Communicating With Your Baby

HOW YOUR BABY CAN LET YOU KNOW THEY ARE READY FOR INTERACTION

Communicating With Your Baby

- Although your baby can't talk to you to tell you how he/she is feeling, he/she can speak to you through their behaviors to let you know if they are ready and able to tolerate interaction or if they need extra support to tolerate being interacted with.
- The more time you spend with your baby doing cares, skin to skin and massage, you will learn what your baby likes and does not like and the ways he/she communicates this with you.

Importance of Parents Being Involved

In an average stay:

- Babies can have 130 caregivers who provide touch and handling in different ways
- In an average day, babies have 82 handlings and 132 disturbances all of which can provide negative vestibular and other sensory input.
- This all affects sleep and brain development
- The more you as parents are here and participate the more consistent their care and handling will be.

Put yourself in your baby's shoes

- Babies are receiving input from all around them, noise, smell, light, touch, pain, activity, and movement all of which should not be happening yet.
 - Just a bad smell may be more than your young or sick baby can tolerate.
 - One bad smell can make it difficult for your baby to then also tolerate the movement and input needed to change a diaper or they may get so overwhelmed, they spit up a feed they are getting.
- Before jumping into touch your baby or pick them up:
 - Think about their current environment
 - What are you going to be asking of them to handle in addition to the environment (what activity are you about to do)?
 - What can you do to make the interaction and environment calm so that your baby can tolerate the activity better? Longer?

Younger Babies Tolerate Less

- Babies who are less than 28 weeks old and/or are very sick will not be able to tolerate much activity and will need support from you to tolerate needed cares/procedures.
 - Your baby will rarely open their eyes or be awake
 - ► They will be in a deep sleep or light sleep state most of the time
 - > You will notice low muscle tone (floppy arms and legs) with tremors and jerky movements
 - Babies this age do not cry much you are likely to notice quiet whimpering
 - Your baby may tolerate activities such as hand hugging, preemie massage (as taught to you by an Occupational Therapist), basic cares and Kangaroo Care (skin to skin)

Babies at this age need to be handled with extreme care and may tolerate one thing one day but not the next.

The Older the Baby, The More They Can Tolerate

Babies who are 29-34 weeks are able to tolerate more activity without as much support.

- He/she should be able to smoothly arouse to a quiet alert state and look at you while you are doing cares. He/she may even be able to suck on a pacifier, while maintaining an awake state and being interacted with.
- ▶ He/she will start to react more to the world around them (i.e. bright lights, loud noises) by startling or crying.
- > You will notice a louder cry and less whimpering.
- > You will notice less episodes of the monitors ringing for decreased oxygen and heart rate.
- > Your baby should tolerate cares, massage, Kangaroo, some feeding at breast or with bottle.

Again, things may differ day to day, but you should start to see more consistency in what your baby likes and does not like.

Older Babies Tolerate The Most

- A baby who is 35-40 weeks is going to be much more stable and should be able to tolerate a variety of activities without much extra support.
 - > You will notice your baby making eye contact with you and tracking your face from side to side.
 - ▶ He/she will respond in a calm manner to changes in the environment (bright light and loud noises).
 - ▶ There will be very few episodes of the monitor ringing off for desaturation and decreased heart rate.
 - You will be able to predict responses from your baby you will know things he/she likes and things he/she does not like.
 - > You will see smooth transitions from sleep to awake states without you needing to wake him/her up.
 - Your baby will have a loud cry.

Baby's Cues

- The 1st thing you can do is start observing your baby before you do any interactions with them.
 - Their face and other parts of their body can give you clues to how your baby is feeling.
 - ▶ Babies have "I'm Ready Cues" AND "I'm Stressed or in Pain Cues"

I'm Ready Cues

Signs your baby is calm, alert and ready to engage:

- Good muscle tone (hands to face, knees pulled up, grasping your finger)
- Stable heart rate and oxygen saturation
- No color changes (pink cheeks and skin)
- Arouses on own and maintains a quiet or active alert state
- Transitions between states smoothly
 - (light sleep -> drowsy -> quiet awake vs. sleep -> wide awake and crying)
- Sucking independently on fists or pacifier
- Makes visual contact

I'm Ready Cues

Focused Attention

(baby will make eye contact with you)



Awake and Quiet



Face and Arms Relaxed, Pink Color, Regular Breathing Rate (baby flexed, relaxed and ready to interact)



Sucking Movements, Bright Eyed



I'm Stressed or in Pain

Signs your baby is not tolerating something well and needs more support:

- Low Muscle Tone (Floppy arms, legs, head)
- Decreased heart rate and oxygen saturation
- Color Changes (pale or splotchy skin)
- Difficult to arouse (shut down)
- Poor digestion, increased spitting
- Hiccoughs
- Finger Splaying
- Arm and Leg Extension
- Jerky or flailing movements, tremors
- Gaze Aversion (looking away from you)
- Arching
- Sudden State Changes (Sound asleep to immediate frantic crying)

I'm Stressed or in Pain

Frown and Cry



Finger Splaying (fingers spread wide open)/Stop Sign



Yawning



Worried Face/Frowning



Looking Away or Crossed Eyes



Furrowed Brow



Gaping Mouth





The Importance of TOUCH

If your baby is showing signs of stress, often you can help the stress go away by how you respond and how you touch your baby.

> Skin is our largest organ and is derived from the same embryonic layer as the brain.

At 7 1/2-8 weeks gestation a fetus can feel touch. Touch is the 1st of our 6 senses to develop.



The Importance of TOUCH

5% of touch received by a premature infant is intended to comfort and sooth. That means 95% of touch a baby receives is procedural based and perceived by the infant as negative, invasive and stressful

Your baby's neuro pathways are affected by experience.

If all the touch your baby receives is stressful, the pathways he/she develop will be disorganized and will lead to an infant/child that is hypersensitive to touch and sound; a child who could struggle to eat, socialize, and learn.

Sensory Input = Motor Output



Preventing stress: TOUCH

- The most sensitive parts of our body are our Hands, Feet and Mouth
- Think about all that happens in these areas, sometimes 24 hours a day that are negative sensations in these areas while in the NICU:
 - ▶ Tape, Intubation Tubes, Tubes, Heel Sticks, IVs, CPAP, Oral Suction

Think About The Way You Touch With EVERY Interaction:

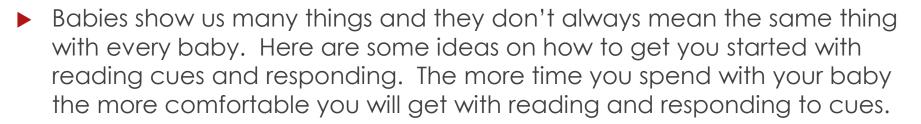
- How are you helping to remove adhesive/tape? (Think about using Vaseline/Aquafor to help remove adhesives rather than pulling or exposing to smelly adhesive removers)
- Offer containment and a pacifier to help reduce stress during cares/procedures
- Participate in 2 person cares to provide support and keep your baby calm during interactions
- Participate in Kangaroo Care and Provide protected sleep
- Talk to your baby quietly and tell them what you are about to do. Hearing a clam, soothing voice can help them remain calm during stress.

Vestibular System

- Another way we influence our babies How we move them
- Our vestibular sense is how we detect motion, balance and spatial orientation.
- ▶ The Vestibular sense is the 2nd of our 6 senses to develop.
 - At 16-20 weeks gestation, a fetus can detect vestibular motion/movement in the womb
- Babies receive their vestibular input through the way we move, reposition or transfer them. If we move them slowly and with slow transitions, they can better tolerate the input and maintain a calm state. If we do things too quickly, we can overstimulate the babies affecting vitals, transition to sleep, ability to tolerate skin to skin after a transfer, or ability to complete a good feeding after cares and transferring to a chair.

Preventing Stress: Vestibular System

- Think about the input you are providing and how you can keep from over stimulating a baby when you assist with:
 - Bed to Chair transfers provide containment, slow movements, complete standing transfers, use your body to contain when transferring to a chair for feeding.
 - Rolling side to side (especially head rotation) provide containment, roll slowly and with rest breaks if needed.
 - Diaper changes keep legs low and do not lift them high above the head



If you notice your baby has low muscle tone (floppy arms/legs/neck)

- Provide boundaries and help maintain a tucked/flexed position
- Use positioning aids (snugglie/bendy bumper) swaddling, or your hands to provide containment during and after cares

If your baby is flailing it's arms and legs around and reaching into space frantically

- Provide boundaries and help maintain a tucked/flexed position
- Use positioning aids (snugglie/bendy bumper) swaddling, or your hands to provide containment during and after cares



- Pause your activity, wait a few seconds, if the number doesn't start to go back up, give a gentle rub to your baby's back and/or head.
- If your baby's heart rate is high (green number on the screen above 220 and alarming)
 - Pause your activity, hug your baby with your hands gently (hand hugging) and wait for the number to come down before continuing on.
- If your baby's oxygen is low (blue number on the screen below 86 and alarming)
 - Pause your activity, hug your baby with your hands gently (hand hugging) and wait for the number to come up before continuing on.



- If you notice your baby is demonstrating stress signs (Color changes, is difficult to arouse, spitting up, hiccoughing, arm and leg extension, finger splaying, jerky and flailing movements, tremors, gaze aversion and arching):
- Before Cares:
 - Your baby will likely not tolerate much more than diaper, temperature and nursing assessment
 - > You will need to provide containment during cares and listen to the monitor for episodes

During Cares:

Provide containment/hand hugging, move slowly and take rest breaks to let your baby reorganize and absorb what input they are receiving.

After Cares:

Provide containment/hand hugging until infant settles. Consider putting your baby in a different position.



- If you notice your baby is demonstrating stress signs (Color changes, is difficult to arouse, spitting up, hiccoughing, arm and leg extension, finger splaying, jerky and flailing movements, tremors, gaze aversion and arching):
- Before Feeding:
 - ▶ Your baby is not ready to eat think about milk swabs or drops if able to calm

During Feeding:

- Stop the feeding if you notice the infant is shut down and no longer participating, spitting up, choking and coughing, arching and extending
- Remove the bottle and give a break if you notice color changes (especially blue around eyes and lips)
- Sometimes feeding will help resolve hiccoughing.

**More to come in the feeding lesson.

- If you notice your baby is struggling transitioning to a quiet alert state (asleep to immediate frantic crying or very drowsy)
 - Your baby would benefit from a massage (as taught to you by your Occupational Therapist).
 - Massage helps work on sensory integration which can help your baby waking up nicely, maintain a quiet alert state and/or fall asleep.

Final Thoughts

- Every time you touch you baby, we are giving him/her a lesson either good or bad depending on the type of interaction we have with him/her.
- Be intentional about all of your interactions, even during the smallest of tasks. Every time you touch your baby you are impacting their brain!



Neurons that FIRE together WIRE together