Care of the Preterm Newborn

Skin to Skin

- The first hour after birth is a special time when the new infant and parents become a family.
- It is important for the mother and infant to be allowed uninterrupted skin to skin contact until after the first breastfeeding.
- It is important to keep the room quiet and calm so the baby can hear mostly parent’s voices.
- Skin to skin contact regulates baby’s temperature, heart rate and blood sugar. Fathers and other family members can bond with baby through skin to skin contact continuing through the first several months of life.

Infant Temperature

- Preterm infants have less body fat and may be less able to regulate their own body temperature than full-term infants.
- Skin to skin care and swaddling may be used to keep baby warm and keep baby from becoming overstimulated.
- Infant temperature should be taken rectally (using KY jelly).
- Digital thermometers are recommended.
- Rectal technique: Lay baby on tummy. Put KY on end of thermometer. Insert ½ inch into baby’s rectum. Stabilize thermometer while waiting for reading.
- Normal infant temperature range taken rectally is 97.6-110.3 degrees.
- Call baby’s doctor if rectal temperature is above 100.4 degrees.

Infection

- Wash hands frequently to prevent the spread of germs to your baby.
- Preterm infants have immature immune systems and are more likely to develop infections.
- Limit the handling of your baby by visitors.
- Family and friends who are not feeling well or have recently been sick should not visit baby.
- Avoid places with large numbers of people and young children (shopping mall, church, playground).
- Watch for signs of listlessness (low energy), fever or low temperature, and breathing problems.
Breathing/Respiratory Challenges

Your premature baby's lungs are not fully developed and may cause your baby to experience respiratory distress. You may want to take a course in infant CPR. Consider having family members or caregivers who will be alone with your baby to take the course, too.

- **Respiratory distress**: Fast breathing, nasal flaring, baby looks pale or blue, and baby struggling to take in air are all signs of respiratory distress.
- **Call 911 if your baby seems to have trouble breathing and it is an emergency.**
- **Call your baby’s healthcare provider if it is not an emergency.**

- **Make your home smoke-free.** It is very important that your new baby’s lungs not be exposed to smoke. Secondhand smoke is linked to Sudden Infant Death Syndrome, asthma and ear infections.

- **Apnea**: Breathing is often irregular with premature babies because the part of the brain that controls breathing isn’t fully developed. Short pauses in regular breathing are normal, but a pause that lasts longer than 20 seconds is called *apnea*. Apnea is usually corrected with gentle rubbing or tapping on the baby’s arm or leg to “remind” baby to breathe. Report this immediately to your baby’s healthcare provider.
- **RSV**: RSV stands for respiratory syncytial virus. It occurs most commonly from fall to spring, but can be caught at any time of the year. RSV can be very serious and is a particular problem for preterm infants. It can cause pneumonia, serious lung disease or even death.

- **Car Seat Test**: In the hospital a day or two after birth, your baby will have a car seat test. Testing will be done with your baby in the car seat he or she will be going home in, to see if he or she has any breathing problems while sitting in it. The test takes about 90 minutes.

Sleep and Rest

- Preterm babies need more sleep and rest because their bodies and brains are still developing.
- Protect your baby from stress and overstimulation. Limiting visitors and the handling of your baby are critical.
- Even though your baby may not easily wake up for feedings or show he or she is ready to eat, preterm babies should be woken every 2-3 hours for feedings.
- Practice frequent skin to skin contact with your baby.
- Take a calm approach to your baby’s care. Gently rock, massage and touch your baby—ONE activity at a time.

[ThedaCare Logo]
• Encourage complete sleep cycles without interruption.

Hypoglycemia (low blood sugar)

• The work of breathing, eating and keeping a normal body temperature can lead to low blood sugar in the first days of your baby’s life.
• Preterm infants tend to eat less and need to be fed more often than a full-term baby.
• Keep your baby warm and practice skin to skin care.
• Your baby will receive a heel stick every 3 hours for the first 24 hours of life to check blood sugars.
• An isolette may be used to help regulate your baby’s temperature. It is used not only to keep your baby warm, but also prevents baby from burning calories when trying to maintain temperature.

Breastfeeding

• REFER TO “Your Guide to Breastfeeding” BOOKLET
  o Premature infants need more support and assistance with feedings.
  o Premature infants need more frequent feedings, are sleepier at feedings and benefit from lots of skin to skin contact.
  o Skin to Skin: For healthy newborns, direct skin to skin contact is recommended immediately after birth until first feeding is accomplished.
  o Typically mothers of preterm infants will need to hand-express and/or pump breast milk to provide adequate stimulation for milk production.
  o Preterm infants frequently require supplementation with your breast milk or formula.
  o The Birth Center staff and your health care provider will guide you regarding frequency of feedings and goals for feeding.

Formula Feeding

• Do not exceed 3 hours between feedings. A preterm infant needs to eat frequently.
• Preterm infants may have increased difficulty with feeding and may need more support and assistance.
• Feed when baby is hungry, typically every 2-3 hours. Baby will feed more at 2-, 4- and 6-week growth spurts.
• Initiate yellow Bottle Feeding Diary.
• It is recommended that your infant is fed Enfacare 22 calorie formula for the first three months of life.
• Wipe off top of formula can before opening.
• Wash hands before preparing formula.
• Follow manufacturer’s instructions exactly when making up formula.
• Clean equipment before use.
• Do not use formula past expiration date.
• A bottle can be warm or room temperature; baby likes consistency.
• Never microwave when heating formula.
• Test temperature of formula before feeding to baby.
• Throw away leftover formula.
• Burp baby after ½ -1 oz. and again halfway through feeding to eliminate trapped air, allowing baby to drink adequate amounts at a feeding time.
• When burping, use a position that puts pressure on baby’s tummy.

**Signs of Hunger**

• Early signs of hunger:
  o Rooting
  o Stirring and stretching
  o Sucking motions and lip movements
• Later signs of hunger:
  o Sucking on fists
  o Fussy noises, crying

**Recording your baby’s feeds**

• All infant feeds should be recorded on the diary provided to you, or you can use your favorite app.

**Vitamins**

• It is recommended that you give your baby 1ml of Poly-Vi-Sol daily.

**Brain Growth and Development**

• Your baby’s brain grows after birth and adds links needed for balance, learning and relating to others.
• Your baby needs to devote all his or her energy to growing and developing. Rest, calm, warmth and stability are all essential to your baby’s well-being.
• Being with you is your baby’s best place to be! Practice skin to skin contact or “Kangaroo Care” as often as possible.
• Your baby’s health care provider may recommend a higher-calorie formula/supplement to support your baby’s growth and brain development.
Diapering

- Change diapers before and after feedings.
- Fold top of diaper over to fit below umbilical cord unless cutout is provided.
- Cleanse infant’s bottom; wipe female genitalia front to back.
- Baby powder or cornstarch is not recommended.
- Olive oil is appropriate for newborn skin; baby oil or lotion is not necessary.
- Sometimes uric acid crystals in the urine dry in the diaper. They can be harmless or indicate dehydration if deposited frequently.

Male Genitalia

- Scrotal swelling can be common initially.

Female Genitalia

- Infant genitalia are often swollen after delivery and will gradually decrease.
- Initially, newborn girls may have blood spots on diaper due to mother’s hormones.

Circumcision Care

- Prior to procedure, baby is given oral sucrose, pacifier for non-nutritive sucking, and Lidocaine block for pain control.
- After a Gomco procedure, apply Vaseline ointment to circumcision.
- After a Plastibell procedure, DO NOT apply Vaseline to circumcision.
- Yellowish discharge on the tip of penis is normal; do not try to remove.
- Site may be submerged in bath water; practice varies, so check with baby’s doctor.
- Site of circumcision will heal in 7-10 days.
- Gently clean groove under head of penis at each diaper change.

After discharge, parents should be watchful of foreskin creeping back toward head of penis. If observed, call baby’s doctor for instructions.
Uncircumcised

- Wash baby’s penis with soap and water during each bath.
- No need to clean beneath the foreskin. It retracts on its own, usually by age 5.
- At that time you will teach your son to gently retract the foreskin and wash the penis with soap and water, rinse, dry and gently pull the foreskin back over the head of penis.

Bathing and Skin Care

- Gather supplies before beginning bath, never leaving baby unattended.
- Tub bath every third day.
- Use mild, pH-balanced soaps.
- Choose dye- and fragrance-free skin care products.
- Check temperature of water to avoid burning or chilling baby.
- Begin by washing baby’s face with clear water.
- Wash eyes from the inside out, using corner of washcloth. Avoid using cotton balls.
- Wash baby’s gums and complete washing remainder of body.
- Review with your physician the use of sunscreen and insect repellent.

Umbilical Cord

- Begins to dry 1-2 hours after delivery.
- Cord stump changes from yellowish green to brown to black as it eventually falls off, usually within 2 weeks of birth.
- Keep cord dry and clean.
- Newborn providers prefer you put nothing on the cord.
- May submerge infant in water for bath; then dry area well
Jaundice

- Yellow discoloration of infant's skin and eyes. Usually will develop during the 2nd and 3rd day of life in more than half of all full-term babies.
- Jaundice is fairly common in Preterm infants.
- Caused by normal breakdown of extra blood cells not needed after birth. When red blood cells break apart, bilirubin enters the bloodstream, causing skin to look yellow.
- All babies are screened for jaundice prior to discharge.
- A blood test may be done to confirm jaundice.
- Treatment is phototherapy done at home with a bili-blanket.
- Bilirubin is eliminated through baby’s bowel movements. It is important for baby to drink lots of breast milk or formula (hydration) and have frequent bowel movements.
- Mom should wake baby to feed every 3 hours until jaundice is resolved. Refer to jaundice handout in Patient and Family Resource Binder.

Tummy Time

- Place baby on his or her stomach frequently when her or she is awake and someone is watching.
- Tummy time strengthens baby’s head, neck and shoulder muscles and helps prevent flat spots on head.

Safety and Safe Sleep Practices

- Place baby on back alone in crib, bassinet or Pack ‘N Play in parents’ room.
- Baby should not sleep on bed, couch or chair or with anyone.
- If you bring baby into bed with you to breastfeed, put baby back in bassinet, crib or cradle when finished. Falling asleep with baby is dangerous!
- Pets should not share sleep space with baby.
- No pillows, blankets, bumpers, toys or stuffed animals in the baby’s crib.
- Being hot is not good for baby.
- Avoid smoking, alcohol and drugs. They hurt baby, too.
- Refer to handout in Patient Admitting Folder: “Helping Baby Back to Sleep.”
Shaken Baby Syndrome

- Occurs when infant or young child is violently shaken.
- A few seconds of violent shaking can cause severe brain damage and even death.
- Alleviating caregiver’s stress at critical periods of crying significantly reduces risk.
- Make sure baby’s basic needs are being met: hunger, burping, change diaper, temperature (not too hot, not too cold).
- Call a physician if you suspect baby is ill or has a fever.
- Call a friend or relative for support or to take care of baby while you take a break.
- If nothing else works, put baby on back in crib, close door and check baby in 10 minutes.
- Review “Babies Cry!” in Patient Admitting Folder.
- View “Happiest Baby on the Block” video.

Infant Car Seats

- AAP advises parents to keep their infants and toddlers in rear-facing car seats until age 2, or until they reach the maximum height and weight for their seat.
- In cold weather, dress baby in thinner layers instead of bulky coat or snowsuit. Tuck blanket around baby after harness straps are buckled (AAP).
- Infant car seats need to be safely installed in your vehicle before baby is discharged from hospital. Review Safe Kids Car Seat Safety Inspection Schedule in Patient and Family Resource Binder.
- Avoid buying used car seats, as safety standards change and car seats expire.
- OB staff are not car seat experts and can’t place baby in the car seat for you. We will provide verbal guidance.