



Infant Sleep Position and SIDS

Questions and Answers for Health Care Providers



U.S. Department of Health and Human Services
National Institutes of Health

Healthy Babies Should Be Placed on Their Backs to Sleep.



In 1992, the American Academy of Pediatrics (AAP) released a statement urging that all healthy infants, born full-term be placed to sleep on their backs (*Pediatrics*, 1992; 89:1120-1126). This advice was based on many research reports that showed babies had a greater chance of dying from Sudden Infant Death Syndrome (SIDS) when they were placed to sleep on their stomachs. The AAP confirmed its recommendation in 1994 (*Pediatrics*, 1994; 93:820), and again in 2000 (*Pediatrics*, 2000; 105:650-656). The AAP encourages health care providers to read these articles supporting the advice that babies sleep safest on their backs.

In the SIDS Act of 1974, Congress gave the National Institute of Child Health and Human Development (NICHD) the responsibility of conducting SIDS research and developing public education materials about reducing the risks for SIDS. The national *Back to Sleep* campaign was launched in 1994, by the NICHD and other campaign sponsors. The campaign's goal is to educate parents and caregivers about the safest sleep position for healthy infants, as well as about other ways to reduce the risk of SIDS. The campaign promotes the supine (back) sleep position at nighttime and naptime. Annual surveys show that the incidence of infants placed to sleep on their stomachs has decreased from about 70 percent in 1992, to about 14% in 2000. During the same time, the death rate from SIDS decreased by 50 percent—by far the most significant decrease in SIDS rates since researchers began gathering such statistics.

The AAP Task Force on Infant Sleep Position and SIDS has prepared the following answers to commonly asked questions about infant sleep positioning. Please note that many of the answers are based on expert opinion because current evidence is not sufficient to provide definitive answers.



What advice should health care providers give to parents on ways to reduce the risk of SIDS?

Health care providers should encourage parents to follow these steps for reducing the risk of SIDS:

- Always place the baby on his or her back to sleep, at nighttime and naptime.
- Place the baby to sleep on a firm mattress, such as in a safety-approved crib.*
- Remove all fluffy and loose bedding, such as quilts, pillows, and stuffed toys from the baby's sleep area.
- Keep the baby's head and face uncovered during sleep.
- Don't let the baby get too warm during sleep. Keep the thermostat at a comfortable temperature and don't overdress the baby or use heavy comforters
- Quit smoking - mothers should not smoke during pregnancy or around the baby after he or she is born.
- Always keep the baby in a smoke-free environment – **no one** should smoke around the baby.
- Talk about SIDS risk to childcare providers, grandparents, babysitters, and all caregivers who care for the baby.

*For more information on crib safety guidelines, call the Consumer Product Safety Commission at 1-800-638-2772 or visit their web site at www.cpsc.gov. If your patient does not have a crib, have them check with their state health department about a crib donation program.



What sleep position is safest for full-term babies in hospital nurseries?

Healthy babies who are born full-term should be placed to sleep on their backs in hospital nurseries.

Nearly all of the research on babies and SIDS involves babies who are between two and six months of age, so there is little evidence on SIDS in newborn babies. However, experience shows that mothers and caregivers use the same sleep position for their babies at home that they see being used at the hospital. Therefore, the AAP Task Force recommends that personnel who work in hospital nurseries place babies on their backs to sleep.

If there are concerns about possible choking during the immediate neonatal period (for the first few hours following birth), hospital personnel can place the babies on their sides, propped up against the side of the bassinet for stability. But, within several hours, the AAP Task Force recommends that the babies be placed wholly on their backs to sleep.



Is the side position as effective at reducing the risk of SIDS as the back sleep position?

Several recent studies show that the risk of SIDS is greater for babies placed on their sides than those placed on their backs. Some data suggest that this increase is because babies placed on their sides have a greater chance of turning to the stomach position.

For those infants who are placed on the side and roll to the stomach the risk is very high. The AAP recommends the back sleep position (wholly on the back); however, if the side position is used, parents and caregivers are advised to bring the baby's lower arm forward, to lessen the likelihood of the baby rolling onto the stomach.



Will babies choke if they are placed on their backs?

There is no evidence that healthy babies placed on their backs are more likely to have serious or fatal choking episodes than those placed on their stomachs. In fact, of the very small number of reported cases of death due to choking, most of the infants were sleeping on the stomach.

Also, in countries where there has been a major change in infant sleep position from mainly stomach to mostly back (including the United States), there has been no increase in the incidence of serious or fatal cases of choking.





Does back sleeping cause infants to have flat heads?

Some data suggest that the number of babies with flat spots on their heads may have increased with the use of back sleeping. However, flat spots on the baby's head are usually a benign condition, which often disappear within the months after the baby starts to sit up.

Health care providers should encourage parents and caregivers to place babies on their stomachs while the babies are awake and supervised to help avoid flat spots (See ***Can a baby ever be placed on his or her stomach?***). Another method for helping to prevent flat spots is to alternate the baby's head position when he or she is placed to sleep in the crib. By changing the direction of the baby's head in the crib, the baby is not always sleeping on the same side of his or her head. Positional plagiocephaly, when a spot on the back or side of a baby's head is flattened from lying in the same position repeatedly, is quite different from craniosynostosis and seldom requires special molding helmets or surgery to correct. (*Pediatrics*, 2003; 112: 199-202)



Why should parents and caregivers avoid soft surfaces for their infants to sleep on?

Several studies done in the United States and other countries show that soft sleeping surfaces increase the risk of SIDS. How soft a surface must be to cause a threat is unknown. Until more evidence is available, the AAP Task Force advises parents and caregivers to use a standard, firm infant mattress with no more than a thin covering, such as a sheet or rubberized pad, between the infant and the mattress. Babies should not sleep on sofas or waterbeds.

The *Back to Sleep* campaign sponsors joined with the U.S. Consumer Product Safety Commission in warning against placing any soft, plush, or bulky items, such as pillows, quilts, comforters, sheepskins, or stuffed toys in the baby's sleep area. These items could come in contact with the baby's face, which may hinder exposure to oxygen, cause the baby to get overheated, or trap the baby's head causing suffocation.



Can a baby ever be placed on his or her stomach?

Developmental experts advise that placing an infant on his or her stomach while the baby is awake and supervised is important for shoulder and girdle motor development. Therefore, health care providers should advise parents and caregivers that a certain amount of “tummy time” is good for an infant, provided that the baby is awake and is being observed. In fact, “tummy time” is a very important and necessary part of an infant’s development.



Encourage parents and caregivers to place babies on their stomachs while they are awake and supervised.



Are there any circumstances when a baby should be placed to sleep on his or her stomach?

Healthy babies should be placed on their backs to sleep. However, babies with certain disorders or conditions have been shown to have fewer problems when lying on their stomachs. Babies with certain upper airway malformations, such as Robin Syndrome, and infants with severe gastroesophageal reflux may benefit from the stomach position with the head elevated. There is, however, no recent literature to support or refute the benefits of this therapy.

There may be other infants in whom the risk/benefit balance favors stomach sleeping. Health care providers should consider the potential benefit to the baby when recommending infant sleep position. If a health care provider decides that a baby should sleep on his or her stomach, parents and caregivers should make sure to avoid soft bedding and ensure that the baby does not overheat. Consideration may also be given to the use of a cardiorespiratory monitor. However, there is no national consensus that this practice is necessary or effective. In fact, the Collaborative Home Infant Monitoring Evaluation (CHIME) study, which uses specially designed electronic monitors in the home to detect cardiorespiratory events in infants, raises questions about the relationship between SIDS and events detected by home monitors (*Journal of the American Medical Association, May 2001*) and the American Academy of Pediatrics has recommended that home monitors not be used as a strategy to prevent SIDS (*Pediatrics. 111:914-917, 2003*).



How should preterm babies be placed for sleep?

Some preterm babies who have active respiratory disease may have improved oxygenation if they are placed on the stomach. Thus, the stomach sleep position during acute respiratory disease may be suitable if an infant is in a highly monitored, inpatient setting. However, epidemiological studies have shown that low birth weight or preterm babies at home have the same risk for SIDS when placed on their stomachs to sleep as do babies

born full-term. Because preterm babies often remain in the hospital for several days to weeks before discharge, the AAP Task Force recommends that these infants be placed on their backs to sleep. This practice will allow the parents to become familiar with the position.



What advice should a health care provider give to a parent or caregiver whose infant has difficulty sleeping in the back position?

Practitioners can explain to parents and caregivers that the baby's preference in sleep position seems to be a behavior that he or she learns from birth to around 4-6 months of age. Using the back sleep position in the hospital nursery and continuing once the infant is discharged will help the baby become used to sleeping on his or her back. There is some evidence that babies who sleep prone (on their stomachs) may sleep deeper. This may be one reason that incidence of SIDS is higher in such infants.



How often should parents or caregivers check on an infant during sleep to make sure the baby has not rolled into the stomach position from the back position?

Studies show that, during early infancy, it is unusual for a baby who is placed in the back position to roll onto his or her stomach. Therefore, the *Back to Sleep* campaign sponsors do not recommend that parents and caregivers who place their babies on their backs continually check on them. Frequent checking is a disruption to the parents or caregivers, and possibly to the infant as well.

There is some concern, however, about babies who are placed on their sides to sleep. Studies show that the risk for SIDS does increase if a baby is placed on his or her side, but then spontaneously rolls to the stomach position. For this reason, the AAP Task Force recommends that all healthy babies be placed on their backs to sleep.



At what age can parents and caregivers stop placing their babies on their backs to sleep?

The first six months, when the infant is forming his or her sleeping habits, are probably the most important in terms of the back sleep position. In countries that have changed to mostly back or side sleeping, evidence shows that the greatest decrease in the incidence of SIDS occurs in younger infants (age 2-6 months). The level of risk related to the stomach position at specific ages during the first years of life is still unknown.

Some recent studies suggest that babies who are used to sleeping on their backs have a markedly increased risk of SIDS if they are then placed on their stomach to sleep. The studies demonstrated that babies who were placed on their backs from birth, but then were placed on their stomachs at several months of age (e.g., 3-4 months) had a dramatically increased risk of dying from SIDS. For this reason, parents and caregivers should continue to place babies on their back to sleep throughout the first year of life. Evidence suggests that many childcare center personnel are not aware of these recommendations. Therefore, parents and caregivers should make sure that anyone who cares for their babies, including grandparents, childcare providers, and babysitters, know that the babies should be placed on their backs to sleep.



Should parents or caregivers use products that are designed to keep babies on their backs or sides during sleep?

The AAP Task Force does not recommend the use of such products. Some of the devices are designed to keep babies on their sides, and there is now good evidence that side sleeping is not as safe as supine (on his or her back). Other devices are designed to keep a baby supine or to prevent re-breathing. But none of the devices have been studied sufficiently to demonstrate a decrease in SIDS risk. Furthermore, no studies have been published that examine the safety of these products; in fact, there have been some anecdotal reports of babies being trapped against bedding while strapped into products that keep babies on their sides.



Babies who sleep on their backs are very unlikely to roll onto their stomachs during the age range most associated with SIDS; therefore the use of products to prevent babies who are sleeping on their backs from rolling onto their stomachs is unnecessary.



What advice should health care providers give to parents of babies in childcare?

Health care providers should encourage parents to talk about sleep position with their childcare provider. Babies should be placed to sleep on their backs in childcare centers and family childcare homes. Research shows that babies who are placed on their backs to sleep at home are at a greater risk for SIDS when personnel in childcare programs do not place infants in their usual back sleeping position. It may be helpful for parents to bring *Back to Sleep* campaign materials to share with their childcare provider.



Does bed-sharing reduce the risk of SIDS?

There is no scientific proof that bed-sharing between a baby and an adult reduces the risk of SIDS. In fact, in some cases, bed-sharing can be unsafe. The safest alternative may be to have a crib/bassinet near the mother's bed to facilitate easy access to the baby. If parents choose to have their baby sleep in the bed with them in order to breastfeed, health care providers should encourage parents to make sure they follow all of the SIDS risk reduction recommendations. The baby should be placed to sleep on his or her back. Soft surfaces such as sofa cushions, soft covers, pillows, and all other soft items should be removed from the baby's sleep area. Parents should make sure the baby cannot get trapped between the mattress and the framework of the bed (headboard, footboard), a wall, or other furniture. Further, no other children should be in bed with the parent(s) and infant, as research has shown that this increases the risk of SIDS several-fold. Finally, sleeping with an infant on a couch is extremely hazardous and should never be done.



For more information on sleep position for babies and reducing the risk of SIDS, contact the *Back to Sleep* campaign at:

1-800-505-CRIB

31 Center Drive, 31/2A32, Bethesda, MD 20892

Fax: (301)496-7101

Web site: www.nichd.nih.gov

***Back to Sleep* campaign sponsors include:**

American Academy of Pediatrics
National Institute of Child Health and Human Development, NIH
Maternal and Child Health Bureau, HRSA
First Candle/SIDS Alliance
Association of SIDS and Infant Mortality Programs



National Institute of Child Health and Human Development
NIH Pub. No. 02-7202
November 2003