep stretch at night. Pumping 6-8 times a day is essential for developing a milk supply to meet your baby’s needs. The milk expressed the first 3-4 days, colostrum, is extremely valuable for your baby. Although it is normal for only a small amount to be produced, it is like special medicine for your baby and helps prevent infection. Toward the end of the first week, the amount of milk you produce will increase. The goal is for mothers to express about 800 ml (3 1/2 cups) of milk per day by the end of the second week. The NICU lactation consultants can help if you are having trouble reaching this goal, or if your milk supply decreases at any time.

For convenience, hospital-grade electric breast pumps are available in the NICU Lactation Room for mothers to use when they come to visit their infant. Mothers may also choose to pump at their baby’s bedside. This is encouraged because it helps increase milk supply. Screens are available for privacy. Mothers need to bring their own pump collection kit each time. Disposable collection bottles, caps, and labels are also provided by the NICU.

Mothers with infants in the NICU are encouraged to attend the weekly breast feeding support group. This group is led by a lactation consultant, and provides a chance to meet other breast feeding mothers, ask questions, and learn more about breast feeding.

Despite the challenges of providing breast milk for a premature or sick infant, most mothers find the rewards well worth the effort. The NICU team is there to help make this a successful and positive experience for you.
Some Common Problems of Babies in the NICU

Babies are in the NICU for many different reasons. Sometimes their needs are minimal, and they may require careful observation for a very short time while the doctors make sure that things are going OK. Some babies may need to stay a longer time to grow and/or mature. Other babies may have more medical problems, which require special help in the NICU. Below are some of the more common problems. Remember, your baby may have a few, many, or none, of the problems mentioned here. Be sure to talk with the doctor about your baby’s particular problems, and use this section as a reference for further explanation.

Prematurity

Normally, pregnancy lasts from 37 to 42 weeks (approximately nine months). Infants born before 37 weeks are considered to be premature. Although a premature baby may not be fully prepared for life outside the womb, he has been completely formed (even fingers, toes, and nails) since he was 12 weeks old! Most of a premature baby’s problems result from a lack of time to acquire the more mature characteristics such as fat, some enzymes, and internal body regulators. The size and frailty of your premature baby may frighten you at first. This will lessen as you visit more often and get to know him. Most parents search for the reason for their child’s premature birth and feel some responsibility for it. Was there something they did or didn’t do that could have caused it? Often a premature birth cannot be explained or related to anything. Your obstetrician will be able to answer some of your questions and help you sort through this problem. It is important to begin resolving some of these feelings in your mind early, so you can focus your attention and energy on your baby.

Premature babies look different than full term babies. The most apparent difference is size. They may weigh anywhere from just over one pound to five or six pounds or more, depending on the length of the pregnancy. They have less fat than a term baby and smaller muscles. Because of this, they may seem skinny or bony (especially around the ribs). With time they will fill out. Their skin is softer and thinner and may be covered with a fine, light hair (lanugo). It will disappear in a few weeks just as it would have inside the uterus. The muscular reflexes are usually acquired late in pregnancy. Because of this, your baby’s movements may seem shaky or jerky. He will become increasingly coordinated as he grows older. The sucking and swallowing reflexes usually do not occur in a coordinated fashion until 32 to 34 weeks’ gestation. When your baby is ready to digest milk, tube feedings can be given until this sucking and swallowing coordination has been acquired. Meanwhile you can help him practice with a pacifier.

Prematurity carries with it a wide range of potential problems, from mild to severe. Fortunately, in the last decade or so, great advances have been made in the understanding of premature babies. Now, the chances are much greater for premature babies to grow up to live happy, healthy lives.
**Respiratory Distress Syndrome**

The most common difficulty premature babies have is Respiratory Distress syndrome (RDS), also known as Hyaline Membrane Disease (HMD). In this disease, there is a relative lack of surfactant. Surfactant coats the lining of the lungs and allows them to inflate easily and retain air. Surfactant frequently is not present in sufficient amounts until the last month of pregnancy. Insufficient amounts will cause the baby to work harder to take deep breaths. This can be very tiring. Some of the medical help required may be oxygen, CPAP, a ventilator, or adding surfactant into the baby's windpipe (trachea). These treatments will be discussed later in this section. RDS frequently improves between the third and fifth day of life, although these babies may be ill for some time with related problems. Our staff are very familiar with RDS and have much experience helping babies through it.

**Patent Ductus Arteriosus**

Before birth, a lot of blood does not need to go to the baby's lungs to pick up oxygen because oxygen is supplied by the mother's bloodstream through the placenta. The blood is directed away from his lungs and to the rest of his body by a vessel called the ductus arteriosus. The ductus arteriosus is located just outside the heart and normally closes shortly after birth because it is no longer necessary. Often, in premature babies it fails to close. This open vessel is called a patent ductus arteriosus (PDA). If the ductus remains open, mild to severe problems can occur. The therapy given will depend on the severity of the problem. Two possible treatments to close a PDA are medication and surgical closure. Usually medication is the preferred treatment and most often is successful. Either will be explained to you before it is begun.

**Apnea**

It is normal for premature babies to have an irregular pattern of breathing. At times, they may even stop breathing. If this occurs, the breathing monitor and sometimes the heart monitor alarm and the nurse will help the baby to begin breathing again. She may tickle him or rub his body to remind him to breathe. She may also have to give him breaths of air with the resuscitation bag at his bedside. These "apnea spells" (episodes of stopped breathing) may be caused by many things. Most frequently, they are due to an immaturity of the breathing control center in the brain and will go away in time.

**Infection**

Babies are generally more prone to infection than adults. If the medical team suspects your baby has an infection, tests may be needed. Samples of blood and/or other body fluids may be sent to the laboratory. Tests to
detect infection may take many days. Antibiotics may be started right away.

**Necrotizing Enterocolitis (NEC)**

NEC is an infection of the wall of the intestines (gut). It may spread to the blood. Premature babies are prone to this disease. They cannot be fed by usual means, and will need nourishment by vein. Although often mild, some cases are very serious. Surgery is sometimes necessary to repair or remove damaged intestine.

**Retinopathy of Prematurity (ROP)**

ROP is a problem of the retina (back part of the eye that "sees"). It occurs mostly in very premature infants. Most cases are not severe and get better on their own. However, on occasion, it can threaten vision in one or both eyes, and surgery may be necessary to improve the chance for sight. Cedars-Sinai’s NICU is recognized for its low incidence of ROP.

**Pneumothorax**

Occasionally, air will "leak" from the baby's lungs into a space between the lung and the chest wall. This trapped air prevents the lung from fully expanding. If large enough, this will cause difficulty breathing and the air may need removal by placing either a needle (for one time removal) or a plastic tube (for continuous removal) in the chest. The tube may need gentle suction to draw out the trapped air. This tube is left in place until the air is removed and the lung is no longer leaking air. This may take a few or many days.

**Meconium Aspiration**

Occasionally, while still in the mom, babies may pass stool (meconium). If the baby breathes it into his lungs (aspirates), it can cause difficulty breathing. Treatment for this problem may include placing a tube into the baby's lungs and cleaning them out with suction. The baby may need oxygen, chest therapy and even the help of a ventilator. The body clears the last traces naturally.

**Jaundice**

Jaundice (yellowing of the skin) is a common problem in babies. It occurs when a pigment called bilirubin enters the blood. Bilirubin is formed by the normal breakdown of red blood cells. Bilirubin is cleared by the liver and removed from the body. A baby's liver may not be able to perform this job efficiently. A blood test can be done to check the amount of bilirubin in the blood. If it is more than the normal amount, treatment will be started. Light of a specific wave-length and intensity (phototherapy or bililights) will help lower the bilirubin. We will keep your baby's eyes covered.
with small eye patches and allow his body to be completely exposed to light. Usually a few days of this treatment will resolve the jaundice. Rarely, the jaundice may be severe enough to require an exchange transfusion. (The baby's blood, which is high in bilirubin, would be slowly replaced by donated blood low in bilirubin.

**Intraventricular Hemorrhage (IVH)**

IVH is bleeding in the area of the normal hollow spaces (ventricles) of the brain. Sometimes the bleeding is so minor that it does not get into the ventricles at all, but only causes minor blood clots at their edges. At other times, bleeding can get into the hollow spaces themselves or even extend into the brain. The most common hemorrhages are minor and do little if any harm. The bleeding is graded from 1-4. Grades 1 and 2 are usually minor. Grades 3 and 4 also can result in little or no harm, but with these grades of hemorrhages the baby's development must be observed more closely, as there is an increased possibility of brain damage.

Babies are tested for this by ultrasound of the head. Sometimes more than one test is needed. At times other studies such as Computed Tomography (CT scan) or Magnetic Resonance Imaging (MRI scan) are needed.

**Multiple Births**

It is common for twins, triplets, or quadruplets to need some time in the NICU before going home. Often, this is because they are born prematurely. Sometimes, they have special medical problems related to their growth in the womb together. Also, birth defects are more common in multiple births.

Parenting multiples is challenging. You will have to plan for extra clothing, supplies, space, and help you may need when they come home. You will also have two (or three or four) times the emotional ups and downs of the NICU. It may be difficult to keep track of information on more than one baby at the same time. If one baby is having a problem, it may be difficult to be happy for the one/others doing well. Also, it is not unusual for one baby to go home before the other. Visiting may become more difficult when you have one new baby at home and one in the hospital. Many parents find it helpful to keep a journal or notes about each baby, so that things do not get confused. Getting the support of other parents of multiples, who can understand this complex time, often helps parents. These other parents can share things that helped them when they were dealing with more than one baby at once. Your social worker or the parent liaison can help you contact a parent-to-parent volunteer or an organization for parents of multiples in the community.
Infants with congenital defects (Defect present at birth)

There are 4 million live births in the United States each year. Of these, 1 in every 33 babies is born with a defect. These defects may vary from simple to life threatening. Sometimes the defect needs quick correction while at other times surgery is best delayed. These decisions are made on an individual basis, by a team. The team includes parents, social worker, geneticist, pediatrician, surgeon, physical therapist, etc. Genetics is involved to educate the family and the health care team about several aspects of care.

Often, more than one birth defect may be present. Thus, several tests may be needed to make sure that no occult (hidden) defect is overlooked. The most common organ to be affected by a defect at birth is the heart.

Infants born with congenital heart disease (Heart defect present at birth)

Some babies are born with problems in the form or function of their heart. The heart is responsible for pumping blood to all parts of the body. The healthy heart has four chambers which each serve a specific function. The heart receives "used blood" from the body, pumping it to the lungs for oxygen. It then receives "fresh blood" from the lungs, and sends it out to the body again. When any part of the heart or its major vessels is abnormal or does not function well, medical or surgical treatment may be necessary. A variety of tests will help to determine the specific problem in the heart. Some problems can be treated easily, while others may be very complex and life threatening. When a heart problem is suspected or diagnosed, a cardiologist and a cardiac surgeon, if needed, will be added to the team. They will be able to give you more details about your baby’s heart and what treatments may be needed.
Sometimes Babies Die

Most NICU babies go home to grow up with their families, but some babies die. Some babies have a problem that makes it impossible for them to live long, like severe birth defects. Other times, a baby may become so sick that the body cannot respond to treatment. Whatever happens, it is a shock to have a baby die, and seems very much against nature for a baby to die before his parents.

The loss of a baby is very painful and many people -- even family and friends, cannot understand the impact on the family. If your baby dies, our staff wants to help you in any way possible. At the time your baby dies, or if it is clear that the baby is dying, a separate room can be made available to you to spend time with your baby. You may want to have family or friends join you in saying goodbye to your baby. Most families find it helpful to have pictures and to keep things which belonged to the baby. These concrete memories often help with the grieving process. If you are unsure about wanting these things at the time, they are kept for you for some period of time, so that you may ask for them later.

A social worker and the parent liaison are available to help you in this difficult time. Many parents find it helpful to be in touch with others who have experienced the death of a baby. Some work with a counselor who has special expertise with this subject. Resources including bereavement support groups will be offered. You will be contacted by our NICU support group when there are memorial events for families whose babies have died.

Our baby was a miracle from conception, and we were privileged and so fortunate to have lived so much love with her in her brief time in the NICU. The help and advice, love and support of the staff meant the world to us during the brief time she was here.

NICU Parents
1 Combination bed in open position as a warmer
2 Medication and feeding pumps
3 Incubator
4 Bililight for treatment of jaundice
5 Nasal canula
6 CPAP
7 Endotracheal tube – baby intubated for ventilator
8 Monitors and ventilator
NICU Equipment and Procedures

Your infant will receive the most complete health care available. The professionals taking care of your baby use special equipment and advanced procedures. This makes a first visit seem scary. The large equipment surrounding your baby will make him seem small. Understanding about some of the equipment and procedures will ease some of your fears and make you feel more comfortable.

Types of Beds

Frequently, when your baby arrives in the NICU, he will be cared for in a special bed that helps keep him warm. This may be an open (radiant) warmer, an incubator, or a combination (hybrid) bed. The warmer provides heat from heaters a few feet above the mattress and is regulated by a temperature probe on the baby’s skin. The warmer allows us to keep your baby warm and keep him easy to reach for procedures. The incubator is a bed enclosed in plexiglass with warm air circulating through it. The heat may be set at a certain temperature or may be controlled by a temperature probe on your baby’s skin. This type of bed helps keep your baby warm, allows us to view him, and provides extra protection from body fluid loss, noise, and drafts. The combination bed allows for warming, access and extra protection.

Babies’ beds are changed on a regular basis for cleaning and maintenance. Sometimes a baby will be moved into a different type of bed. A baby may be moved to a different location in the room or moved to another room to ensure the best care for all the babies. Sometimes it scares parents if their baby has been moved since their last visit. Understand that such moves are for the benefit of the babies. Upon arrival, ask your baby’s nurse or the secretary for the location of your baby.

Monitors

Temperature, heart rate, breathing, oxygenation, and blood pressure monitors may be used in your baby's care. The wires from these monitors are attached like small band aids on your baby's skin. Alarms are set to alert the nurse if any of these vital signs change. An alarm does not necessarily mean something is wrong with the baby because it is set to ring long before the baby is critical and may only indicate that the baby is moving a lot or the wire has come loose. Monitors do not control the baby's breathing or heart rate in any way. They only record rates. The baby will be monitored for most of his NICU stay.

Don't be intimidated by all the monitors, etc. The child's spirit is what counts. Be there for your child.

-NICU Dad
Oxygen, CPAP, and Ventilators

Most babies with lung problems need extra oxygen. This oxygen may be given through a clear plastic hood ("oxyhood") or through a small plastic tube (nasal cannula). The "oxyhood" is placed over the baby's head. The nasal cannula is placed under the baby's nose. The amount of oxygen given to the baby will depend on his needs. It can range from room air (21%) to 100%. The oxygen given is carefully monitored (using a pulse oximeter, on a hand or foot). The oxygen, carbon dioxide, and acidity (pH) of the blood will be measured by blood samples (blood gases). These results help us know how well your baby's lungs and breathing support are working. In addition to Oxygen, other gases such as Nitric Oxide or Helium are sometimes used for special purposes.

Many infants in the NICU require assistance with their breathing. A ventilator can do all or some of the breathing for the baby. It can also maintain necessary pressure in the baby's lungs. If he cannot fully expand his lungs or keep them expanded, then CPAP (Continuous Positive Airway Pressure) may be used. A steady stream of pressurized air will be delivered through small tubes (prongs) placed just inside the baby's nose. An endotracheal (ET) tube is used when the baby cannot do all the breathing on his own. The ET tube, connected to the ventilator, is placed through the mouth into the trachea (windpipe). This is referred to as intubation or "being intubated." (When the tube is removed, the baby is "extubated"). Because the tube passes between the vocal cords, the baby will not make any noise when he cries while intubated.

When mucus accumulates in the baby's lungs, it is necessary to remove it with a suction tube (catheter), because he cannot cough it up by himself. In order to keep all air passages clear, the mouth and nose are also cleared using the same process. It is important that all air passages and the ET tube be kept clear.

Although the ventilator is life saving, long term use is associated with lung injury. Therefore, as soon as possible, we attempt to wean infants from ventilator support.
**X-Rays**

From time to time, x-rays may be needed to help in your baby's care. Parents are often concerned about the x-ray exposure their baby gets. Many people do not know that x-ray techniques have improved over the years. Much less x-ray exposure is needed now. Also, since babies are so small, very little radiation is needed for the picture. We are all naturally exposed to radiation (x-ray) in everyday life. Just living in Los Angeles for a few days would give you more natural radiation than a baby is exposed to when a chest x-ray is done. We also make every attempt to minimize the radiation exposure your baby gets by only doing x-rays when absolutely needed.

Parents worry that their baby may be exposed to radiation when another baby is being x-rayed. Usually, the other babies do not get x-ray exposure. Radiation cannot be read six feet away from a baby being x-rayed. We hope this will help with your concerns. If you have any questions, the Radiation Safety Office at Cedars-Sinai (310) 423-4336 will be happy to talk with you.

**Lumbar Puncture (Spinal Tap)**

Most people call this procedure a "spinal tap." A small needle is inserted between the bones of the lower spine into the fluid around the spinal cord. A small amount of this fluid (2-3 cc, or approximately 1/2 teaspoonful) is taken out for tests. The fluid is rapidly replaced by the baby.

A lumbar puncture is the only reliable way to tell if there is an infection of the brain or of the fluid around the brain and spinal cord. Babies are relatively susceptible to such infections, and it is very important to know whether such an infection is present. It helps us decide which antibiotics to use, what doses to use, and how long to treat.

The main risks of a spinal tap are bleeding into the tissues surrounding the spinal column or into the spinal fluid. This is fairly common, but does no lasting damage. The introduction of infection is extremely rare.

**Umbilical or Peripheral Artery Catheters**

Your baby may need a plastic tube to be put into his belly button or arms/leg in a big artery of the body. It is called an arterial catheter. We can take blood from it and sometimes give medicine, fluid and sugar through it. It is very important when a baby is on a ventilator or getting oxygen. We can use it to measure the oxygen and carbon dioxide in the blood without bothering the baby.
Arterial catheters may cause infection or bleeding. They could also cause the blood in smaller arteries to clot. Putting an umbilical artery catheter in usually is not painful. All babies with arterial catheters are hooked to a machine. It shows their heart rate, breathing rate and blood pressure. These babies have their own nurse or may share a nurse with another baby.

**Umbilical Vein Catheter**

Your baby may need a plastic tube to be put into his belly button in a vein which goes from his lower body to the heart. It is called an umbilical vein catheter. This tube lets us measure pressure that tells us if the heart is working well. We can also take blood from it and give medications, fluid and sugar.

An umbilical vein catheter may cause infection or bleeding. It could also cause the blood in the veins coming from the liver, kidneys or intestines to clot. Putting the umbilical vein catheter in usually is not painful. All babies with an umbilical vein catheter are hooked to a machine that shows their heart rate and breathing rate. These babies have their own nurse or may share a nurse with another baby.

**Suprapubic Tap**

A small needle is placed in the bladder to take out a small amount of urine for tests. This test is only performed when there is strong reason to suspect a urine infection. This is the best way to obtain an accurate urine sample. The results of this test help us to pick the proper antibiotic for the infection and to decide how many days of treatment will be necessary.

The main risks of a suprapubic tap are bleeding and infection. However, this procedure is very safe, and side effects are extremely rare.

**Transfusions and Exchange Transfusions**

Many of the babies in the NICU need a transfusion at one time or another. Most of the babies less than 1500 grams (3 pounds, 5 ounces) need transfusions. The babies become anemic from the many blood tests that must be taken. Also, very premature babies do not produce blood cells as well as they will when they are older. Very small babies may need several transfusions.

Reactions to transfusions are rare in babies. In addition, all the blood given to babies at Cedars-Sinai is checked for AIDS, syphilis, certain types of hepatitis, and several other viruses that may be transmitted by blood transfusion. The risk of the baby acquiring any of these infections is very small. You can reduce the risk to your baby further by having family members and friends donate blood that will be given only to your baby. The fewer the number of donors from whom a baby receives blood the lower the risk. Usually, donated blood is used for transfusion of red blood cells. This is the part of the blood most often needed by our babies. Sometimes, a baby may require other parts of the blood -- plasma or platelets. Plasma and platelets are separated from the red cells of the blood. If your baby requires plasma or platelets, then usually a special donor is needed.
Please speak with your baby’s doctor about blood donations and read the pamphlet, “If You Need Blood...A Patient’s Guide to Blood Transfusions.” Your consent will be requested prior to transfusion.

**Pain and Comfort**

Even very small premature babies demonstrate that they can experience pain. The people caring for your baby will try to minimize those procedures which cause discomfort. Only those tests that are necessary for quality care are performed. The pain that these tests and procedures cause is, for the most part, very slight.

Staff and parents alike are concerned about trying to keep your baby as comfortable as possible. The nurses have many ways to help your baby when he is uncomfortable. Medicines may also be used to lessen pain. We use nursing techniques and medicines that help your baby cope with any pain or discomfort that he may experience. If you have questions or concerns about your baby’s comfort, please talk to your nurse or doctor. It is important to pay attention to how your baby responds to positioning, handling and other interactions. Be sure to share your observations with the staff, and ask them what things they find most helpful in keeping him comfortable. In time, as you get to know your baby, you will also be able to tell the staff what you find works well for him.

Babies like quiet hands against their bodies. This makes them feel secure. It is best to avoid light, stroking touch on the face, arm or leg. A comfortable baby will look peaceful and calm.
Research in the NICU and Nurseries

At Cedars-Sinai’s NICU and nurseries we offer the latest treatments for newborn babies. We continue to do research that will help us improve future treatments. Because we are a research and teaching hospital, we often do research studies to help us learn how to take better care of babies like yours.

While your baby is in the hospital, your baby may be qualified for some of the research studies that are being done. We may ask you whether you are interested in being part of a study with your baby.

If you agree, someone from the study will talk with you and will explain the study to you. You will decide whether you want your baby to be part of it. No one else will be able to make the decision for you. We will fully protect your family’s privacy and confidentiality.

If you have any questions about our research please speak with your doctor. You may ask either your own pediatrician or the one here at Cedars-Sinai who is taking care of your baby. The phone number on weekdays is (310) 423-4434. The number for evenings and weekends is (310) 423-4451.

The Cedars-Sinai Medical Center Institutional Review Board is a group of people from the community and medical people. This group approves all research to make sure your rights will be protected. You can call them if you have any questions about your rights at (310) 423-3783.

We may also ask you for permission to take photographs or videotapes of your baby. These will be used for education and research. We will also use them to help train new doctors. You will be the one to decide if you want to do this. We will not take any research pictures of your baby unless you sign a permission slip.
How Much Care?

Sometimes parents wonder about the kind and amount of care we give babies. They may be concerned about whether the staff will "give up" and not work hard to help their baby in complicated situations, or after a major setback. They may worry about the baby "suffering." Often parents worry about how the baby’s problems might affect the future. These are all common concerns. These concerns should be discussed with the doctors and nurses taking care of your baby. They usually have had a lot of experience in seeing babies with similar conditions. They will probably have some ideas about what you might expect. Whether your concerns are that your baby will not receive enough care or that he will receive too much care, it is important to share your thoughts with the staff. Remember, you are part of the team, too.

Life Support Decisions

When the staff or the parents are worried that a baby may die, or that he will be severely disabled, there are special meetings to discuss the care. This situation affects only a very small percentage of babies cared for in the NICU. Parents' thoughts are very important in talking about the kind and amount of care for babies. Babies will always receive the highest level of care unless the parents and the doctors together decide to reduce or stop the treatment. If you have any questions or concerns about the care your baby is receiving, be sure to ask your baby's doctor.

The staff meets regularly to discuss decision-making in complex situations. This is known as the Bioethics Forum. Also, anyone can call the Bioethics Committee of the hospital for their input and consultation about decisions in care. Your baby's caregivers can help you contact the Bioethics Committee if you wish to speak with them.
If you have a concern or problem...

Sometimes families are bothered by something about the care of their baby. It is best to tell someone as soon as possible. This way, small issues can be dealt with before they become bigger, and you can concentrate on supporting your baby rather than worrying about the care.

Your social worker can help you and can be an advocate for you in expressing your concerns.

When possible, it is best to talk to the person who has caused this worry. Sometimes, however, parents find it difficult to discuss their concern with the person. Or, they may feel that things have not improved when they have tried to discuss it with that person. It is helpful to know who might help next.

If the concern involves nursing care, parents should speak with the charge nurse. Telling the charge nurse what is making you uncomfortable gives her a chance to understand the situation and work on a solution. If you still are concerned, you may ask to speak with the Nurse Manager.

You might experience a problem with the doctors, residents, or nurse practitioners. You should talk to the neonatologist in charge of your baby's team. If you still need to speak with someone else, you may speak with the Director of Neonatology.

If further help is needed, you may contact the Patient Relations Representative at (310) 423-3683.
Keeping Yourself and Your Family Well

Normal Reactions to Stress

The birth of a baby is a busy time under the best of circumstances. The unexpected admission of your baby to the NICU makes it a scary and especially difficult time. Parents and families experience many unfamiliar and strong feelings. Shock, confusion, fear, guilt, anxiety, anger at yourself, your partner, others around you and even your baby are all common reactions. Some mothers or fathers may even blame themselves for the situation and feel isolated from their baby and different from other parents. It may be hard to leave your baby’s bedside or difficult to visit at all. Some parents feel extreme optimism and hope despite a baby's critical condition. These feelings can make you lose your appetite, have trouble sleeping and concentrating, become easily irritated, and have a lack of energy. It may be difficult to understand, but all these intense and changing emotions are normal. The frightening part is how strong they are.

Sharing the Experience

Most strong emotions are best handled if you can talk about them. Talking to your partner or a close relative or friend will often reduce the intensity of the feelings. It may also help you to feel less alone. There are many others you can talk to as well. Your pediatrician and our staff are experienced in helping families through crises such as yours. The social workers on our neonatal team are especially trained to listen, to understand the situation, and to provide guidance counseling. Our NICU has several social workers who meet with all families. Their services are available without charge to all parents. Please let your baby's nurse know if you would like to speak to

Giving updates on your baby to concerned family and friends can be very emotionally draining and time consuming. Sending an e-mail update can be a great option.

-NICU Mom
them when something new happens or you have a question. You may call them at (310) 423-4446. Your social worker will arrange family meetings and join with the medical staff and parents so that there is continuity in care and communication.

You will probably get to know some of the other parents in the unit. Parent meetings, led by the parent liaison, are held at regular times. They cover educational topics and are an opportunity to talk about common experiences and reactions. Many parents find this to be very supportive. Notices about upcoming meetings are posted in the NICU. All parents are welcome.

You also might like to talk to a trained parent volunteer who, like yourself, has had a baby in the NICU. This program is described under the section in this book called Good Beginnings on page 41. It is called Parent-to-Parent. Ask your nurse, social worker, or the parent liaison.

**You and Your Family**

The ups and downs in the NICU can be very trying. It is important that you take care of yourself by getting enough rest and eating proper meals. Talking about your experience with a caring family member, friend, or someone here at the hospital helps too. By looking after yourself, you will be better able to cope and allow us to take care of your baby.

Your whole family will be affected by this experience. Everyone seems to need extra support. This includes your partner, relatives, and other children. Young brothers and sisters need a simple and honest explanation to help them understand what has happened to the new baby. Some parents are helped by the presence of family members. Some parents find it stressful to have others around or have to be answering questions about the baby. It may help to tell your relatives and friends what would help you the best, including your need to be alone for a while, if that is what you are feeling.

How much and how to give information to others about the baby varies from one family to another. Some find it helpful to appoint one person in the family who can share the information you give them. Other friends and relatives can then call that person for updates. Some families find that it helps to send out brief Email messages or leave a quick update on a telephone answering machine. Friends who want to help can prepare meals, do housework, shopping, or babysitting. They can donate blood for or in honor of your baby, or drive you to the hospital. Our staff can offer suggestions to ease this added strain.

Social workers are available to all families, providing support and resources.

We attended nearly every parent meeting while our baby was in the NICU, sometimes sitting in silence, other times asking questions galore. We got something out of every meeting, but more importantly, our baby did . . . more informed, participative parents. There were times when the last thing we wanted to do was talk to or see other people, but it was those very times when the group really helped.

NICU Parent
Financial Help

Being in the hospital can be very expensive. Most private health insurance will cover the majority of the costs. Check with your insurance company or personnel department for information on your coverage. Be sure to add your baby to your policy right away. If you do not add your baby within your policy's grace period, he may not be covered.

There are some special financial benefit programs to help with costs not covered by your insurance. Some of these programs are California Children Services (CCS), Medi-Cal, WIC (nutritional assistance for Women, Infants, and Children), and SSI (Supplemental Security Income). Applications are different for each program and may take some time to complete. It is important to apply as soon as possible. This may help to ease the stress related to financial concerns. For more detailed information, contact your social worker (310) 423-4446.

Remember to keep track of the expenses you incur while visiting your baby (e.g. transportation, parking, etc.). These may be tax deductible on your state and federal tax forms.
Good Beginnings

Good Beginnings is a support group that was organized by parents who had babies in the NICU. These parents have volunteered their time, energy and special point of view since 1979. This group has designed special events and projects to help give our tiny patients and their families a better start. Its members really believe that "a good beginning should be the only beginning."

One of the ways the group has helped our parents is through the Parent-to-Parent program.

When first entering the world of the NICU, parents often know of few people who have had the same experience. For many, the experience is like taking a roller coaster ride. It often helps to speak with a parent who knows the ups and downs. If you want to get in touch with a Parent-to-Parent volunteer, please speak with your baby's nurse, your social worker, or the parent liaison. Or, you can meet with a parent volunteer by going to the weekly parent meetings and coffee breaks.

Good Beginnings sponsors other activities which raise funds and help others become aware of the care in our NICU. The money is used to buy books and equipment, and help the NICU in many ways.

Good Beginnings sponsors a yearly reunion party for graduates and their families. Families get a chance to get together again with staff and other families after going home from the hospital.

We hope you will join us each year after your baby has gone home from the hospital!
The Pathway Home

Parents often want to know when their baby will be going home. When babies improve during their NICU stay, they may go home or return to a facility closer to home. These choices are made to meet the needs of the baby and family. If a baby was transferred to Cedars-Sinai from a distant hospital, the family may find it helpful to consider transfer closer home prior to discharge.

How Long Until Your Baby Can Go Home?

When a baby is first admitted to the NICU, one of the questions of most parents is: "When can we take him home?" For babies who are premature, as well as those who are not, the expected time of discharge will depend on their particular illness. To estimate the length of stay you can expect, a general rule is that most premature babies will need to stay in the NICU until they are near term. Generally, it takes about that much time for the baby to develop the abilities he needs to grow and thrive. Like you, the staff begins to plan for, and look forward to, your baby's homecoming from the first day of admission. We look for the baby to pass certain "milestones" that tell us he is ready to go home:

- Generally, the baby will reach a discharge weight of approximately 1800 to 2,000 grams, or about four and one-half pounds. At this time, most premature babies have outgrown the special problems they had (apnea, jaundice, etc.).

- When a baby is doing exceptionally well in all other areas, he may be able to go home a little smaller.

- Your baby should be able to take all the feedings by mouth from the breast or bottle and gain weight steadily, at least half an ounce or so each day.

- He should be able to keep warm in an open crib, without the help of an incubator.

- In most cases he should be free from any breathing problems he might have had.

In a few cases, babies may need to go home with special equipment. Your baby's doctor will discuss any special needs with you if your baby is otherwise ready to go home.

Of course, each baby is an individual. The length of hospital stay might be shorter or longer than "predicted," depending on his particular needs. When these needs are met, we know that your baby is ready to go home, and we want to be sure the family is ready to have the baby at home. We make sure that the family has been able to learn the baby's daily care. We offer baby care and CPR classes on a regular basis. Be sure to ask your nurse about the current schedule of classes.

Don't be shy about asking for just "one more" demonstration. We were so happy that the staff was always patient and upbeat with us. Our confidence in being caregivers was assured.

– NICU Parent
Especially if the baby's stay in the NICU has been a long or difficult one, many parents approach the time of their baby's discharge with almost as much anxiety as the time when he first entered the NICU. Feelings of inadequacy or even fear about taking your baby home can be natural at this time. "How will I know if he's getting sick? How will I know if he's getting enough to eat? Is it all right for the baby to breathe that way? Is it all right to take him out of the house? Is he getting an infection?" These questions go through the minds of almost all parents. We expect them. By letting us know about your feelings, and by getting involved with your baby as early as you can, these questions can be answered long before your baby is ready to go home. That way, the day of your baby's discharge will be a happy one.

Some families benefit from the opportunity to "room in" with their baby a night or two before the expected discharge. By using our family suite, the parents can spend the night with their baby, doing all of his feedings and care, with the NICU staff available for support and last minute questions and assistance. If you are interested in rooming in, speak to your baby's nurse or the charge nurse about the availability of the room and the possibility of scheduling you for an overnight. Be sure to have an infant car seat with you for your baby's discharge. It is a California law that parents must protect their own children under age 6 years or 60 pounds in safety seats when driving. Familiarize yourself with the seat prior to the discharge, so that straps can be adjusted for a proper fit and you know how to secure it properly in the car.

**Medical Advice**

If your baby has a pediatrician, he or she is the first person to call, if you have a question or problem when your baby is at home with you. If you do not have a pediatrician but would like to find one, please let us know. We can help. In case of an EMERGENCY where you need immediate medical help, dial 911. Stay on the line and a specially trained operator will obtain the help you need.

**Birth Certificates**

Official record of your baby's birth can be obtained through the Birth Certificate Office. The birth certificate worksheet should be filled out and signed prior to mother's discharge. If this did not happen, call (310) 423-3306 and make arrangement to complete these forms within 10 days following the baby's birth.

**Infant Progress Clinic (IPC)**

The clinic provides follow-up testing for infants who have been discharged from the NICU and may be at risk for delays. Our goal is to provide follow-up evaluations to check each child's development. If needed, early services provide each child the chance to function at his best. The first visit is scheduled at 4-6 months of age.
A special therapist will perform a standard test. Parents are able to ask questions and to understand their child’s developmental needs. Suggestions are given for exercises and activities to improve the infant’s development. Any suggestions are shared with the parents and the baby’s doctor.

For more information, please call the IPC coordinator at (310) 423-4465.

**Regional Center**

Many families are referred to the Regional Center, a state funded agency which provides care for eligible babies with special needs. Ask your social worker for more information.

**Gifts of Support**

After going home, some families honor their baby, and the care their baby received, through a gift to support future NICU families and the doctors and nurses who staff the NICU. This gift may come in the form of a financial gift, volunteering time, or donating an item from the NICU “wish list.” Should you wish to support the efforts of the NICU, please contact our parent liaison at 310 423-6389. Thank you.

**Our last word:**

Please feel free to keep in touch with us after your baby has been discharged home – with letters, pictures, phone calls, birthday announcements, etc. Nothing makes our day happier than seeing our "graduates," big, healthy and happy. If you want to come back to say hello, stop at the front desk and ask to see the charge nurse. Plan to join us each year at the reunion, as well. We love to keep in touch with our families.

Feedback from our families is an important aspect of maintaining and improving the level of care in our NICU. We welcome comments about the care you and your baby are receiving throughout your baby’s stay. You may also be contacted following your baby’s discharge, asking you to comment on various aspects of your baby’s care. Your help is greatly appreciated.

-The IPC uses toys and activities of a standardized evaluation to monitor the child’s developmental progress for the first 2 years of life.

...It makes our day to see the babies coming back and doing well!
...I LOVE the reunion! I get to see all my families again and see the babies all grown up! It's the most rewarding and happiest part of my job.

-NICU Staff
Appendices

Glossary
Promoting Development Services
Our Team
Metric Conversion Charts
Graph of My Baby’s Weight
Maps
Glossary of Terms Used In The NICU

A’s and B’s - an abbreviation referring to episodes of apnea and bradycardia; see APNEA and BRADYCARDIA.

ANEMIA - less than the normal number of red blood cells in the blood.

APNEA - The cessation of breathing; see p.23.

ASPHYXIA - A condition where there has been a lack of sufficient oxygen to the tissues of the body. The brain and the kidneys are the most sensitive organs to a lack of oxygen.

ASPIRATION - Breathing a foreign material (such as formula, stomach fluids, meconium, etc.) into the lungs.

ATTENDING PHYSICIAN - a doctor who has the primary responsibility for coordinating the medical care for a patient. In the NICU this will generally be the neonatologist.

BAGGING - Filling the lungs with air or oxygen by squeezing a bag which is connected to an endotracheal tube or attached to a mask fitted over the face. This allows us to breathe for the baby when his own breaths are not enough.

BILILIGHTS (Phototherapy) - special lights used in the treatment of jaundice; see JAUNDICE.

BILIRUBIN - A breakdown product of red blood cells. See JAUNDICE.

BLOOD GASES - The amounts of oxygen, carbon dioxide and degree of acidity in the blood. A small amount of blood is taken from the heel (by heel stick), umbilical catheter or from the artery near the wrist where your pulse is felt to test for these levels.

BLOOD PRESSURE (BP) - The pressure of the blood in the arteries with each pulsation of the heart.

BRADYCARDIA - An abnormally slow heart rate.

BROVIAC - see CENTRAL CATHETER

CARDIOLOGIST - A medical doctor who specializes in the heart and circulation.

CASE MANAGER - A staff member who interfaces with insurance agencies regarding medical necessity and length of stay, as required, helps with discharge planning, arranging for medical equipment and visiting nurses when necessary, and makes referrals to CCS for medically eligible infants. Many insurance companies also have CASE MANAGERS who are assigned to customize and individualize benefits for those with extensive or complex health care needs.

CBC (Complete Blood Count) - A count of the various types of cells present in the blood, chiefly: red cells (for carrying oxygen), white cells (for fighting infection), and platelets (for prevention of bleeding).

CCS (California Children’s Services) - a state agency, operating by county, which assists with medical benefits and ongoing therapies for infants and children who meet certain diagnostic criteria.
CENTRAL CATHETER or CENTRAL LINE - a thin, flexible tube (catheter) placed in a larger vein or artery to deliver medications or necessary fluids and nutrients to the body. Broviac catheters are usually placed in the upper chest and tunnel under the skin to enter the vena cava, the large blood vessel in the center of the body carrying blood to the heart. PICC lines (percutaneously inserted central catheters) are usually threaded through a vein in the arm to the vena cava. Central catheters also include umbilical venous and umbilical artery catheters which may be inserted into the vein or artery of the umbilical stump (belly button) shortly after birth.

CHEMSTRIP - a test in which a drop of the baby's blood is placed on a strip of special paper to determine the amount of sugar in the blood.

CHEST TUBE - A small plastic tube placed through the chest wall into the space between the lung and chest wall to remove air or fluid from this space. See PNEUMOTHORAX.

CIRCUMCISION - A surgical procedure done to remove the foreskin of the penis. Usually done just before the baby goes home and only on request.

CONGENITAL - Existing at the time of birth.

CPAP (Continuous Positive Airway Pressure) - a form of ventilatory assistance which helps to keep the baby's lungs properly expanded. CPAP does not breathe for the baby, but allows the baby to breathe into a "wind."

CT SCAN (of the head) - Computerized x-rays which show the size and position of many parts of the brain. A CT scan also can be done on other parts of the body. The baby must go to another area of the hospital to have a CT scan.

CULTURE - A laboratory test of blood, spinal fluid, urine, or other specimens which shows if germs are present and which ones they are.

CYANOSIS - Blue color of the skin occurring when there is not enough oxygen in the blood.

DIFFERENTIAL - A test which divides the white blood cell count (from the CBC) into several categories, chiefly: "polys" (short for polymorphonuclear leukocytes), "bands" (immature "polys"), "lymphs" (lymphocytes), "monos" (monocytes), "eos" (eosinophils), "basos" (basophils). The percentages of each cell type may vary in different kinds of infections; for example, polys and bands usually will predominate in bacterial infections, while the number of lymphs usually will increase in viral infections.

ECHOCARDIOGRAM - A test done to look at the heart using soundwaves through the chest wall. This is much like an ultrasound done during pregnancy and is neither harmful nor painful.

EDEMA - "Puffy" skin from a build-up of fluid in body tissues.

ENDOTRACHEAL TUBE (ET Tube) - A plastic tube which goes from the baby's nose or mouth past the vocal cords and into the upper trachea (windpipe).

EXCHANGE TRANSFUSION - A treatment which removes the baby's blood in small quantities and replaces it with donor blood. This procedure is used most frequently to lower the level of bilirubin in the baby's blood. (See also Jaundice.) It also may be used to raise or lower the number of red blood cells, and improve the ability of the blood to clot.
EXTUBATION - removal of a tube which has been placed through the nose or mouth into the trachea; see ENDOTRACHEAL TUBE.

FELLOW (in Neonatology) - A trained pediatrician who is receiving additional specialized training in the care of sick newborns.

GASTROENTEROLOGIST - a medical doctor who specializes in the digestive system.

GASTROSTOMY - a surgically created opening in the abdominal wall to provide nutrition directly into the stomach.

GAVAGE FEEDINGS - Feedings delivered by a small plastic tube placed through the nose or mouth and down into the stomach when the baby is too weak or too premature to suck and swallow.

GENETICS - the branch of medicine that deals with heredity, the variation of individuals, prognosis for development and function(100,2),(997,984), and risks of recurrence of genetic conditions.

HEART MURMUR - A rushing sound made by the blood within the heart, usually heard with a stethoscope. This may or may not be a sign of a problem for a baby.

HEELSTICK - A quick prick of the heel with a sterile instrument (much like a finger prick) to obtain small blood samples for tests.

HEMATOCRIT (crit) - A test done to determine if the amount of red blood cells in the blood is adequate.

HOUSESTAFF - a term referring to medical doctors who are enrolled in a supervised training program in an area of specialization, such as Pediatrics; see also INTERN and RESIDENT.

HUMOR, SENSE OF - something you used to have before your baby was in the NICU. Don't lose your sense of humor, it helps parents get through these difficult times.

HYDROCEPHALUS - an abnormal accumulation of cerebrospinal fluid (the normal fluid which bathes the brain and spinal cord) in the ventricles of the brain.

HYPERALIMENTATION - see PARENTERAL NUTRITION

HYPERBILIRUBINEMIA - An elevated level of bilirubin in the blood. See JAUNDICE.

HYPOGLYCEMIA - A low amount of sugar (glucose) in the blood.

I:E RATIO - The ratio of the length of the forced breath provided by a ventilator to the length of the time between two breaths.

INFLITRATE (IV Inflitrate) - the slipping of an IV needle out of a vein, allowing IV fluid to accumulate in the surrounding tissues.

INTERN - a medical doctor in his or her first year of "residency." See also RESIDENT

INTRAVENOUS (IV) - A small plastic tube or hollow metal needle placed into one of the baby's veins, through which fluids, sugar, and minerals can be given when the baby cannot take all of his nourishment by feedings.
INSPIRATORY TIME (IT) - The length of a forced breath provided to the baby by a ventilator.

INTRAVENTRICULAR HEMORRHAGE (IVH) - a collection of blood in and around the ventricles (hollow portions) of the brain. (See p. 23 for further details.)

INTUBATION - Placing an endotracheal tube in the baby's trachea (windpipe). See Endotracheal Tube.

JAUNDICE - A yellow coloration of the skin and eyes caused by increased amounts of bilirubin in the blood. Bilirubin is a break-down product of red blood cells; it is processed and excreted by the liver. Treatments for jaundice include phototherapy ("bili-lights") and (rarely) exchange transfusion.

LUMBAR PUNCTURE ("Spinal Tap") - A procedure in which a small needle is placed in the small of the back, between the vertebrae (back bones), to obtain spinal fluid for bacterial cultures and other tests. (See p. 27 for further details.)

MAS (Meconium Aspiration Syndrome) - see MECONIUM ASPIRATION.

MECONIUM - The first bowel movements that a baby has which are thick, sticky, and dark green to black in color.

MECONIUM ASPIRATION - the inhalation of meconium into the lungs. If a baby passes meconium before delivery, the meconium may be inhaled into the lungs, causing problems with breathing after the baby is born. This condition is called meconium aspiration syndrome (MAS).

MENINGITIS - Infection of the fluid that cushions and surrounds the brain and spinal cord.

MRI (Magnetic Resonance Imaging) - A computerized method of viewing any portion of the body. It uses magnetism rather than x-rays. All metal must be removed from around the baby. The baby must go to another area of the hospital to have an MRI.

MURMUR - see HEART MURMUR.

NASAL CANNULA - A clear plastic tube which passes under the nose to provide supplemental oxygen.

NECROTIZING ENTEROCOLITIS (NEC) - An infection of the wall of the intestines, which may spread to the blood. Premature babies are particularly vulnerable to this disease. Surgery is sometimes necessary to remove damaged intestine, and the baby may need prolonged feeding by vein until he recovers. See also PARENTERAL NUTRITION, SEPSIS.

NEONATOLOGY - The medical specialty concerned with diseases of newborn infants (neonates). Neonatologists are pediatricians who have received several years of additional training.

NEPHROLOGIST - a medical doctor who specializes in disorders of the kidneys.

NEUROLOGIST - a medical doctor who specializes in the brain and nervous system.

NPO - Nothing to be given by mouth.

OPHTHALMOLOGIST - a medical doctor who specializes in disorders of the eye.

OTOLARYNGOLOGIST - a medical doctor who specializes in the ear, nose, and throat.
OXYHOOD (02 hood) - A clear plastic hood placed over the baby's head through which oxygen is given.

PARENTERAL NUTRITION (also called Total Parenteral Nutrition, or TPN) - Protein and sometimes fats (lipids) given along with sugars and salts by vein when the baby cannot tolerate complete feedings by nipple or gavage.

PATENT DUCTUS ARTERIOSUS (PDA) - A small vessel which allows blood to bypass the lungs. This vessel is open while the baby is in the womb, but normally closes shortly after delivery. If the vessel fails to close on its own, special medication or surgery may be needed. (See p. 23 for more details)

PEAK INSPIRATORY PRESSURE (PIP) - The highest pressure that is delivered to the baby by the ventilator during a forced breath.

PEDIATRICIAN - A medical doctor who specializes in infants and children.

PEEP - See POSITIVE END-EXPIRATORY PRESSURE.

PHOTOTHERAPY - a treatment in which the baby is placed under bright lights (frequently blue in color) or on a special light blanket which helps bilirubin to be excreted into the intestine. See also BILIRUBIN, JAUNDICE.

PICC LINE - see CENTRAL CATHETER

PIP - See PEAK INSPIRATORY PRESSURE.

PKU - A rare disorder in which one of the amino acids (a building block of protein) cannot be handled normally by the baby, leading to elevated levels in the blood. Babies with PKU require a special diet. All babies are routinely tested for PKU, as well as several other disorders, before going home from the nursery. This test is required by law.

PNEUMOMEDIASTINUM - Leakage of air from the normal passageways of the lung into the space surrounding the heart inside the chest. A pneumomediastinum is usually harmless in itself, but is often associated with a pneumothorax (which can be life-threatening if large). See PNEUMOTHORAX.

PNEUMOTHORAX - Leakage of air from the normal passageways of the lung into the space surrounding the lung inside the chest wall, causing a partial or complete collapse of the lung.

POSITIVE END-EXPIRATORY PRESSURE (PEEP) - The lowest pressure that is delivered by the ventilator to the baby between forced breaths. See also PEAK INSPIRATORY PRESSURE (PIP).

PROGNOSIS - What is expected in the future.

RED BLOOD CELLS - The cells in the blood which carry oxygen.

REFLUX - a return or backward flow; gastroesophageal (GE) reflux occurs when portions of feedings or other stomach contents flow back up into the esophagus.
REGIONAL CENTER - One of a network of state-funded agencies which helps to coordinate community services and resources to infants at risk of having a developmental delay; also provides services and coordination of resources to children and adults with specific developmental disabilities.

RESIDENT (Pediatric) - A medical doctor who is training to become a Pediatrician. A residency program is usually three years long. First year residents are sometimes referred to as interns. Third year residents are sometimes called senior residents.

RESPIRATORY DISTRESS SYNDROME (RDS) - A common breathing problem of premature infants caused by insufficient surfactant in the baby's lung. This results in an excessive stiffness of the baby's lungs. See also SURFACTANT.

SEIZURE - a "short circuiting" of the electrical activity in the brain, sometimes causing involuntary muscle activity or stiffening. There are many causes of seizures. If your child has a seizure, speak with your baby's doctor about this condition and its implications.

SEPSIS - Infection of the blood. See also MENINGITIS, NECROTIZING ENTEROCOLITIS.

SEPTIC WORKUP - An assortment of tests performed on an infant who is suspected of having an infection. This may include a chest x-ray and/or abdominal x-ray, as well as blood, urine, and spinal fluid cultures. Because infections in babies can progress very rapidly, the baby is frequently started on antibiotics until the results of the cultures are known.

SUPRA-PUBIC TAP - Obtaining an uncontaminated sample of urine by first cleaning off the lower abdomen, then inserting a needle directly into the urinary bladder.

SURFACTANT - A material secreted by special cells within the alveoli (air sacs) of the lung, which makes the lung flexible and helps to keep the lung from collapsing. Deficiency of surfactant is the main problem in Respiratory Distress Syndrome (RDS). Commercial products are available which can be put into the lungs through the tube in the windpipe. These products frequently are very helpful to the premature baby with RDS.

TRACHEOSTOMY - a surgical opening in the trachea, below the larynx (voice box) to allow air to enter the lungs; usually done to by-pass a narrowing in the area immediately below the larynx.

TRANSFUSION - Giving donated blood to the baby by vein or artery. (See also Blood Donations, p. 15.)

ULTRASOUND OF THE HEAD - A test done using soundwaves which shows an image of the brain. The test is not harmful or painful to the baby and may be done at the bedside.

UMBILICAL CATHETER - A small plastic tube in one of the umbilical (belly button) blood vessels (either an artery or a vein).
Promoting Your Baby’s Development:  
An Adjunct to Parent Education in the NICU

DID YOU KNOW

Babies can easily become fatigued from over stimulation.

Newborns initially prefer to look at their parent’s faces and at bold black and white geometric patterns.

Rocking movements increase alertness.

Sucking on a pacifier during gavage feeding will help develop your baby’s suck, and will aid in digestion.

Movement develops from head to toe; therefore, your baby will lift his head before he rolls over.

WHAT YOU CAN DO

Watch your baby for signs of:
- Frequent yawning
- Closing of eyes
- Facial grimacing
- Color changes
- Hiccuping

Place black and white geometric pictures in your baby’s visual field. These can be obtained from your nurse and should be limited to 3 or 4 pictures.

A baby in an incubator can be supported by both your hands and gently rocked to and fro or side to side.

When your baby is unable to nipple feed, give him a pacifier during the gavage feeding.

Encourage your baby to lie on his stomach for short periods of time when he is awake.
Newborns observe people more vigorously and more often than inanimate objects. This is because faces and bodies are more complex and constantly moving.

Babies can only attend for a few seconds at a time. This will increase with practice and age.

For comfort, premies like positioning with blankets and rolls to form an enclosed area.

Babies bring their hands to their mouth in order to calm themselves.

**DID YOU KNOW**

When your baby is awake and alert, hold him approximately 8 to 10 inches from your face, so he can begin to make visual contact.

Limit each activity to approximately one minute and allow a rest period before the next activity.

Make a “log” out of a blanket and position it around your baby like a “nest.” (Be sure to check with your baby’s nurse before doing this so she can monitor the temperature.)

Place your baby’s hand on his face and lips so he can touch these areas.

**WHAT YOU CAN DO**
<table>
<thead>
<tr>
<th>Service</th>
<th>Location/comments</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATM</td>
<td>Plaza Level, South Tower</td>
<td></td>
</tr>
<tr>
<td>Blood Donor Facility</td>
<td>Street Level, South Tower, Room 1690</td>
<td>(310) 423-5346</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>Street Level, South Tower</td>
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<tr>
<td>Chapel</td>
<td>Plaza Level</td>
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<tr>
<td>Chaplain</td>
<td>Plaza Level</td>
<td>(310) 423-5550</td>
</tr>
<tr>
<td>Coffee Shop (Plaza Café)</td>
<td>Plaza Level, South Tower, open Mon-Sat</td>
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<tr>
<td></td>
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<td>6:30 a.m. - 7 p.m.</td>
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<tr>
<td>Dietician</td>
<td>food and formula assistance or dietary advice</td>
<td>(310) 423-4575</td>
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<tr>
<td>Gift Shop</td>
<td>Plaza Level</td>
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<td>Lactation Support/Education</td>
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<td>NICU Lactation Consultations</td>
<td></td>
<td>(310) 423-4322</td>
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<tr>
<td>Lactation Education Center</td>
<td>Room 3202</td>
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<td></td>
<td>Pump rentals and baby supplies</td>
<td>(310) 423-5312</td>
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<tr>
<td></td>
<td>Breastfeeding Help Line</td>
<td>(800) 972-6003</td>
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<tr>
<td>Parking Office</td>
<td>George Burns Dr.</td>
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<tr>
<td>Social Work Department</td>
<td></td>
<td>(310) 423-4446</td>
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<tr>
<td>Support Groups</td>
<td></td>
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<tr>
<td>Good Beginnings</td>
<td>weekly group meetings; education, support, activities; watch for notices in NICU</td>
<td>(310) 423-6389</td>
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<tr>
<td>NICU Parent Meetings</td>
<td></td>
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<td></td>
<td>One-to-one support from trained volunteer &quot;graduate&quot; parents</td>
<td>(310) 423-6389</td>
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<tr>
<td>Parent-to-Parent</td>
<td></td>
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<tr>
<td>Bereavement support</td>
<td>ask Social Worker or Parent Liaison for referral</td>
<td>(310) 423-4446</td>
</tr>
<tr>
<td>Vending Machine Center</td>
<td>Street Level, South Tower, open 24 hours a day (next to cafeteria)</td>
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# Some of the People on Our Team

<table>
<thead>
<tr>
<th>Nurse Manager</th>
<th>Medical Director</th>
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<tbody>
<tr>
<td><strong>Primary Nursing Team</strong></td>
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<tr>
<td>Nurses</td>
<td><strong>Neonatologists</strong></td>
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<td><strong>Primary Neonatologist</strong></td>
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<td><strong>Team Neonatologists</strong></td>
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<td></td>
<td><strong>Residents or NNP</strong></td>
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<td></td>
<td><strong>Pediatrician</strong></td>
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<td></td>
<td><strong>Consultants</strong></td>
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<tr>
<td><strong>Charge Nurses</strong></td>
<td><strong>Respiratory Therapists</strong></td>
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<td></td>
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<tr>
<td>Social Worker</td>
<td></td>
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<tr>
<td>Parent-to-Parent Coordinator</td>
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<tr>
<td>My Parent-to-Parent Volunteer</td>
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</tbody>
</table>
## Metric Conversion Chart

### Weight

#### Pounds to Grams

Based on 1 Oz. = 28.3495 Grams

Example: 4 lbs. 6 oz. = 1984 Grams

### Length

1 inch = 2.54 cm  
1 cm = .3937 inch

### Volume

1 ounce = 30 cc or 30 ml.  
1 tsp = 5 cc
Map to Cedars-Sinai Medical Center

**CSMC Fourth Floor**

<table>
<thead>
<tr>
<th></th>
<th>NICU 1</th>
<th>9a Lactation Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NICU 2</td>
<td>9b Family Suite</td>
</tr>
<tr>
<td>2</td>
<td>NICU 3</td>
<td>9c Parent Resource Room</td>
</tr>
<tr>
<td>3</td>
<td>NICU 4</td>
<td>10 Reception Area</td>
</tr>
<tr>
<td>4</td>
<td>NICU 5</td>
<td>11 Special Care Room</td>
</tr>
<tr>
<td>5</td>
<td>NICU 6</td>
<td>12 Special Care Room</td>
</tr>
<tr>
<td>6</td>
<td>Multi Purpose Room</td>
<td>13 Nurse Manager's Office</td>
</tr>
<tr>
<td>7</td>
<td>Charge Nurse Office</td>
<td></td>
</tr>
</tbody>
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