FIRST CANDLE/SIDS ALLIANCE REVISES IMPORTANT CHILD CARE RECOMMENDATIONS FOR PARENTS AND CAREGIVERS

Summary of the American Academy of Pediatrics Revised Policy Statement on SIDS:

While there has been a dramatic decrease in the incidence of sudden infant death syndrome (SIDS) since the initiation of the national Back To Sleep campaign in 1994 (53%), statistics show that some of the recent decrease of the last several years may actually be a result of coding shifts to other causes of unexpected infant deaths, rather than a continued steady decline in SIDS rates. As a result, the American Academy of Pediatrics (AAP) recently convened a *Task Force on Sudden Infant Death Syndrome* to take a closer look at several issues that have become relevant since the last statement on SIDS was published in 2000.

In an effort to stimulate a continued decline in SIDS rates among the general population, the AAP today announced the release of revised recommendations for parents, caregivers and health professionals to further reduce the risk of SIDS for their infants. A summary of these revisions include an emphasis on supine sleep (fully on the back) as the only recommended sleep position, avoiding redundant soft bedding and soft objects in the infant's sleep environment, the hazards of adults sleeping with an infant in the same bed, the SIDS risk reduction benefit associated with having infants sleep in the same room as adults, the use of pacifiers at naptime and nighttime, the importance of educating secondary caregivers and neonatalogy practitioners on the importance of "back to sleep,' and strategies to reduce the incidence of positional plagiocephaly associated with supine positioning. A comprehensive, detailed list of the revised recommendations can be found at the end of this report.

Several other issues were not addressed in this revised policy statement because there have been no new findings. These include the effects of overheating, maternal antenatal smoking and infant environmental smoke on SIDS incidence; cardiac arrhythmias as an etiologic factor in SIDS; and complications of non-prone sleeping other than plagiocephaly.

The predominant hypothesis regarding the etiology of SIDS remains that certain infants, for reasons yet to be determined, may have a maldevelopment or delay in maturation of the brainstem neural network that is responsible for arousal and affects the physiologic responses to life-threatening challenges during sleep. Recent examinations of the brainstems of infants who died of SIDS have revealed unique deficits in serotonin receptors in a network of neurons throughout the ventral medulla. The medullary regions involved develop in mid-gestation from a common embryonic anlage and are thought to be involved with arousal, chemosensitivity, respiratory drive, thermoregulation and blood pressure responses.

It is important to note that the revised recommendations were developed to "reduce the risk" of SIDS and not as preventative measures per se. Risk, in this case, refers to the probability that an outcome will occur given the presence of a particular factor or set of factors. Association between risk factors (e.g. socioeconomic characteristics, behaviors or environmental exposures) and outcomes (e.g. SIDS) do not necessarily denote causality. In fact, the best current working model of SIDS suggests that more than one scenario of pre-existing conditions and initiating events may lead to SIDS. Therefore, when considering these recommendations, it is misguided to focus on a single risk factor or attempt to quantify risk for an individual infant.

AMERICAN ACADEMY OF PEDIATRICS

Task Force on Sudden Infant Death Syndrome (SIDS)

The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleep Environment and New Variables to Consider in Reducing the Risk of SIDS

Recommendations:

1. ***Back to sleep***. Infants should be placed for sleep in a supine position (wholly on the back) for every sleep. Side sleeping is not as safe as supine sleeping and is not advised.

2. ***Use a firm sleep surface***. Soft materials or objects, such as pillows, quilts, comforters, or sheepskins, should not be placed under a sleeping infant. A firm crib mattress, covered by a sheet, is the recommended sleeping surface.

3. ***Keep soft objects and loose bedding out of the crib.*** Soft objects such as pillows, quilts, comforters, sheepskins, stuffed toys, and other soft objects should be kept out of an infant's sleeping environment. If bumper pads are used in cribs, they should be thin, firm, well secured, and not "pillow- like." In addition, loose bedding, such as blankets and sheets, may be hazardous. If blankets are to be used, they should be tucked in around the crib mattress so the infant's face is less likely to become covered by bedding. One strategy is to make up the bedding so that the infant's feet are able to reach the foot of the crib (feet to foot), with the blankets tucked in around the crib mattress and reaching only to the level of the infant's chest. Another strategy is to use sleep clothing with no other covering over the infant or infant sleep sacks that are designed to keep the baby warm without the possible hazard of head covering.

4. ***Do not smoke during pregnancy***. Maternal smoking during pregnancy has emerged as a major risk factor in almost every epidemiologic study of SIDS. Smoke in the infant's environment after birth has emerged as a separate risk factor in a few studies, although separating this variable from maternal smoking before birth is problematic. Avoiding an infant's exposure to second-hand smoke is advisable for numerous reasons in addition to SIDS risk.

5. ***A separate but proximate sleeping environment is recommended***.

   The risk of SIDS has been shown to be reduced when the infant sleeps in the same room as the mother. A crib, bassinet, or cradle that conforms to the safety standards of the Consumer Product Safety Commission and ASTM (formerly the American Society for Testing and Materials) is recommended. "Co-sleepers" (infant beds that attach to the mother's bed) provide easy access for the mother to the infant, especially for breastfeeding, but safety standards for these devices have not yet been established by the Consumer Product Safety Commission.

   Although bed sharing rates are increasing in the United States for a number of reasons, including facilitation of breastfeeding, the task force concludes that the

evidence is growing that bed sharing, as practiced in the United States and other western countries, is more hazardous than the infant sleeping on a separate sleep surface and, therefore, recommends that infants not bed share during sleep. Infants may be brought into bed for nursing or comforting but should be returned to their own crib or bassinet when the parent is ready to return to sleep. The baby should not be brought into bed when the parent is excessively tired or using medications or substances that could impair his or her alertness. The task force recommends that the baby's crib or bassinet be placed in the parents' bedroom, which when placed close to their bed, will allow for more convenient breastfeeding and contact. Infants should not bed share with other children. Because it is very dangerous to sleep with an infant on a couch or armchair, no one should sleep with an infant on these surfaces.

6. ***Consider offering a pacifier at nap time and bed time***. Although the mechanism is not known, the reduced risk of SIDS associated with pacifier use during sleep is compelling, and the evidence that pacifier use inhibits breastfeeding or causes later dental complications is not. Until further evidence dictates otherwise, the task force recommends use of a pacifier throughout the first year of life according to the following procedures:

   - The pacifier should be used when placing the infant down for sleep and not be reinserted once the baby falls asleep. If the baby refuses the pacifier, he or she should not be forced to take it.
   - Pacifiers should not be coated in any sweet solution.
   - Pacifiers should be cleaned often and replaced regularly.
   - For breastfed infants, delay pacifier introduction until 1 month of age to ensure that breastfeeding is firmly established.

7. ***Avoid overheating***. The infant should be lightly clothed for sleep, and the bedroom temperature should be kept comfortable for a lightly clothed adult. Over bundling should be avoided, and the infant should not feel hot to the touch.

8. ***Avoid commercial devices marketed to reduce the risk of SIDS***. Although various devices have been developed to maintain sleep position or to reduce the risk of rebreathing, none have been tested sufficiently to show efficacy or safety.

9. ***Do not use home monitors as a strategy to reduce the risk of SIDS.*** Electronic respiratory and cardiac monitors are available to detect cardiorespiratory arrest and may be of value for home monitoring of selected infants who are deemed to have extreme cardiorespiratory instability. However, there is no evidence that use of such home monitors decreases the incidence of SIDS. Furthermore, there is no evidence that infants at increased risk of SIDS can be identified by in- hospital respiratory or cardiac monitoring.

10. ***Avoid development of positional plagiocephaly***.

    - Encourage "tummy time" when the infant is awake and observed. This will also enhance motor development.

- Avoid having the infant spend excessive time in car seat carriers and "bouncers," in which pressure is applied to the occiput. Upright "cuddle time" should be encouraged.
- Alter the supine head position during sleep. Techniques for accomplishing this include placing the infant to sleep with the head to one side for a week and then changing to the other and periodically changing the orientation of the infant to outside activity (e.g., the door of the room).
- Particular care should be taken to implement the aforementioned recommendations for infants with neurologic injury or suspected developmental delay.
- Consideration should be given to early referral of infants with plagiocephaly when it is evident that conservative measures have been ineffective. In some cases, orthotic devices may help avoid the need for surgery.

11. ***Continue the "Back to Sleep" campaign.*** Public education should be intensified for secondary caregivers (child care providers, grandparents, foster parents, and babysitters). The campaign should continue to have a special focus on the black and American Indian/Alaska Native populations. Health care professionals in intensive care nurseries, as well as those in well-baby nurseries, should implement these recommendations well before an anticipated discharge.