

<p style="text-align: center;"><b>Neonatal Nursing Education Brief: Recommendations for Safe Infant Sleep</b></p>
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<p>Infants requiring NICU care often require prone positioning during their acute illness. Prior to discharge, the American Academy of Pediatrics recommends supine positioning to reduce the risk of SIDS.</p>
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<p>Safe sleep, sudden unexpected infant death, SIDS, SUID, preterm infants</p>
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# Recommendations for Safe Infant Sleep

## **Purpose and Goal: CNEP # 2079**

- Learn about safe infant sleep environments.
- Learn about barriers to providing optimal NICU care.

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## **Requirements for successful completion:**

- Successfully complete the post-test
- Complete the evaluation form

## Date

- June 2018 – June 2020

## Learning Objectives

- Describe the incidence of Sudden Infant Death Syndrome.
- Describe the risk factors for Sudden Infant Death Syndrome.
- Describe at least 2 barriers to providing safe infant sleep.

## Introduction

- SIDS is also known as Sudden Infant Death Syndrome
  - SIDS is the third leading cause of infant death in the US
  - SIDS is the most common cause beyond 1 month
- The current updated term for these deaths is SUID
  - Sudden Unexplained Infant Death
    - SIDS is a type of SUID
- The US has the highest rate of SUID among developed nations
- 4000 infants die unexpectedly in the US during sleep each year
  - From SIDS and SUID
  - From unknown causes
    - From accidental suffocation
    - From accidental strangulation
    - From unsafe sleep practices
  - Most of these occur in unsafe sleep environments
  - Most of these deaths are considered preventable
- Most SIDS deaths occur between 1 and 4 months
- SIDS is not a risk for infants >1 year of age

## Sudden Unexplained Infant Death

- SUID is defined as the sudden death of an infant
  - Less than one year of age
  - That cannot be explained
- Half of all SUIDs are due to SIDS
- There is a direct relationship between
  - Non-supine sleeping and SIDS
- The American Academy of Pediatrics (AAP)
  - Defines safe infant sleep as:
    - Supine positioning
    - In a safety-approved crib
    - Without positioning devices
    - Free of quilts, comforters, or soft surfaces
- Some infants have a higher risk of SIDS
  - Black infants have a 2-3 times greater risk
  - Native American infants have a 2-3 times greater risk
- Premature infants have the greatest risk of SIDS
  - Especially low birth weight infants
  - There is a 4 times greater risk if <37 weeks
  - There is a 10 times greater risk of <34 weeks
- Preterm infants are frequently placed prone
  - Often placed prone during NICU care
  - Especially during periods of acute illness
- All healthy infants should be placed supine for sleep
  - Preterm and term infants
  - Prior to discharge from the NICU
- The AAP recommends that all infants be placed supine
  - By 32 weeks gestational age
  - Or as soon as clinically stable if >32 weeks
- Despite the recommendations this is less likely to occur
- Several factors have been associated with this practice
  - It is critical that nurses act as role models for parents
  - Consistently using safe sleep practices in the NICU
    - Modeling risk reduction recommendations
    - Supporting parents in making best decisions at home

## **AAP Safe Sleep Recommendations**

- The AAP has developed guidelines for
  - Safe Infant Sleep
  - SIDS risk reduction
  - SUID risk reduction
- The goal of the guidelines is supine positioning for sleep
- Since the development of the guidelines
  - There has been a sharp decline in SIDS
    - More than 50% decrease
  - But there remains an increase in SUID
    - Suffocation
    - Entrapment
    - Asphyxia
- Several studies shown that safe sleep messages
  - Are not reaching all segments of society
- Reducing the rates of SIDS and SUID requires
  - Knowledge and action
  - By parents, caregivers, and health care providers
- The AAP has focused on educational needs
  - Of healthcare providers
  - Of parents and family members
  - Of childcare and daycare providers
- There are three main components of the guidelines
  - Breastfeeding is recommended
  - Infants should be immunized
  - Bumper pads should not be used in cribs
- It is important that all providers endorse the recommendations

## **AAP Guidelines for Safe Infant Sleep**

- The AAP Guidelines recommend the following:
  - Always use back only positioning for all sleep

- For every nap time
- For every bed time
- Always use a firm sleep surface
  - On a safety approved mattress
    - Cribs
    - Bassinets
    - Portable play yard
  - Covered by a snug fitted sheet
  - Car seats are *not* recommended
  - Other sitting devices are *not* recommended
    - Baby slings
    - Baby carriers
    - Baby swings
    - Baby strollers
    - Baby bouncers
- Place the baby to sleep in the same room as the parents
  - Room sharing is recommended
    - Bedside sleepers *are* acceptable
    - In bed sleepers are *not* recommended
  - Solitary sleeping is *not* recommended
    - For at least the first 6 months
  - Bed sharing is *not* recommended
    - Including couch or recliner sharing
- Always keep soft objects or toys out of the crib
  - No pillows
  - No quilts
  - No sheepskins
  - No stuffed toys
  - No bumper pads
- Always keep loose bedding out of the crib
  - No loose blankets
  - Blankets should be tucked in
- Do not use wedges and positioners

- Unless medically indicated
- Unless prescribed by a medical provider
- Do not expose the baby to tobacco smoke
  - Do not smoke during pregnancy
  - Do not smoke after birth
  - Do not smoke around the baby
  - Do not allow smoking around the baby
  - Do not expose the baby to second hand smoke
- Breastfeeding for one year is recommended
  - Breastfeeding reduces the risk by 50%
- Offer the baby a pacifier for sleep
  - Pacifiers are protective
  - They decrease the risk by 50-90%
  - They should be offered once breastfeeding well
- Never allow a baby to become too hot during sleep
  - Keep the sleep room comfortable
  - Avoid covering the baby's head
  - Dress the baby in one layer more
- Do not use home baby monitors
  - Heart monitors
  - Breathing monitors
- Do not use devices marketed to prevent SIDS
  - Owlet Smart Socks
- Immunize according to recommended schedule
- Supervised awake tummy time is recommended
  - Daily to facilitate development
    - Neck, arm, shoulder muscles
  - To minimize positional plagiocephaly

## **Situations Where Bed Sharing is Highly Dangerous**

- Bed sharing has become a common trend

- It has often been promoted to facilitate breastfeeding
- There are several circumstances that increase the risk
  - If the infant is <4 months old
  - If the infant was born premature
  - If the infant had low birthweight
  - If the bed sharer is a smoker
  - If the mother smoked during pregnancy
  - If the bed sharer has taken illicit drugs
  - If the bed sharer has taken drugs that cause sleepiness
  - If the bed sharer has consumed alcohol
  - If the bed sharer is not a parent
  - If there are multiple bed sharers
  - If the sleep surface is soft
    - A waterbed
    - An old mattress
    - A pillow top mattress
  - If the sleep surface is small
    - A couch
    - A sofa
    - A recliner
  - If soft bedding is present
    - Pillows
    - Blankets

## **The Importance of Transitioning to Supine Sleep**

- All NICU nurses should endorse safe sleep practices
- All NICU nurses should model safe sleep practices
  - “Back to Sleep” positioning
  - “Safe to Sleep” sleep environments
- When a recommendation cannot be followed
  - The reason should be provided to the parents

- Safe sleep education should be reinforced
- Safe sleep should be implemented before discharge
- Several studies show that parent education is critical
  - Ongoing education is more effective
    - Starting at birth
    - Consistently modeled
    - Continued throughout the hospital stay
    - Provided by multiple health care providers
  - Traditional discharge teaching is not effective
  - Parents will mimic what they see done in the NICU
- All infants should be placed supine well before discharge
- Especially premature infants who are at highest risk
- NICU practices need to be carefully monitored
  - Swaddling is considered safe if done correctly
    - Supine positioning
    - Single thin blanket
    - Careful wrapping
      - Loose and not too tight
        - Not restricting breathing
        - Not restricting hip movement
      - Not too loose that it covers the face
      - Not higher than the shoulder level
    - Commercial swaddle sacks are safe and acceptable
    - Swaddling should be discontinued
      - When the infant starts to roll over
      - Often as early as 2 months after discharge
  - Skin-to-skin care is safe and recommended
    - Only if the parent is awake
    - Only if the baby is closely watched by the parent
    - Once a parent becomes sleepy or distracted
      - The infant should be placed in the crib
- Parent education is important, but modeling is critical
  - Remove extra blankets from crib



- Remove positioning aids from crib
- Remove caregiving supplies from crib
- Transition infant to supine positioning
- Tuck blankets securely around mattress
- Studies have shown the least implemented practice is:
  - Removing soft items from the crib
  - Especially stuffed animals and stuffed toys
  - This is an unsafe practice and needs reinforcement
- Studies have shown parents intend to place infants' supine
  - But only 67% use supine positioning
  - Up to 23% use unsafe sleep environments

## **Barriers to Implementing Safe Sleep Guidelines**

- There are several contributing barriers to implementation
  - Hospital policies
  - Noncompliance with guidelines
  - Ongoing education for nurses
- Hospital policies can improve compliance by 50%
  - Not all hospitals have Safe Sleep policies
  - A Safe Sleep policy can markedly improve transition
  - Clear hospital policies can standardize care and time lines
- NICU nurses' perceptions of when to transition infants
  - Despite awareness of AAP safe sleep guidelines
    - Transition to supine sleep positioning varies
  - 53% of nurses strongly agree guidelines make a difference
  - Yet nurses continue to place infants in non-supine positions
- Up to 95% of nurses believe a non-supine position is optimal
  - Based on perceived comfort
  - Based on personal preferences
  - Based on developmental support needs
- Nurses cite traditional practices for noncompliance

- Side lying considered safer
  - Less risk of reflux
  - Less risk of aspiration
  - Studies disprove both
- Improved respiratory status when not supine
  - Prone positioning is not safe at home
    - It affects cardiovascular control
    - It leads to rebreathing of carbon dioxide
    - It leads to hypoxia
    - It leads to upper airway obstruction
    - It contributes to infant overheating
- When nursing care is inconsistent
  - Parents become confused about best practice
  - Parents become confused about AAP Guidelines
- Education for nurses varies from hospital to hospital
  - Studies show 40-53% have received SIDS education
  - After formal education → compliance improves by 90%
- Education for parents remains a barrier as well
  - Parents cite reasons that are similar to nurses
    - Parental preference
    - Improved infant comfort
  - Parent education is inconsistent
    - 20% of nurses provide no education
    - 33% of nurses provide verbal information
    - 16% of nurses provide written information
  - Parental knowledge does not always predict practice
  - Consistent education and role modeling remains critical
    - Studies show the importance of this approach
    - After education → compliance improves by 82%
    - After education → 97% retention rate at 4 months

## Summary

- Maintaining safe sleep practices in the NICU is important
  - It is more than placing infants “Back to Sleep”
  - It is providing “Safe to Sleep” sleep environments
- Nurses are on the frontline of providing safe infant care
  - Nurses can readily ensure safe infant sleep at home
- Parents learn by observation during their NICU stay
- Ongoing education and adherence to guidelines improves safety

## References

Hitchcock, S.C. 2017. An Update of Safe Infant Sleep. *Nursing for Women’s Health*, 21 (4), p. 307-312.

Naugler, M.R. & DiCarlo, K. 2018. Barriers to and Interventions that Increase Nurses’ and Parents’ Compliance with Safe Sleep Recommendations for Preterm Infants. *Nursing for Women’s Health*, 22 (1), p. 24-38.

Colson, E.R., Geller, N.L., Heeren, T. and Corwin, M.J. 2017. Factors Associated With Choice of Infant Sleep Position. *Pediatrics*, 140 (3), p. 1-10.

Andreotta, J., Hill, C., Eley, S., Vincent, D., and Moore J.M. 2015. Safe Sleep Practices and Discharge Planning. *Journal of Neonatal Nursing*, 21, p. 195-199.

Hwang, S.S., O’Sullivan, A, Fitzgerald, E. Melvin, P, Gorman, T, and Fiascone, J.M. 2015. Implementation of Safe Sleep Practices in the Neonatal Intensive Care Unit. *Journal of Perinatology*, 35, p. 862-866.

Barsman, S.G., Dowling, D.A., Damato, E.G., and Czeck, P. 2015. Neonatal Nurses’ Beliefs, Knowledge, and Practices in Relation to Sudden Infant Death Syndrome Risk-Reduction Recommendations. *Advances in Neonatal Care*, 15 (3), p. 209-219.

McMullen, S.L., Wu, Y.W., Austin-Ketch, T, and Carey, M.G. 2014. Transitioning the Premature Infants from Nonsupine to Supine Position Prior to Hospital Discharge. *Neonatal Network*, 33 (4), p. 194-198.

Grazel, R., Phalen, A.G., and Polomano, R.C. 2010. Implementation of the American Academy of Pediatrics Recommendations to Reduce Sudden Infant Death Syndrome on the Neonatal Intensive Care Units. *Advances in Neonatal Care*, 10 (6), p. 332-342.