SIDS: A Parent's Worst Nightmare

McKenzie Pediatrics 2012

It's a parent's worst nightmare. A seemingly healthy baby is put down for a nap, or for the night. The child is assumed well and in a protected environment. The caregiver feels secure, their world in order.

Suddenly, everything is turned upside down. The baby is found dead, the cause a total mystery. Often, the infant is fed normally just before being placed in bed. No outcry is heard, and the infant is found in the position he or she was placed.

Sudden infant death syndrome (SIDS) is the biggest killer of babies over one month old in the rich world. Despite marked reductions in rates of SIDS over the past decade, SIDS is still responsible for more infant deaths in the United States than any other cause of death during infancy beyond the newborn period.

Most sudden infant deaths occur at home, forcing parents and siblings to witness and live with the memory of a terrible tragedy, and scenes of intense confusion. In the absence of answers, parents who are innocent of blame feel responsible nonetheless, and spend the days and months ahead torturing themselves imagining ways in which they might have contributed to or prevented the tragedy.

Despite decades of extensive research, no explanation has proved satisfactorily complete. By definition, the child is dead when the diagnosis is made. That means researchers usually have only post-mortem data about the symptoms to go on. Therefore our understanding of the causes of SIDS remains partial.

We know what SIDS is not. It is <u>not</u> caused by contagious disease, or by immunizations. Neither is it the result of vomiting or choking. It cannot be predicted by "near-SIDS" events, what doctors call "apparent life-threatening events." There is absolutely no evidence that home apnea monitors are an effective strategy for preventing SIDS.

Doctors define SIDS as the sudden death of a previously healthy infant under one year of age that remain unexplained after a thorough case investigation, including examination of the death scene, a review of the child's medical history, and performance of a complete autopsy that include X-rays and a wide range of laboratory tests.

SIDS is a diagnosis of exclusion. Heart conditions, infections, aspiration, metabolic disorders, toxin or drug exposure, suffocation, and trauma all must have been excluded in order for doctors to assign SIDS as the cause of death. Intentional suffocation, or child abuse, is felt to account for between only 1 to 5 percent of SIDS cases, and seldom is suspected except when the age of death is older than 6 months.

Nine in ten sudden infant deaths occur in the first six months of life, most often between two and four months. It is rare in the first month, for reasons not yet fully understood, and uncommon beyond age six months.

SIDS occurs at higher rates in African-Americans, and in some Native American populations. Male infants are one and half times more affected than females. Babies who were premature, or were of low birth weight, are also at higher risk.

SIDS is more likely to strike babies of young mothers, and mothers who received late or no prenatal care. Most significantly, infants of mothers who smoked during pregnancy or afterwards have a six-fold greater risk of SIDS. The more an infant is exposed to cigarette smoke, the greater the risk. The most likely explanation is that nicotine may blunt the baby's brain response to low oxygen.

Other known risk factors include: the prone sleep position ("tummy sleeping"), sleeping on a soft surface, and overheating.

Finally, bed sharing has been proven to increase the risk of SIDS, primarily in very young babies whose mother smoke or drink, or use illicit substances or prescription medications that impair his or her ability to awaken. The risk of SIDS is also increased in the parent's bed has an improper mattress, unsafe bedding, or has gaps between the mattress and headboard, footboard, or wall.

Bed sharing can also be hazardous if the mother is obese, leading to accidental suffocation of the infant, or if there are multiple bed-sharers. The highest risk to the infant occurs when adults sleep with an infant and on a sofa or in an armchair.

Prone, or tummy, sleeping is the most important modifiable risk factor for SIDS, increasing the risk 10- to 15-fold. Since 1994, the rate of SIDS in the United States has fallen by <u>more than half</u>, thanks to the national Back To Sleep public awareness campaign launched during that year by the American Academy of Pediatrics. Today, more than 80 percent of infants are placed on their back to sleep.

Yet too many caregivers, especially child care providers, babysitters, and relatives, are still placing infants to sleep on their tummy. Twenty to thirty percent of all SIDS deaths occur when the infant is in the care of a non-parental caregiver, and this number has held constant over the past two decades.

In fact, the greatest risk of SIDS is when an infant under six months who is normally placed to sleep non-prone is suddenly placed to sleep on his tummy, such as when in the care of an inexperienced or unfamiliar caregiver. Researchers have found this sudden reversal of sleep position to cause a 37 times greater risk of SIDS!

Safe sleep helps reduce SIDS. Ninety-nine percent of SIDS infants had at least one risk factor. There are some simple actions every parent, child care provider, relative, and babysitter can take to lower the risk:

- 1. Put babies on their backs ("supine") to sleep every time, even for short daytime naps. While safer than tummy sleeping, side sleeping is nevertheless too risky, as babies can easily roll onto their tummy. Of course, tummy time is okay when the baby is awake and supervised.
- 2. Insist that all temporary caregivers (babysitters, day care providers, and relatives) place your baby on his or her back to sleep, even if just for a short nap.
- 3. Because babies can easily overheat, avoid wrapping the baby with lots of blankets and clothes, and keep the baby's room temperature between 68 and 72 degrees. In the winter, use a blanket sleeper rather than adding layers of blankets for warmth.
- 4. Babies' breathing systems are not grown up yet. Babies can be smothered easily. Plush, soft, fuzzy, warm and cuddly those seem like the perfect attributes for a newborn nursery, except if you're a newborn. Keep soft blankets, quilts, comforters, soft toys, stuffed animals, and pillows away from a baby's sleeping space.
- 5. Never put a baby to sleep on a soft surface such as a sofa, waterbed, pillow-top mattress, egg-crate mattress, sheepskin, pillow, or beanbag chair. Babies should be put to sleep only on a firm sleep surface, such as a firm mattress with a fitted sheet, in an unadorned crib, bassinet, or portable crib.
- 6. While bed sharing can be made safe, it often is not. A separate but nearby sleeping place is safest. Select a crib, bassinet, or cradle that conforms to the "CPSC" recommendations. If bumper pads are used, they should be thin, firm, well-secured, and not "pillow-like". Devices (such as wedges and positioners) intended to keep babies on their backs or sides are not recommended.

- 7. Never sleep with your baby on a couch or in a chair.
- 8. Consider offering a pacifier at nap time and bedtime once successful breast feeding is established. Pacifiers reduced the risk of SIDS as much as threefold. The mechanism is not fully understood, but it seems to have something to do with stimulating arousal as the babies suck during sleep. However, never, ever attach a pacifier to an infant's clothing in any way, especially with a string or ribbon around the baby's neck.
- 9. Finally, create a smoke-free zone for a pregnant woman and for babies.

Removing risk factors decreases but does not eliminate the risk of SIDS. The syndrome can strike infants who do not have any risk factors, including those who sleep on their back.

Nevertheless, most SIDS cases upon investigation contain multiple identified risks, and risk-free SIDS cases are rare. Knowing this, please adopt the above-mentioned sleep practices in order to dramatically reduce your baby's risk of SIDS.

Dr. Todd Huffman April 2012