

# SIDS And Safe Sleep

Laszlo Sandor

New practices and products can ameliorate the danger of SIDS. Neonatal Intensive Care looks at how a comprehensive program for NICU nurses and parents at St Joseph's Hospital Health Center in Syracuse, NY, has influenced care strategies through direct applications of procedures that promote safe-sleep compliance.

## Background

Many recommendations have been promulgated for safe-sleep procedures in the NICU. According to the journal, *Advances in Neonatal Care*, "Clear policies regarding infant sleep practices must be written and enforced. Parent education needs to be an integral part of the policy. Role modeling sleep practices in the hospital and instructions regarding safe bedding materials must also be included."

The American Academy of Pediatrics, under the aegis of its Back to Sleep campaign, has published specific guidelines for SIDS prevention that include: the providing of a firm sleep surface, no soft objects or loose bedding in the sleeping area; no smoking; no bed-sharing; a regulated temperature for the infant, and supine positioning. The latter recommendation has provided the greater challenge toward implementation in the NICU, where nurses are often faced with a dilemma, in that clinical strategies have often been thought to necessitate the prone positioning of infants. It's difficult to get healthcare practitioners to change longstanding procedures; also, until recently, there has been no rigorous attempt to promulgate the benefits of switching infants to the supine position in the NICU. However, the AAP's recommendations, reinforced by clinical evidence, are finding their place in this critical care environment.

Beyond the hospital environment, NICU nurses have also had little guidance about what to tell anxious parents when they are taking their tiny infants home. A recent study revealed that only half of the surveyed nurses provided sleep-positioning instructions for parents, and that the AAP's recommendations weren't being consistently promulgated.

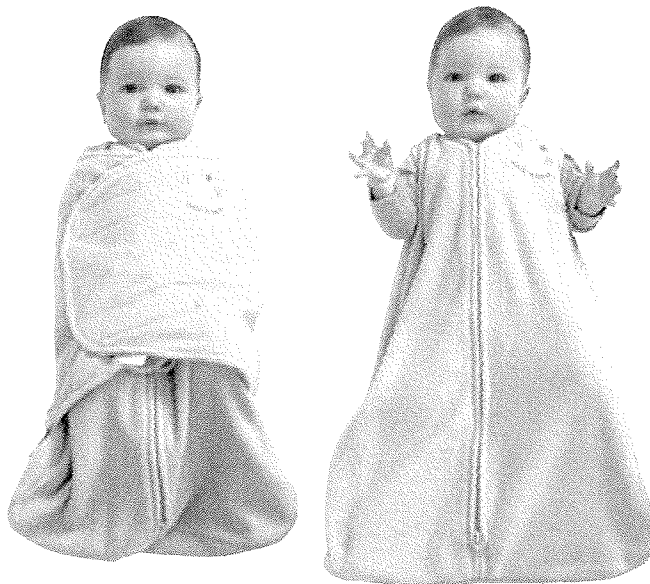
St Joseph's Hospital Center in Syracuse, NY, recently put into practice a program aimed at both SIDS strategies in the NICU and an educational component for when infants are discharged.

## Education Is Key

St Joseph's developed an education module that includes

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Laszlo Sandor is a contributing editor to *Neonatal Intensive Care*. HALO SleepSack and HALO SleepSack Swaddle are registered trademarks of Halo Innovations, Inc. Editorial material for this article was provided by the company.



The HALO SleepSack.

an online SIDS teaching tool, updates on sleep positioning, instructions for discharge education, SIDS education as a regular component of new nurse training, and the use of products that enhance safe SIDS procedures, including the use of a "sleep sack" and "crib card."

The hour-long computerized educational component of St Joseph's nurse training program is designed to provide a set of empirical standards for use by NICU nurses, and is consistent with the aforementioned AAP guidelines. While the computerized training schema, which is undergoing NNP review and approval, is still in the process of fine-tuning, it is envisioned that the process will provide a valuable teaching tool.

Aspects of the program include a SIDS "Crib Card" for post-NICU caregivers to review while their infant is still in the unit. The card, which is to be placed in the crib or incubator, promulgates supine positioning, and incorporates all of the AAP's recommendations for safe sleep [see sidebar].

## Supine Sleep in the NICU

Initially, the supine-positioning of infants in the NICU met with some resistance. The *Journal of Neonatal and Perinatal Nursing* has noted that during prone sleep, "an infant is at risk for rebreathing oxygen-poor air trapped in an air pocket created by soft bedding. Prone sleep is deeper and more prolonged than supine sleep. Without an underlying disorder, the challenged infant would arouse and react to environmental conditions and restore homeostasis. In association with an underlying disorder, the additional compromises to arousal may not be overcome."

# Stepping Up

## The Five Steps to Home

1. No loose bedding, pads, stuffed toys in the crib. (Infants in the NICU or hospital are supinely positioned a week before discharge.)
2. Don't overheat the room, and don't bundle the baby while it's sleeping. The ideal room temperature is between 65 and 71 degrees. Don't cover the baby's head. Don't sleep with your baby in the same bed.
3. Watch the baby! Babies can play on their bellies so long as they're observed.
4. Tell nannies and grannies: this baby sleeps on its back, only.
5. Put out that cigarette. No smoking in the home.

It was also noted that this issue has been studied. There has been a welcome rise in the use of a supine sleep position for infants. "There is no evidence of an increased risk of death from aspiration."

According to a survey about infant sleep positioning in *Advances in Neonatal Care*, up until recently, "supine position was identified as the best sleep position for preterm infants in [only] 5.1% of respondents. Among the 95% of respondents choosing a non-supine sleep position, neonatal nurses identified the best sleep position as prone." Contrary to common perception, the study pointed out, "Although reflux and cardiorespiratory events are common in preterm infants, there is little evidence to suggest that they are causally related." Another concern was the possibility of plagiocephaly without stenosis. Despite anecdotal evidence, it has been noted that without a population-based study of its incidence, it remains unclear if and by what degree plagiocephaly without stenosis is occurring. In any event, the sections on Plastic Surgery and Neurological Surgery of the American Academy of Pediatrics Committee on Practice and Ambulatory Medicine continue to support the benefits of supine sleep.

As a result of careful study, and after giving due consideration to the special needs of tiny babies in the NICU, St John's NICU and hospital policy has been brought up to date and now eliminates prone or side-positioning of healthy infants, and also requires stabilized NICU infants to be supinely positioned. The policy also encodes and enforces the use of "sleep sacks" to maintain normal infant body temperature. In addition, NICU nurses were instructed to discuss discharge procedures with parents, and to document discharge instructions to parents or other post-hospital caregivers.

## Warming Trend

In addition to enforcing the supine positioning of infants, a major component of St Joseph's program to promote safe sleep is making sure that infants don't become overheated. To this end, the hospital currently uses the HALO SleepSack wearable blanket. SleepSack wearable blankets are designed to keep the baby at the proper temperature, and are also designed so they can't cover the infant's head. Initially, St Joseph's used a locally-manufactured "sleep sack." Some nurses were resistant to use of the "sleep sack," believing the infants weren't warm enough, and that the use of a sack would cause a return to the incubator.

However, St Joseph's decided that the sack was in fact the best option, and initiated a study using the HALO SleepSack Swaddle (Halo Innovations, Inc, MN; halosleep.com). The Swaddle by Halo is an all-around covering that provides extra warmth, and the use of this product has improved nurse compliance. St Joseph's now also uses the HALO SleepSack wearable blanket for all infants when they're transferred to an open crib.

The SleepSack's design also encourages proper sleep positioning. In a recent study, 74% of parents using the SleepSack at home placed the infant in a supine position because the zipper was located on the front. In addition, the design kept infants from turning over, scrunching under the blanket, and overheating. By 2006, St Joseph's reported that all the infants in the NICU were sleeping supine and in a SleepSack or SleepSack Swaddle. By the following year, 70% of infants were lying supine in both cribs and incubators. Some of the infants had an increased oxygen demand, but oxygen administration was proportionately increased.

## Sharing Beds

St Joseph's also instituted the AAP's recommendations on bed sharing. Infants rooming with their mothers in the maternal-child unit of the hospital were provided with their own bassinet, and twins were also kept in separate beds. Nurses observed mothers and babies and offered instructions on safe-sleep procedures. Mothers who were tired and falling asleep with their infants were told to put the baby in the crib or call hospital staff to do so. Mothers were told about the dangers of falling asleep in the same bed with their babies. It was hoped that the in-hospital instruction and example would encourage mothers not to bed-share once they took their infants home.

In addition, St Joseph's also bought HALO SleepSack Swaddles for term infants and incorporated their use into the daily sleep-care of the infants.

## Summary

The safe-sleep model based on the AAP's Back to Sleep campaign offers a practical approach to implementation of the AAP's SIDS-reducing recommendations. St Joseph's education campaign, with its computerized teaching component, begins at the nursing level, and mandates and codifies safe sleep principles. The basics of SIDS-preventive safe sleep procedures are, concurrently, an integral part of St. Joseph's discharge procedures. While it has been recognized that ingrained nursing practices relating to sleep positioning would be a challenge to implement, St. Joseph's sought to offer a comprehensive program that has made this possibility into a reality.

## References

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