

Sudden Infant Death Syndrome (SIDS)

Training Objectives:

- caregiver will be able to state the age range when SIDS is likely to occur.
 - caregiver will be able to list the factors that would place babies at higher risk of SIDS.
 - caregiver can explain why communications between the baby's primary care provider and caregiver in the child care setting is critical.
 - caregiver knows the percentage of SIDS deaths in a childcare setting.
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Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant, 1 month to 1 year of age, which remains unexplained after a complete investigation. The investigation includes an autopsy, examination of the death scene, a review of the child's symptoms or illness the infant had prior to the death, and any other pertinent medical history. Because most cases of SIDS occur when the baby is sleeping in a crib, SIDS may also be known as crib death. The event may occur wherever the infant is sleeping, not necessarily the crib.

SIDS can occur anytime between 1 month and 1 year of age, however, 90% of the deaths occur before the age of 6 months, with the concentration between 2 and 4 months. Approximately 3,000 babies die of SIDS in the U.S. each year, and 218 babies died in Texas of SIDS during 1999. There is an increase in incidence in the winter months. It is more common with male children than females, (60% vs. 40%). SIDS happens suddenly and silently in a seemingly healthy infant. The death leaves many unanswered questions, causing intense grief for parents and families.

SIDS is not:

SIDS is not hereditary, contagious, caused by immunizations, choking, suffocation, or apnea. It is not child abuse, and not the reason for all unexpected infant deaths.

Which babies are at high risk?

Infants born weighing less than 5 to 6 lbs., premature babies, twins or triplets, babies born to mothers younger than 20 years old, and babies born to mothers who smoked during pregnancy increase the risk by three times. Factors after birth that increase the risk of Sudden Infant Death Syndrome are babies that sleep on their stomachs and smoking in the infant's environment. Smoke in the environment doubles the risk.

What can be done to reduce the risk of SIDS?

Even though SIDS cannot be completely prevented, there are things that can be done to reduce the risk of SIDS.

- Place babies on their back for sleep. Always position the baby on their back for nighttime and naptime. Do not place the baby on their stomach or side. Starting in 1992, the American Academy of Pediatrics (AAP) recommended that babies be put down to sleep on their backs instead of their stomachs and in 1994, began the nationwide "Back to Sleep" campaign. Since this recommendation, the incidents of SIDS have reduced 40%, which means saving about 2,000 babies each year from SIDS. The concern expressed with placing babies on their backs is that those infants may choke. There is not evidence to support this as researched by countries where "back to sleep" was the standard, and these countries also had a much lower incident rate of SIDS.
- Place the baby on a tight-fitting mattress in a crib meeting current safety standards. Don't put babies to sleep on soft mattresses, sofas, waterbeds, pillows, beanbags or other soft surfaces.
- Remove all fluffy and loose bedding from the sleep area. Pillows, quilts, and comforters and stuffed toys should not be in the sleep area. If using a blanket it should be thin. Place the baby in the crib with his feet at the foot and tuck the blanket around the crib mattress, only as far as the baby's chest. Blankets and coverings can bunch up around the baby's face, which can cause potentially dangerous re-breathing of stale air. Also, make sure the baby's head is uncovered during sleep.
- Make sure the baby does not become over heated by wearing too much clothing, heavy bedding or too warm a room. Babies cannot regulate their own body temperature well, so the baby should be dressed in whatever clothing is comfortable to you as an adult. Remove outer wear (jackets, sweaters, hats) once inside so not to overheat the baby.
- Keep the environment smoke free.
- Breast-feed the baby, if possible. Breast-fed baby's are at a lower risk for respiratory illnesses. The increase of SIDS during the winter months may

be due to use of heavier bedding, over dressing the baby, and increased respiratory infections which may be triggering events for a SIDS death.

What causes SIDS?

While the causes of SIDS are still unknown, a triple-risk model is not often used to describe the elements that occur together that may lead to the sudden death of infants.

- During the first 6 months of life, the rapid growth that occurs with infants may periodically destabilize their system that controls sleeping and waking, breathing, heart rate, blood pressure and temperature - this is known as the critical development period.
- The vulnerable infant has an underlying defect in the brain that controls breathing and heart rate during early life, and
- There are outside or environmental challenges present that a normal baby can overcome, but an already vulnerable infant might not. Stressors such as second-hand exposure to tobacco smoke, stomach sleep position or an upper respiratory infection alone do not cause death in an infant, but may further tip the balance against an infant's chances for survival. According to this model, all 3 elements must come together for SIDS to result. The babies seem to not have enough protective responders to handle changes in oxygen and carbon dioxide levels.

Child Care Providers need to consider:

Study results released in September 2000, evaluating the circumstances of nearly 2000 SIDS deaths, found that 20% of those SIDS deaths occurred in child-care settings. Thought to be a contributing factor was a high percentage of the caregivers were not aware of the "back to sleep" recommendation and other risk reducing techniques - probably because most of them had children that were older than when the recommendation came out in the 90's.

Also, it has been found that babies who routinely are used to sleeping on their backs and are then placed on their stomachs for sleep have a 20 times greater risk of SIDS. A well intentioned, yet possibly uninformed caregiver, feels the baby would "sleep more soundly" on their stomach. It is essential that sleep position be nighttime, and naptime, and from parent to grandparent to child-care provider.

"Tummy time" while the baby is awake and being observed, is important to develop shoulder and neck muscles and coordination, as well as reduce the flattening that can develop on the back of the head.

If you have a child in care with reflux, respiratory disease or some other breathing dysfunction, be sure and obtain information from the child's physician on the recommended sleep position.

Test Questions:

1. At what age is SIDS most like to occur?

- a. birth to 3 years of age
- b. birth to 9 months of age
- c. 6 months to 12 months of age
- d. 1 month to 12 months of age

2. Factors that would place babies at higher risk for SIDS would include

- a. sinus congestion, birth order of baby and health of the mother.
- b. sleeping on their back, mother smokes, and over weight babies.
- c. premature baby, mother smokes, and sleeping on their stomach.
- d. mother over 40 years of age, sleeping on their stomach, and baby born under 6 lbs.

3. It doesn't matter if babies are placed on the stomach or back as long as they are not too warm.

- True
- False

4. Babies should not be placed on soft mattresses or surfaces if unattended.

- True
- False

5. What percent of SIDS deaths occurred in childcare settings?

- a. 5%
- b. 10%
- c. 20%
- d. 30%