
Sudden Infant Death Syndrome

New recommendations



The American Academy of Pediatrics has published new SIDS prevention recommendations that can affect child care providers who care for infants. These include new guidelines on side-sleep positions, pacifiers, soft bedding, and plagiocephaly (misshapen or flattened skull).

What is SIDS?

SIDS is the leading cause of death in infants in the United States—5,000 to 6,000 deaths a year. Almost 20 percent of those deaths occur in child care programs.

SIDS is defined as the sudden death of a previously healthy baby younger than 1 year old. It's identified as the cause of a death that is unexplained after a thorough case investigation including autopsy, death scene investigation, and medical history. SIDS is a diagnosis of exclusion. This means that a SIDS diagnosis is made only after all factors including injury and illness that could contribute to the death are ruled out.

SIDS has been described as a syndrome in search of a cause. SIDS rates have dropped dramatically since 1992 when parents and other caregivers were urged to place infants on their backs for sleep. But unfortunately, the syndrome is complex and not always caused by the same factors or conditions.

Causes of SIDS

In the medical science world, a theory (an educated and considered guess) must be researched, studied, and formalized. The theory might be based on the evaluation of medical records, demographics, and anecdotal records.

In 2006, researchers determined that abnormalities in a part of the brain that controls breathing and arousal likely play a role in SIDS. Other current research points to heart disturbances and genetic defects and examines environmental factors like the impact of pacifiers and ceiling fans.

At the same time, experts have discounted several early causation theories including suffocation, choking, birth injury, and infection.

After years of study, researchers have developed a triple-risk model to describe the factors that can cause SIDS. Today, most experts believe that an infant at a **critical developmental stage** (the first six months of life) must have a **biological vulnerability** (an undetectable brain, heart, or genetic defect, for example) and an **environmental stressor** (soft bedding, for example) for SIDS to occur.

Risk factors for SIDS

While any infant can die from SIDS, several behaviors and conditions seem to increase the risk. Researchers and physicians have identified risk factors to guide the care of infants. However, these factors do not account for all SIDS deaths and, indeed, some babies seem to be unaffected by them.

Factors that put babies at greater risk for SIDS include the following:

- Age and sex—male babies younger than 6 months are most vulnerable;
- Race—Black and American Indian babies are at twice the risk due to genetic and behavioral factors;
- Premature birth and low birth weight;



- Sleep position—stomach and side sleeping positions put babies at high risk;
- Sleep environment—sharing a bed, soft surfaces, and fluffy bedding increase risk;
- Cold weather—there are more SIDS deaths in the winter months;
- Overheating;
- Second-hand smoke;
- Unaccustomed tummy sleeping—if the infant usually sleeps on the back and then is placed on the tummy for sleep, there is as much as an 18 times greater risk; and
- Specific maternal characteristics and behaviors—a mother’s young age, smoking, binge drinking during pregnancy, and limited or absent prenatal care are all identified as putting babies at risk.

New recommendations

The AAP has issued the following recommendations:

Sleep positions: Multiple studies have demonstrated that side position for sleep places infants at higher risk for SIDS than the preferred back (supine) position. Side sleep positions are unstable; the infant is likely to flop to the unaccustomed prone (tummy) position. Babies at highest risk for SIDS (18 percent higher than consistent back sleepers) are those who usually sleep on the back but are placed on the tummy or roll onto the tummy for sleep.

Babies typically begin comfortably and consistently to roll from back to tummy by 6 months of age. Generally the risk of SIDS diminishes after this developmental milestone is reached. The AAP says that you don’t have to shift sleeping babies who roll to their tummies if all other risk factors have been minimized.

Parents often voice concern about the danger of choking or aspiration when babies sleep on the back. Healthy babies who spit up will not choke. Research shows that there is no increased risk of aspiration for babies who sleep on their backs.

Pacifiers: Studies consistently demonstrate the protective effect of pacifiers. The specific mechanisms involved in this protection are unknown, but it’s clear from the research that there is a reduction in the risk of SIDS even when the pacifier falls out of the mouth when the baby falls asleep.

There are downsides, however. These include dental malocclusion (for toddlers who don’t give up the pacifier by age 3), *otitis media* (twice the risk of ear infection), gastrointestinal infections, and oral *Candida* (likely related to lax sanitation practices).

First aid for unresponsive infants

When a baby is unresponsive, immediately put into action your program’s medical emergency plan.

- Initiate infant CPR or rescue breathing and call 911.
- Get help to care for the other children in the group.
- Contact the child’s parents or other emergency contact.
- Call the parents of the other children in your care.
- Do not disturb the scene.
- Notify child care licensing and your insurance agency.

If the infant is being breastfed, it’s best to wait until the baby is at least 1 month old before introducing a pacifier to help ensure the firm establishment of breastfeeding. If the baby refuses the pacifier, don’t force it. If the pacifier is useful, use it when the baby is falling asleep. Don’t reinsert it after the baby is asleep, don’t coat it with sweetener, and don’t put it in your mouth. Clean and replace pacifiers regularly.

Soft bedding: Infants who die from SIDS are more likely to be sleeping in a prone position (face down) and have soft mattresses and bedding that cover the nose and mouth.

A baby’s crib should be safety-approved with slats spaced not more than 2³/₈ inches apart. The mattress should fit snugly in the crib and have a tight-fitting sheet. Chairs, sofas, water beds, cushions, and adult beds are not safe sleep surfaces for babies.

Excess bedding—pillows, bumper pads, blankets, quilts, and plush toys—can impair the baby’s ability to breathe if they cover the face. Wearable blankets or sleep sacks are safer than blankets if extra warmth is needed.

If you use a blanket, use the recommended *feet-to-foot* technique. Place the baby’s feet against the foot of the crib and tuck the blanket under the baby’s arms and along the sides and foot of the crib. This technique keeps the baby from scooting under the blanket and covering the head.

The AAP discourages the use of wedges and positioners. Bumper pads are not necessary.

Plagiocephaly: Because a newborn’s skull is soft and pliable, back sleeping can contribute to a flattening on the back of the head (positional plagiocephaly). This condition is generally temporary. As

babies grow and become more active, their skulls round out.

Babies spend much of their time in bouncy seats, infant carriers, strollers, and car safety seats. Each of these exerts constant pressure on the back of the head, especially in the youngest babies who tend to fall asleep in these chairs.

When you place an infant on the back to sleep, alternate the direction the head faces, causing the baby to look left or right.

The AAP recommends supervised tummy time for awake babies and holding awake babies upright to help decrease the constant pressure on the back of the head. Tummy time is essential to muscle strength and development. Interact with babies during tummy time for short periods three to four times a day, increasing the amount of time gradually as the baby's strength increases.

Safe sleep practices

Because the safety of children is your highest priority, it's wise to formalize your program's policies for safe sleeping practices. Share these procedures with families, and ask for a parent's or guardian's signature to reinforce cooperation (and protect you in the case of SIDS). A formal policy will help maintain

What to expect if a baby dies

The place of death is considered the death scene. Because SIDS is a diagnosis of exclusion, it's necessary for officials to conduct a complete investigation so they can rule out other causes. Expect the following procedures:

- Many people—police, child care regulators, medical personnel, and parents—will ask for the same information. Assume everyone is asking for information so they can help—not because they think you are to blame.
- Police investigators will ask for information about the baby's health and behavior. They will take photos and will want to see the environment as it was when the baby died. Don't clean up or neaten the area.
- Your licensing agency will ask questions about the event. A SIDS death is not a reason for license revocation.
- The coroner or medical examiner will compile a detailed medical history and conduct an autopsy.
- The cause of death won't be determined until after a death scene investigation and autopsy.

quality standards, guide teacher training and expectations, and reassure parents that their baby's health is paramount.

Use the following guidelines in establishing safe sleep policies for your program.

- Put babies to sleep on the back. The AAP and local health authorities have brochures and posters reinforcing "Back is best."

PUT BABIES TO SLEEP ON THE BACK.

- Obtain a physician's note for non-back sleepers. Make sure the directive describes the prescribed sleep position, the reason for not using the back position, a time frame for the directive, and the physician's signature. Keep a copy of the note in the baby's file and post one on the baby's crib.
- Maintain a smoke-free environment.
- Use safety-approved cribs and firm mattresses.
- Keep the crib free of anything but the baby.
- If you use blankets, practice the feet-to-foot rule.
- Sleep only one baby per crib.
- Maintain room temperature that prevents overheating (comfortable for a lightly clothed adult). If a baby is sweating around the neck or face, it probably means fever and illness. When this happens, use fewer covers—not more.
- Monitor sleeping babies.
- Schedule tummy time for babies when they are awake.
- Avoid apnea monitors and other marketed SIDS-prevention devices. They are costly and unlikely to prevent a SIDS death.

Resources

Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs, Second Edition. 2002. Elk Grove Village, Ill.: American Academy of Pediatrics.

American Academy of Pediatrics. Healthy Child Care America Back to Sleep Campaign.

www.healthychildcare.org/section_SIDS.cfm.

National Institute of Child Health and Human Development. Back to Sleep Campaign.

www.nichd.nih.gov/sids.