

#### PREMATURE INFANT DEVELOPMENT VOCABULARY

### Gestation

The number of weeks your baby has been growing. A fullterm infant is 37-40 weeks gestation.

#### Chronological Age

Your baby's actual age in days, weeks, months, or years from their birthday.

# Adjusted or Corrected Age

Your baby's age based on their *due date*. We usually refer to adjusted age with gestational weeks *before* the due date and weeks or months *after* the due date.

#### Motor Development

Development of movement and muscles

# Sensory Development

Development of the 5 senses = touch, body awareness, taste, hearing, seeing

# Occupational Therapist (OT)

A licensed health care professional with specialized training in infant development, with expertise in sensory development.

# Physical Therapist (PT)

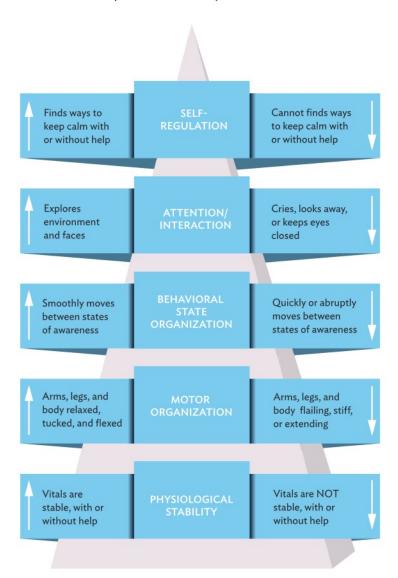
A licensed health care professional with specialized training in infant development, with expertise in motor development.

\*While OTs and PTs each have special areas of focus, neonatal OTs and PTs are trained to evaluate and treat many areas of infant development.



# SENSORY DEVELOPMENT

Behavioral state development is the ability of your baby to be calm and organized, but premature infants need help to do this. Your baby's development is like a pyramid, with the most basic skills at the bottom and the most complex skills at the top.



Now that you understand these basic skills, you can learn to communicate and respond to your baby. Your baby will communicate in many different ways. Premature babies often have certain movements, behaviors, or cues they use to show us they are stressed or overstimulated. Here are some examples:

- Skin color changes
- Changes in vital signs (heart rate, respiratory rate, blood pressure, oxygen)
- · Gagging, hiccups, sneezing, yawning
- · Floppy or limp arms and legs
- Frantic, flailing movements
- Spreading fingers/toes wide apart
- Stiff or straight arms or legs
- Not resting peacefully or twitching/grimacing while asleep
- Turning eyes to side
- · Panicked look with wrinkled brow



#### MOTOR DEVELOPMENT

Flexion: Your baby's therapists or nurses may use any combination of positioning aids to help your baby stay in the fetal position, or what we call "midline flexion." Your baby will use a lot of energy trying to get into fetal position, so these aids are important to help them rest and gain weight. When your premature baby is in midline flexion, they have a better chance of resting comfortably, controlling their movements, and strengthening their muscles and bones.





#### Posture and Movement:

Premature infants have a special way of moving. You may notice jerky, uncoordinated, stiff, or even floppy movements of the arms and legs. Your infant's neck and torso posture may also fluctuate between stiff or floppy. Sometimes the weight of gravity and heavy medical equipment can make it harder for your baby to move. Your therapist will help you recognize your baby's unique posture and ways to encourage active movement.

#### WHAT YOU CAN DO

# 1. Responding to Overstimulation and Stress

- · Offer your finger to hold
- Gently use your hand to "contain" their arms, legs, or torso ("hand hugs")
- Use a soft whisper to speak
- Pull the curtains and dim the lights when your baby is out of the isolette
- Limit fast and vigorous rocking or bouncing in your chair while you hold your baby
- · Reposition your baby into a flexed position in the isolette

#### 2. Developmental Activities at Bedside

One of the most important things you can do to help your baby grow and be healthy is to spend time with them. There are many activities that we recommend to help you bond with your baby. The activities you try with your baby may also depend on their gestational age or "maturity" of their sensory systems. The following activities are recommended based on your baby's gestational age, but your therapist may introduce them to you at different points based on your baby's progress. Ask your therapist or nurse about your baby's current gestational age.



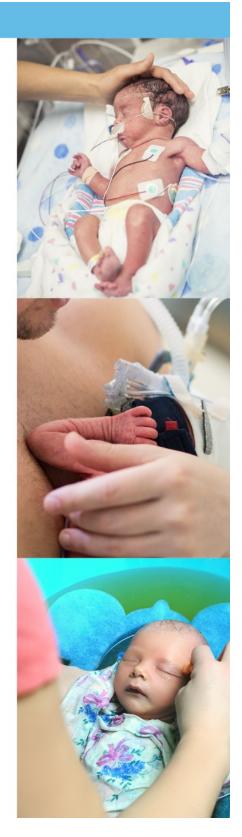
# Before 34 weeks:

- Hand hugs and containment during nursing assessments
- Skin-to-skin or "Kangaroo Care"
- Position (or reposition) your baby into flexion using positioning aids
- Talk, read, or sing softly to your baby

# After 34 weeks with the help of your therapist:

- · Learn to swaddle your baby
- Try "tummy time" on your chest or lap
- · Sit your baby upright in your lap
- · Leg bicycles and patty cake
- · Baby massage
- · Swaddled bathing and hydrotherapy
- · And much more!

Thank you for letting us be a part of your baby's team! The OT and PT team would like to keep you updated about your baby's progress throughout your stay and also help you prepare for going home. We are looking forward to caring for your baby while you are here in the Neonatal Critical Care Center.





# TO CONTACT THE THERAPY TEAM,

have your baby's nurse page us Monday-Friday 8:00-5:00pm, or email us anytime at ncccotpt@unc.edu