PEDIATRIC NEWBORN MEDICINE CLINICAL PRACTICE GUIDELINES

Infant Sleep and Therapeutic Positioning

© Department of Pediatric Newborn Medicine, Brigham and Women’s Hospital
Clinical Practice Guideline: Safe Sleep and Therapeutic Positioning

Points of emphasis/Primary changes in practice:

1. In spite of information provided to families regarding safe sleep practices, infant caregivers have been shown to follow the sleep practices that are modeled by caregivers in the hospital, often resulting in unsafe infant sleep practices upon discharge home.

2. Not all infants may qualify for safe sleep practices. Therefore, this guideline proposes specific strategies focused on therapeutic positioning for infants until they are ready to transition to safe sleep positioning.

3. Parent and staff education regarding the differences in therapeutic positioning and safe sleep practices are important. This guideline addresses these differences and educational materials have been developed.

Rationale for change: To establish optimal sleep practices for hospitalized infants who are cared for in both the newborn intensive care unit (NICU) and the well baby nursery, and to model safe sleep behavior prior to infant discharge from the hospital based on the guidelines proposed by the American Academy of Pediatrics in 2016.

Questions?
Please contact: Corinne Cyr Pryor (cpryor@partners.org) or Christina Meehan (cmeehan@partners.org).
I. Purpose

The purpose of these guidelines is to establish optimal sleep practices for hospitalized infants who are cared for in both the newborn intensive care unit (NICU) and the well baby nursery. These guidelines have been developed to ensure that infants receive care that is developmentally appropriate, while ensuring that therapeutic and safety concerns associated with infant sleep are met. In addition, these guidelines will ensure that modeling of safe sleep practices occurs prior to discharge for infant caregivers.

II. Scope

These guidelines apply to infants in both the NICU and well baby nursery. While the guidelines apply to all hospitalized infants, they are tailored to ensure that sleep positioning follows therapeutic positioning or safe sleep practices based on medical conditions, gestational age, and birth weight.

III. Guidelines

A. Therapeutic Positioning

1. Infant eligibility:
   - Any infant ≤ 32 weeks 1500 grams
   - Any infant in the first 24 hours following birth
   - Infant’s demonstrating respiratory distress symptoms such as: tachypnea, grunting, retracting, requiring oxygen therapy
   - Intubation
• CPAP
• Nasal cannula (except for planned home therapy) with flow ≤ 500 mL or minimum discharge flow
• Phototherapy
• Scalp IV or Central lines
• Neonatal Abstinence Syndrome (NAS) until captured and weaning successfully
• Medical condition that requires side-lying or prone position
• Neurological or neuromuscular disorders
• Birth defects (e.g. neural tube defects, hydrocephalus, Pierre-Robin Syndrome).
• Airway compromise

2. Alternate options to positioning may include:
   • Prone or side-lying positioning
   • Use of positioning aids
   • Elevating the head of the bed
   • Emphasis on midline head alignment with the use of positioning aids when in the supine position.
     i. This may facilitate head shaping prior to positional rotation of head with supine safe sleep.

B. Safe Sleep Practices
1. Infant eligibility:
   • Any infant ≥32 weeks 1500 grams who does not meet any of the eligibility criteria for therapeutic positioning
   • NAS infants who are captured with current treatment plan

2. Approach to positioning:
   • All positioning aids should be removed from crib or isoclette
   • All toys/stuffed animals should be removed from crib or isoclette
   • All extra blankets should be removed from crib or isoclette
   • Head of infant bed should be flat
   • Utilize sleep sacks for swaddling, no extra blankets in the bed
   • In the absence of a sleep sack, one single newborn blanket may be used to swaddle the infant at the level of the shoulders and not covering any part of the face.
   • Stable infants will not wear hats after the early postpartum period (i.e. 24 hours after birth or after the first bath) while the infant is sleeping unless needed for thermoregulation per staff discretion.

**NOTE:** Infants who are being gavage fed may have the head of the bed elevated during the feeding when on a pump if this has been shown to improve feeding tolerance for this infant.
C. Anticipatory Guidance

1. A specific discharge plan for each infant regarding sleep position will be developed and shared with parents in advance of discharge.
   - Parents will be encouraged to
     - bring in long-sleeved pajamas to dress infant appropriately to stay warm
     - not place a hat on the baby’s head
     - allow for supervised tummy time during parent visits and care times
     - implement Safe Sleep Practices approximately 2 weeks prior to discharge, for infant’s requiring home oxygen therapy
     - hold infants regularly during gavage feedings and/or awake periods whenever possible

IV. Guiding principles for this Clinical Practice Guideline

- All infants are placed in a supine position to sleep, unless medically indicated otherwise.
- All infants will be placed in alternative positions during awake periods.
- Open cribs are not to be covered with blankets or other materials.
- If therapeutic positioning is necessary as the infant approaches discharge, the team of caregivers, in collaboration with the infant’s family, will develop a plan for optimal sleep that ensures the infant’s safety.
  - If a medically indicated device is required (i.e. tortle, cranial cup), a plan for safe sleep will be developed in advance of discharge with the infant’s family.
- A physician order for Therapeutic Positioning vs. Safe Sleep Practices will be a part of daily rounds. A General Care Order that reads “Please follow Department of Pediatric Newborn Medicine Safe Sleep and Therapeutic Positioning Clinical Practice Guideline” will be entered by the physician caring for the infant. The algorithm can then be used to determine whether the infant would qualify for Safe Sleep or Therapeutic Positioning. If the team determines that positioning for an infant outside the guidelines is needed, an order indicating this will be entered.
### V. Procedures for implementing safe sleep guidelines

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Assess infant eligibility criteria for therapeutic positioning and safe sleep</th>
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<tr>
<td>Step 2</td>
<td>If infant meets <strong>safe sleep guidelines:</strong>&lt;br&gt; -- Modify the infant’s bed environment by removing any soft sleeping surface (e.g. sheepskin etc.), loose bedding, positioning aides, sleeping rolls, toys, music boxes and any other miscellaneous items from the inside of the infant’s crib.</td>
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<td>Step 3</td>
<td>Place HOB flat and tuck in all crib sheets.</td>
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<td>Step 4</td>
<td>Place infant on his/her back in crib&lt;br&gt; • In the absence of a sleep sack, one single newborn blanket may be used to swaddle the infant.&lt;br&gt; • Covering tops of open cribs is not allowed.&lt;br&gt; • Encourage positional neck rotation to both sides during supine safe sleep.</td>
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<td>Step 5</td>
<td>Assess and document tolerance of supine sleep position.&lt;br&gt; • Notify MD/NP with any issues or concerns with supine positioning and tolerance (e.g. changes in oxygen saturation, apnea, heart rate, difficulty transitioning to sleep state, etc.).</td>
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**PRIOR TO DISCHARGE HOME**

| Step 6 | Discuss with family:<br> • Safe Sleep guidelines in hospital/ home.<br>   o These include but are not limited to loose bedding, soft sleeping surfaces, overheating, exposure to smokers, co bedding<br> • Review SIDS risk factors and prevention. |
| Step 7 | Instruct parent(s) on the importance of:<br> • Providing alternative positions during awake periods<br> • Providing supervised tummy time<br> • Encouraging neck and head rotation to both sides during all play activities<br> • Providing supervised awake time in alternative positioning devices (such as infant seat, different holding/carrying positions) |
| Step 8 | Instruct parent(s) that infant(s) should sleep alone (i.e. infant(s) should not share a bed with adults or other siblings).<br> • The infant’s crib may be moved close to the parent’s bed but infant should not sleep in parent’s bed. |
VI. References


3. NICHD Pub. #065759, Safe Sleep for Your Baby; What Does A Safe Sleep Environment Look Like. 2006


Safe Sleep Positioning Algorithm

Is the infant ≥ 1500 grams or ≥ 32 0/7 weeks?

Yes

Does the infant have any medical conditions? (Phototherapy, scalp IV/central lines, respiratory support, NAS, etc.)

Yes

NICU Therapeutic Positioning

No

No

Does the infant have compromised respiratory symptoms and/or require oxygen therapy?

Yes

For infants who will be discharged on oxygen therapy, consider Safe Sleep Practice approximately 2 weeks prior to discharge.

Yes

NICU Therapeutic Positioning

No

Initiate Safe Sleep Positioning