

Starting A Hospital-Based Infant Safe Sleep Program: a step by step guide.

In order to reduce sleep-related infant deaths in a community, it is critical to provide a consistent and repetitive message about infant sleep safety. A hospital-based program will achieve this goal of reducing the risk of injury and death to infants while sleeping, through multiple processes including: 1) providing accurate and consistent infant safe sleep information to hospital personnel including medical, nursing, breastfeeding, child birth education, and nutritional staff; 2) enabling the hospital to implement and model infant safe sleep practices throughout their facility; 3) providing direction to health care professionals so that safe sleep education for parents is consistent and repetitive.

Developing a hospital-based infant safe sleep program requires two components: program acceptance and curriculum development. Program acceptance must occur at multiple levels of the organization including hospital administration, physicians, and nursing staff. Initial program support will most easily be found at the physician level. Focus on the staff who are already knowledgeable about SIDS and accidental infant sleep deaths. Pediatricians, neonatologists and emergency room physicians all have first-hand experience with these tragedies, so they have a vital interest in eliminating these events in their communities. Additional support can be obtained by working with public healthcare advocacy groups such as local health bureaus, Safe Kids Coalitions, Cribs for Kids programs, and Child Death Review teams.

A presentation of the need for an infant sleep safety program can be provided to hospital administrators with the support of the chairmen of the departments of pediatrics and/or emergency medicine. The presentation should: 1) explain the scope of the problem, including both national and local statistics; 2) describe the logistics of the program, focusing on the fact that the program is based on a successful model that has produced excellent public health care results; 3) discuss cost-effectiveness.

Sample Outline:

- A. Definitions: SUID, SIDS
- B. Scope of Problem: include graph of causes of death 1 month to 1 year
4000 deaths per year
- C. Causation: triple risk model, brain-stem abnormalities, serotonin receptors....focus on modifiable risk-factors
- D. AAP statements and evolution of Back to Sleep Campaign
- E. Provide statistics on increasing risk of SIDS with different unsafe sleep environments.
- F. Discuss fall in SIDS rates with rise in supine sleeping (graph)...focus on simple, inexpensive intervention results in 50% decrease in mortality!!
- G. Discuss most recent data- stagnant SIDS rates, coding shift, identification of bed-sharing risk and new AAP recommendations

- H. Show data on percent of SIDS cases with unsafe sleep environment (Allegheny County, N. Carolina- 90%). Include local data!!! Show pictures of sample unsafe sleep environments.
- I. Provide current recommendations on Safe Sleep. Include picture.
- J. Explain the need for hospital-based program:
 - Only way to capture 100% of birthing population
 - Nurses as role models- parents will do what they see the nurse do
- K. Discuss the program model- based on Shaken Baby Program- which resulted in 50% reduction in shaken baby injuries in Upstate NY.
- L. Discuss program components: family views DVD, one-to-one re-enforcement of information with nursing staff, signing voluntary commitment statement of understanding
- M. Anticipated results- 50% reduction in local infant sleep-related deaths
- N. Inexpensive program- cost of DVD, minimal paper work, can use free brochures from the National Institute of Health (NIH), volunteerism

The other critical component to program acceptance is achieving “buy-in” at the nursing level. Just as pediatricians have an understanding of the tragedy of SIDS, most newborn and pediatric nurses are knowledgeable on the topic, making them quick allies to the concept of a program designed to reduce local infant mortality rates. In a hospital-wide program, initial discussions should include head nurses of the newborn nursery, intensive care nursery, labor hall, and the pediatric floor (can also consider the emergency department). Discussions should be held at the staff organizational level, including multidisciplinary committees (i.e., newborn or neonatal care committees, nursing counsels such as education and practice committees). These committees contain nurses who are leaders and can support the dissemination of the program concept to the general staff. A more complete discussion of the program can than be presented at nurse staff meetings and reinforced by e-mail.

The next step in program development is to provide intensive infant sleep safety education to all staff involved in infant care. Staff need to develop a level of expertise to become comfortable discussing safe sleep issues with families. Studies show that nurses are reluctant to be safe sleep advocates for multiple reasons including: a lack of formal training, a lack of time to review research, a lack of understanding of statistics, and a disbelief that changing their behavior will make a difference (1. survey Franklin County Birthing Hospitals, 2. Stasny 2004). Furthermore, there are still many nurses who are uncomfortable with the back to sleep recommendation, even though it has been the standard of care recommended by the American Academy of Pediatrics for 19 years. However, nurses are crucial role models for parents. Parents who see their baby place supine in the nursery are almost twice as likely to continue this practice at home.

There are some potential pitfalls in the nursing component of the education. Recognizing and dealing with these concerns at the outset, will result in better program compliance. One important issue to deal with is breastfeeding- some individuals will claim that an infant sleep safety program is anti-breastfeeding because the baby is not sleeping in the mother’s bed. This is a completely untrue statement. It needs to be emphasized that the

program fully supports the AAP recommendation that all infants be breastfed through one year of age. A related concern is that the program is anti-bonding. Again, this is untrue. It should be emphasized that mothers can spend time in bed with the infant whether to breastfeed or to bond, as long as mother is fully awake. Once the mother is feeling drowsy, the baby should be returned to the safety of the crib. Finally, there is a small minority of healthcare providers who are advocates of bedsharing or even a family bed. They will reference the writings of Dr. Sears or the research of Dr. McKenna (who is an anthropologist, not a medical doctor). In response, it should be emphasized that even Dr. McKenna's research shows that mothers respond differently to the infant in bed compared to the father and other children. This suggests that the family bed is an inherently dangerous setting for the infant. Furthermore, it should be stressed that even these advocates warn that bedsharing not occur in cases where the caregiver is excessively tired. This term is not defined, but it is very concerning that it most likely describes the vast majority of new parents.

Once nursing education is complete, the program is ready for introduction to the public. The next portion of this discussion will focus on curriculum development. The overall curriculum was created by combining the best materials developed by numerous infant sleep safety groups and merging them into a comprehensive program that allows for a consistent and repetitive message about infant sleep safety throughout the community. The curriculum can be divided into two components: healthcare provider education and public education.

Provider education focuses on the nursing staff because they have the greatest amount of interaction and educational opportunities with families. However, physicians and their office staff should not be excluded from the educational process. (Physicians can also be educated through grand rounds.) When physicians talk to new mothers about infant sleep safety, babies are 3 times more likely to be kept supine at home! Staff should have guidelines in place for infant sleep safety in the hospital. Most hospitals do not have an infant sleep safety policy, so one should be developed to set the standard of care at the institution. A sample policy can be found on the Allegheny County Department of Health website. The York Hospital policy was developed by modifying elements of the Allegheny County sample, merging it with existing policy, and then finalizing it through newborn and pediatric hospital committees.

Multiple components were developed for staff education and the maintenance of proficiency in infant sleep safety. Nurse education on infant sleep safety can be implemented by direct contact with in-service lectures or by computer-based training. Other programs have reported better compliance of distributing the information by the computer-based route, however, they have also reported better compliance of program implementation when the teaching is done face-to-face. Our hospital chose live in-services so questions could be addressed directly. This route will require a significant number of man-hours. However, anyone who has been involved in resuscitation attempts of a SIDS infant or an apparent life-threatening event (ALTE) should provide an excellent pool of volunteers to support these educational efforts. At our hospital we made extensive use of the Cribs for Kids Program staff, which mostly consists of nurses

from our neonatal intensive care unit (NICU), the newborn nursery (NBN), and the pediatric floor.

The in-service curriculum was developed by our local Cribs for Kids staff. A power point presentation was developed from the AAP SIDS policy statement, NIH materials, and Cribs for Kids lecture materials. This was supplemented by informational poster boards made available in infant care areas. The presentation is similar in format to that described above for administrators. However, the nursing presentation focuses more on some of the pitfalls noted above. Additional time is also spent on the concern of aspiration events. It includes a demonstration of the anatomic and physical factors in the relationship between the trachea and the esophagus to smash the enduring misconception of a relationship between supine (back) sleeping and aspiration events.

Multiple in-service sessions were held on varying days and times to obtain compliance from all staff on all work shifts. The sessions were made mandatory. In addition to the power point presentation, staff watched the parent teaching video to reinforce the lecture material as well as make them familiar with what the parents will be learning. Our research, as well as others, shows that the information is well-received and results in sustained knowledge and behaviors. Continuing education credits of one hour were awarded for attending the in-service.

To help staff maintain their expertise on infant sleep safety, we have prepared additional materials that are available at every nursing station. This consists of a safe sleep toolkit developed by the Allegheny County Department of Health (a modifiable sample is on this web page, the original document is available on their website) and modified for our local use. The toolkit includes the hospital policy on infant sleep safety, a review of appropriate safe sleep practices, and discussion points to review with families, focusing on dialogue to educate families who offer resistance to following the safe sleep guidelines being taught in the hospital. To further assist nurses at the bedside, we developed an informational flip chart with specific prompts for the staff on one side, and easy to understand pictures on the other side to show the family. Finally, in order to maintain long-term retention of safe sleep information, we have developed a computer-based review course. The information was modified from a combination of sources including a SIDS risk reduction program developed by the NIH. This has been made part of yearly nursing competencies and nurses must demonstrate adequate understanding of the materials by passing a post-test at the end of the review session. The NIH materials can also be used (Continuing Education Program on SIDS Risk Reduction).

As mentioned earlier, the public education component of this program is based on the Shaken Baby Or Abusive Head Trauma Education model. The reasons for choosing this model include: it is easy to assemble, it is not time-consuming for nursing staff, it is inexpensive, **but most importantly, it works!** The Shaken Baby education model was developed by Dr. Mark Dias, a neurosurgeon who had the idea that extensive parental education on this “taboo” subject could result in a decrease in shaken baby injuries. The program consists of: having the family watch an educational video, followed by one-to-one reinforcement with the nursing staff, and then having the family sign a voluntary

acknowledgement statement stating that they have received information on Shaken Baby Syndrome and understand that shaking a baby can result in brain-injury or death. Dr. Dias studied the Upstate New York area after implementing this program and reported a 50% reduction in Shaken Baby injuries (Peds, April 2005).

We have replicated the elements of the Shaken Baby Program for our Infant Safe Sleep Initiative. After delivery, when mothers are comfortably recovering on the maternity ward, they watch a video on infant sleep safety (English version developed by Dr. Tyralla, medical director of Cribs for Kids, Spanish version developed by SIDS-ILL). The video discusses all the essential points for reducing the risk of SIDS, including: having the baby sleep alone on a firm mattress in an uncluttered crib, always placing the infant on the back for sleep, not over-bundling, providing a smoke-free environment, offering a pacifier at sleep times, and providing supervised tummy time. After the family has viewed the video, the nurse reviews the essential safe sleep elements with direct dialogue with the family, making use of a safe sleep brochure (We are currently using the NIH brochure) or when available, a safe sleep flip chart. This is an excellent time to use “teach back” technique to make sure that families understand the key components to infant sleep safety. After the family has completed the education process, we ask them to sign a voluntary acknowledgement statement. This statement confirms that the parents have received information on infant sleep safety and that they understand that the safest position for an infant to sleep is on the back and that sleeping with an infant increases the risk that the baby can die of SIDS. It also makes families focus on how important we feel this information is for them. (One issue that came up with nursing staff was a concern that public authorities might try to use this documentation in prosecuting a family if they sleep with an infant and he/she subsequently dies. We had to reassure staff that in general, families are not prosecuted in such cases, that there are no “sleep police,” and that the contract does not bind them to follow our recommendations- it only asks them to acknowledge receiving and understanding the information. We also have emphasized that this documentation protects the hospital from a potential lawsuit if a family tries to claim that they were not given safe sleep information.)

In addition to the basic replication of the elements of the Shaken Baby Program, we have supplemented our program with additional features to enhance the safe sleep message. We have posters with the Back to Sleep message in English and Spanish placed prominently in every maternity room, and we have offered them to every pediatric, obstetrical, and family practice group in our community. We offer sleep sacks for purchase on the maternity ward and we have made them available at discount as baby gifts in the hospital gift shop. Some hospitals give them to new families as a gift at discharge. We have developed a sample nursery on the maternity floor to reinforce safe sleep habits to the general population. We also have additional safe sleep information on our hospital web site. To further extend education into the community, we have included the safe sleep teaching at grandparent classes. Another area where education can be offered is at child care centers, which have a disproportionate number of SIDS deaths. Another technique we have used to disseminate information to the public has been through the hospital phone service. People on hold hear the basics of the safe sleep message.

Every new family is discharged from the hospital with a safe sleep brochure. We provided safe sleep in-services for all the home visiting nurse staff so they can properly assess what is happening in the home environment and reinforce the safe sleep message. Families who participate in the York County Cribs for Kids Program receive a follow-up phone call approximately 4 to 6 weeks after delivery to get program feedback through a survey that also reinforces the safe sleep information.

On the pediatric ward, we have developed an “against medical advice” (AMA)-type non-compliance form to deal with families who insist on sleeping with their sick infant in the hospital. On the maternity ward this is not a problem as babies can be returned to the nursery if a mother falls asleep with the baby in her bed. However, there is no such safe haven on the pediatric floor. The form was developed to minimize confrontation with families. When an infant is found sleeping with the parent, the staff provides education on safe sleep and informs them of the hospital policy against bedsharing due to the increased risk of SIDS. If the family fails to comply with the request, then they are given the non-compliance form to sign. The form states that the family has been given education on infant sleep safety, they are aware of the hospital policy forbidding bedsharing due to the increased risk of SIDS, and that by signing the form they absolve the hospital of responsibility if a suffocation event occurs.

We have monitored our program’s outcomes with IRB-approved research. We have shown that new mothers who have undergone our education program have a statistically significant increase in intention to follow through with supine sleep and the use of a crib. A more extensive review actual use of all safe sleep recommendations in the home is ongoing.