SENSE: Supporting & Enhancing NICU Sensory Experiences

A Guidebook for Parents in the NICU

Adopted for use at:
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Glossary

The NICU has its own language. We have created a list to explain some words that you will hear in the NICU and throughout this book:

- A baby who is not preterm grows inside the mother for 40 weeks before being born. So, the 25th week of pregnancy means that the baby is 15 weeks from his/her due date.
- **NICU**: the Neonatal Intensive Care Unit.
- **Due Date**: The date the baby would have been born if he/she had stayed inside mom for 40 weeks.
- **Full Term**: A baby who was born at his/her due date or two weeks before or after his/her due date.
- **Preterm**: A baby who was born three weeks or more before his/her due date.
- **Gestational Age**: The number of completed weeks that an infant spent developing in mom’s womb prior to being born (from the date of the mother’s last menstrual period).
- **Postmenstrual Age**: The number of weeks gestation an infant was born at plus the number of weeks since birth. This helps us understand the ‘developmental age' of your baby (how close or far from the due date your baby is). If your baby was born at 26 weeks gestation and is now 4 weeks old, his/her postmenstrual age would be 30 weeks (10 weeks before the due date).
- **Term Age**: A baby who has reached his/her original due date.
- **Womb or Uterus**: The place where a baby begins and grows inside of mom.
- **Senses or Sensory**: How you experience the world around you with touch, taste, smell, sight, hearing, and movement.
- **Development**: The process of growing and learning new things.
- **Intervention**: Something done to help and/or fix a situation; something done to help the baby develop or grow.
- **Treatment**: Something done to help and/or fix a medical problem.
- **Nursing Cares**: Something the staff does to help care for your baby. This can include diaper changes, checking temperature and other vitals, and performing other procedures.
Parenting in the NICU

What You Can Do For Your Baby
Importance of Parents

• You can offer security and support for your baby to help him/her continue to grow and develop while in the NICU.

• Parents provide stability for the baby in an unstable situation.

• The information in this book is a source of information that will help you support your baby throughout his/her stay in the hospital.
• Premature babies sleep most of the time. Sleep is very important for your baby’s development.

• If your baby is sleeping when you arrive, speak softly to let him/her know you are there. Place a hand on his/her head to let him/her experience loving touch. You can also talk to your baby without waking him/her.

• Your baby may be easily overwhelmed by bright lights, noise, quick movements, and medical care. Your comfort can help your baby.

• As your baby grows and develops, he/she will wake for longer periods of time and will interact more.
2

Experiencing the World

Our Body’s Senses
1. Touch
2. Body Awareness (understanding the parts of your body, where they are located, how they feel, and what they can do)
3. Movement
4. Smell
5. Taste
6. Hearing
7. Seeing
The tight wall of the womb keeps baby curled up, with pressure on his/her back, hands toward the middle of the body, and legs curled up.

The “hug” of the womb makes the baby feel safe and secure. Your baby is able to move about while still feeling his/her mother’s "hug" all around his/her body.

This teaches your baby about the position of his/her bones and muscles during bending, straightening, pulling, and stretching.
Your baby’s taste buds develop at the 13th to 15th week of pregnancy.

Your baby can smell and taste the mother’s diet; including salty, sweet, sour, bitter, and savory. The baby can perceive the unique smell of the mother. The sense of smell and taste together allow the enjoyment of many different flavors.

Smell has a strong connection to long term memory, and the baby recognizes the mother’s smell immediately after birth.

Recognition of mom's smell is important for bonding and makes your baby feel safe.
Growing Up in The NICU

How To Support Your Baby
The NICU Experience

- Premature birth and staying in the NICU changes how your baby experiences the world around him/her.

- He/she no longer has the protection of mom’s body, and he/she experiences all of the noise, light, touch, pain, and gravity that is in the outside world.

- Your baby’s senses continue to develop just like they would in the womb, but now those senses are getting extra stimulation.

- It is important to make sure that your baby receives the right kind of stimulation, so that it will support his/her developing senses.

- How? By giving positive sensory experiences that are close to what your baby would get in the womb, and spending quality time with mom, dad, and family every day.
• Talk to your baby softly. Let him/her know you are there.

• Let your baby hold onto your finger with gentle pressure.

• Babies in the NICU may better tolerate firm and non-moving touch, rather than light or moving touch.

• Touch and contact help your baby feel comforted and help to calm him/her.
Supporting Your Baby’s Sense of Smell

- Provide maternal scent through scent cloths.
- Sleep with or wear the scent cloth (wear in your shirt or bra).
- Return the scent cloth to the NICU and place it under your baby’s head.
- Wear one scent cloth while keeping another with your baby.
- Change your baby’s scent cloth every 24 hours to keep your scent near your baby.
- Allow your infant to smell your presence.
- Breastfeeding provides many benefits to your baby, including being near your scent.
- Kangaroo care provides close physical contact between parent and baby and allows your baby to experience your scent.
How Your Baby Talks To You

Watching His/Her Signals
Approach Behaviors: “I’m Ready to Interact”

- Focused Attention
  - Baby will make eye contact with you.

- Bright Eyed & Sucking Movements
  - Regular Breathing Rate

- Face, Arms, and Legs Relaxed
- Color: Pink
- Awake, Quiet, & Alert

Baby nestled, relaxed, and ready for comforting touch.
Overwhelmed Behaviors: “I Need a Rest”

Worried Face, Salute (Arms Up), & Finger Splay

Stop Sign (Hands up and out with fingers splayed)

Worried Face, Wrinkled Forehead (Furrowed Brow), & Hand Splaying

Yawning
Your Time With Your Baby

When To Interact
Sleep is very important for your baby, but having positive sensory experiences is also very important.

By making sure the experiences are planned around your baby’s sleep, your baby can have both uninterrupted sleep AND positive sensory experiences.

Some activities can be done while your baby is sleeping and may help your baby sleep.

Other activities should be structured around a time when your baby is going to be waking soon.
Your Baby’s Care Schedule

• Many babies are on a schedule so that all needed care happens around a scheduled time.

• While your baby is in the NICU, this is usually every 3 to 4 hours.

• When all of your baby’s care is done on this schedule, it allows your baby to sleep without interruptions before and after the scheduled time.
Helping Your Baby’s Senses

Week-By-Week Sensory Plan
Each week in the NICU, your baby's senses are getting stronger.

This next section will introduce week-by-week activities to do with your baby. The postmenstrual age at the top of each page will help you find the activities appropriate for your baby’s current developmental stage.

The symbols on the left show which sense each activity will be helping.
Here are some things you can do with your baby each day this week (as long as he/she tolerates it)

<table>
<thead>
<tr>
<th>TOUCH</th>
<th>HEARING</th>
<th>SMELL</th>
<th>SEEING</th>
<th>MOVEMENT &amp; BODY AWARENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do kangaroo care (skin-to-skin) or comforting touch with your baby for at least 1 hour per day.</td>
<td>Keep the area near your baby quiet, but engage in quiet conversations near the bedside and during diaper changes.</td>
<td>Place a scent cloth under your baby's head.</td>
<td>Keep lights off to protect your baby's eyes. Use a cover over the bed to further protect your baby from light (&lt;10 Lux).</td>
<td>Unswaddle your baby and allow stretching and free movement for 2 minutes prior to a diaper change at least 1 time per day.</td>
</tr>
</tbody>
</table>
Sensory Support: 30 Weeks*

Here are some things you can do with your baby each day this week (as long as he/she tolerates it)

**TOUCH**

Give at least 1 ½ hours of positive touch each day by doing one or more of these things:

- Do kangaroo care (skin-to-skin) for at least 1 hour.
- Provide comforting touch.
- Hold your baby in a blanket for 15 minutes at a time.

*Kangaroo care is preferred over holding at this age to help keep your baby’s temperature stable (which limits the amount of time for holding)*

**HEARING**

Read, sing, and/or speak to your baby for at least 30 minutes per day.

*At 45 decibels (the sound of a whisper or quiet conversation)*

**SMELL**

Place a scent cloth under your baby’s head.

**SEEING**

Keep lights off to protect your baby’s eyes. Use a cover over the bed to further protect your baby from light (<10 Lux).

**MOVEMENT & BODY AWARENESS**

Unswaddle your baby and allow stretching and free movement for 2 minutes prior to a diaper change at least 3 times per day.

*Denotes change from previous week*
Here are some things you can do with your baby each day this week (as long as he/she tolerates it)

<table>
<thead>
<tr>
<th>TOUCH</th>
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| Give at least 3 hours of positive touch each day by doing one or more of these things:  
  • Do kangaroo care (skin-to-skin) for at least 1 hour. 
  • Provide comforting touch. 
  • Hold your baby in a blanket. 
  • Do up to 15 minutes of massage, several times per day. | Give at least 3 hours of positive sound each day by doing one or more of these things:  
  • Read, sing, and/or speak to your baby. (can be broken up into 30 minute periods several times per day) 
  • Play soft music or recorded voice.  
  *At 45 decibels (the sound of a whisper or quiet conversation) | Hold your baby as often as possible. | Cycle light with 12 hours of the lights on (daytime, 25-100 Lux) and 12 hours of the lights off (<10 Lux). Avoid direct and bright lights.  
  • Have your baby try to focus on or follow your face (with your face 12-18 inches from his/hers). | Unswaddle your baby and allow stretching and free movement for 2 minutes prior to every diaper change.  
  • Rock during holding for at least 7 minutes. |
Helping Your Baby’s Senses

A “How-To” Guide
• Wear a button down shirt.
• Use the restroom and get any items you will need during your time holding your infant.
• Have a nurse or therapist assist you.
• Ensure that there is enough room on your baby’s leads to allow movement from the bed to the chair.
• Secure any tubes or leads in your hand or by clipping to your shirt.
• Unwrap the top of the infant but keep your baby in his/her positioning device or blanket.
• Unbutton your blouse and stand close to the infant’s bedside with a chair pulled up close to you.
• Bend down as close to your infant as you can, and then holding your baby’s body in alignment, scoop up your baby and place him/her directly on your chest.
• Once the infant is secure at your chest, stand back up tall and then pivot to sit down in the chair.
• Secure any additional leads.
• Secure the wrap around the infant (if you are using one) or use blankets or pillows to achieve comfort and support.
• Hold your infant skin to skin for a minimum of 1 hour to allow the infant to settle into it and achieve its benefits.
Positive Touch

• Your touch is comforting to your baby.
• Your touch lets your baby know you are near.
• Holding your baby or providing a hug with your hands is especially important during procedures or activities that may make your baby feel uncomfortable.

• To provide comforting touch (gentle human touch):
  • If baby is on his/her belly:
    • Place one hand between the buttocks and lower back
    • Place the other hand on the infant’s head
  • If baby is on his/her back:
    • Place one hand on the baby’s head.
    • Place the other hand on the baby’s belly.

* You can also secure the arms across the chest or up toward the face for added comfort.
* You can also use hands to tuck legs underneath or toward body.
Your baby should be in near darkness (<10 Lux) until 32 weeks postmenstrual age (2 months before the due date).

- Use covers over the baby’s bedspace.

- Always protect your baby from direct light exposure.

- Once your baby is 32 weeks postmenstrual age, cycling light should be started:
  - 12 hours of lights on
    - During the daytime
    - Dim light is ideal (25-100 Lux)
  - 12 hours of lights off
    - During the nighttime
    - Darkness, shielded from light (<10 Lux)
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<tr>
<th>Day of Week</th>
<th>Who did it today? (Check All That Apply)</th>
<th>Time in NICU (Check All That Apply)</th>
<th>Touch and Smell (Check All That Apply)</th>
<th>Movement</th>
<th>Seeing</th>
<th>Comments (How did it go? What did your baby like and/or dislike?)</th>
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<td>□ Movement Opportunity</td>
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<td>-Total time ____hrs in NICU: ____mins</td>
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<td>[ ] Lights: ___ On ___ Off</td>
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*Recommended: 30 mins
*Recommended: 1½ hrs

Room for comments on back of page →

Bed Space ____________
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<td>Follow your face? □ Yes □ No  Cycled Lighting? □ Yes □ No</td>
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