



Shaken Baby Syndrome

Babies are fragile. Please don't shake a child

Most of the time, shaken baby syndrome occurs when adults, frustrated and angry with children, shake them strenuously. Many well-trained, responsible people, who could never dream of hitting a child, think nothing of giving a baby a “good shaking”. The effects may be far more damaging than they realize.

What is Shaken Baby Syndrome?

When a baby is vigorously shaken, the head moves back and forth. The sudden whiplash motion can cause bleeding inside the head and increase pressure on the brain, causing the brain to pull apart and resulting in injury to the infant. This is known as shaken baby syndrome, and is one of the leading forms of fatal child abuse. A baby's head and neck are susceptible to head trauma because his or her muscles are not fully developed and the brain tissue is exceptionally fragile. Head trauma is the leading cause of disability among infants and children. Baby's heads are large and heavy, making up about 25% of their total body weight. Their neck muscles are too weak to support such a disproportionately large head.

Shaken Baby Syndrome occurs most frequently in infants younger than 6-months old, yet can occur up to age three. Often there are no obvious outward signs of inside injury, particularly in the head or behind the eyes. In reality, shaking a baby, if only for a few seconds, can injure a baby for life. These injuries can include brain swelling and damage, cerebral palsy, mental retardation, developmental delays, blindness, hearing loss, paralysis and death. When a child is shaken in anger or frustration, the force is multiplied five or ten times greater than it would be if the child had simply tripped or fallen.

How does it happen?

Often, frustrated people or other people responsible for a child's care feel that shaking a baby is a harmless way to make a baby stop crying. The number one reason why a baby is shaken is because of inconsolable crying. Almost 25% of all babies with Shaken Baby Syndrome die. It is estimated that 25-50% of parents and caretakers aren't aware of the effects of shaking a baby.

What happens?

When shaking occurs, the brain bounces within the skull cavity, bruising the brain tissue. The brain swells, creating pressure and leading to retinal (back of the eye) bleeding. This can cause blindness. Some blood vessels feeding the brain are torn away, leading to additional brain damage or abnormalities. Blood pools within the skull, creating more pressure.



Immediate Consequences

- Breathing may stop
- Seizures
- Limp arms and legs
- Excessive drooling
- Heart may stop
- Death

Long-Term Consequences

- Learning disabilities
- Physical disabilities
- Visual disabilities
- Speech disabilities
- Seizures
- Death

What can you do to prevent a tragedy?

If you or someone else shakes a baby, whether accidentally or on purpose, call 911 or take the child to the emergency room immediately. Bleeding inside the brain can be treated. Immediate medical attention will save your baby many future problems and possibly the baby's life.

Suggestions for caregivers

- Never throw or shake a baby
- Take the baby for a stroller ride
- Make sure the baby is fed, burped and dry
- Make sure clothing is not too tight
- Always provide support for the baby's head and neck
- Play music or sing to the baby
- Gently rock or walk the baby
- Give the baby a pacifier
- Lay the baby tummy down across your lap and rub or pat his back
- Ask another caregiver to "take over for a while"
- Offer a noisy toy or rattle
- Sit down, close your eyes and count to 20
- Don't pick the baby up until you feel calm
- Put the baby in a front carrier close to your body and breath slowly
- Hug and cuddle a baby gently

This information provided by the Child Abuse Prevention Center



Sudden Infant Death Syndrome

What is SIDS?

Sudden Infant Death Syndrome (SIDS) is the diagnosis given for the sudden death of an infant, 1-month to 1-year of age, that 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 wherever the infant is sleeping in a crib, SIDS may also be known as crib death. The event may occur wherever the infant is sleeping, not necessarily in a crib.

SIDS can occur anytime between 1-month and 1-year of age, however 91% of the deaths occur before the age of 6-months, with the highest concentration between 2- and 4-months. There is an increased incidence in the winter months. It is more common with male children than female. 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.

What are the risk factors?

- Mothers less than 20-years old at the time of her first pregnancy
- Late or no prenatal care
- Premature or low birth weight infant
- Mother smoked during pregnancy; this increases risk by 3 times
- Smoking in environment after birth; increases risk by 2 times
- Mother abused alcohol or drugs during pregnancy
- Infants who are placed to sleep on stomach

How can we reduce the risk of SIDS?

- Place infants on their backs for sleep, including naptime; do not place infants on their stomach to sleep
- Place baby on a firm, tight-fitting mattress in a crib that meets current safety standards
- Do not place baby on a water bed, sofa, bean bag, soft mattress, foam padding or pillow to sleep
- Use no soft bedding, pillows, sheepskins, stuffed toys or other soft items in the crib
- Make sure the baby's head remains uncovered during sleep
- Avoid over-heating the baby; the temperature in the room should feel comfortable to an adult.
- Overdressing the baby should be avoided
- Keep the baby in a smoke-free environment



What causes SIDS?

The cause remains a medical mystery, but mounting evidence from research suggests that some SIDS babies are born with brain abnormalities that make them vulnerable to sudden death during infancy. Studies of victim's show many have an abnormality in the brain that is likely to be involved in controlling breathing and waking during sleep.

Some things for caregivers to consider

- If a parent of an infant is breast feeding, encourage them to provide bottled breast milk that is clearly labeled with the child's name for feeding while in care
- Check the infant sleeping environment frequently to assure sheets are tight-fitted and soft bedding or objects are not in the crib
- If you have a child in care with reflux, respiratory disease, or upper airway malformation, be sure to obtain information from the infant's doctor on the recommended sleeping position
- If a child in your care is not breathing or is unresponsive, call 911; begin CPR and immediately notify the child's parents
- If a child in your center dies, do not disturb the scene of death; do not remove anything, if possible



Infant Interactions

Suggestions on positive and safe interactions for infants:

Be warm, loving, and responsive

Children who receive warm and responsive care-giving, and are securely attached to their caregivers, cope with difficult times more easily when they are older. They are more curious, get along better with other children and perform better in school than children who are less securely attached.

Infants communicate their needs, preferences and moods to the adults who care for them by the sounds they make, the way they move, their facial expressions and the way they make or avoid eye contact. Children become securely attached when caregivers try to read these signals and respond with sensitivity. They begin to trust that when they smile, someone will smile back; that when they are upset, someone will comfort them; that when they are hungry, someone will feed them.

You might think that a newborn might get spoiled with all this attention, but studies show that newborns who are more quickly and warmly responded to when crying typically learn to cry much less and sleep more at night. A baby expresses distress by crying. When the caregiver responds with food, warmth or comfort, the baby tends to be calmed. The stress-response system in the brain is turned off and the infant's brain begins to create a network of brain cells that help the baby soothe himself.

Talk, read and sing to the child

Infants learn from "conversations", even when they cannot understand what you are saying. When babies hear the same words over and over again, the part of the brain that handles speech and language develop. The time used to change a diaper or feed an infant can be an opportunity to spend some individual time with that child, talking, singing and expanding on their own coos and gurgles.

Read picture books and stories to infants. By 6-months old, infants show excitement by widening their eyes and moving their arms and legs when looking at a book with pictures of babies and other similar objects.

Establish Routines

Daily routines associated with pleasurable feelings are reassuring for children. Repeated positive experiences provide for a sense of security. It helps a child learn what to expect from his environment and how to understand the world around them.

Encourage safe exploration and play

Play is an important learning experience. Look around the environment you are providing for infants. Make sure there are enough interesting things for them to look at - not too many, but that there are things for the



infant to focus on one at a time. Put the infant on the floor in safe areas that encourage them to move about. Keep containers that the infants can dump and fill. Adults should encourage exploration and then also be receptive when the child needs to return to them for security.

By providing consistent and responsive care-giving, you can ensure that a child will have the best opportunity for healthy emotional and social development.

Every important caregiver has the potential to help shape a young child's future.

Understanding Early Childhood Brain Development

Why should care-givers know about brain development?

The brain is the part of the body that allows us to feel joy and despair, to respond to others in a loving or angry way, to use reason, or to simply react. These capabilities don't just magically appear; they result from the interplay between a child's heredity and the experiences they have during childhood.

At birth, the brain is unfinished. The parts of the brain that handle thinking and remembering, as well as emotional and social behavior, are underdeveloped. The fact that the brain matures in the world, rather than in the womb, means young children are deeply affected by their experiences. Their relationships with parents and other important care givers don't just influence their moods, but actually affect the way the children's brains become "wired". Researchers now confirm that the way infants are interacted with and experiences provided for them have a major impact on the child's emotional development, learning skills, and how they function later in life.

How does the brain form "connections"?

At birth, the brain contains about 100 billion brain cells that are yet to be connected into functioning networks. By the time a child is three, the brain has formed about one thousand trillion connections between these brain cells. Some of these connections become permanent, while others disappear as the child grows. How does the brain know what connections to keep? Connections that are used repeatedly during the child's early years become the foundation for the brains organization and function throughout life. In contrast, a connection that is not used results in a lack of development or even the disappearance of these connections. For example, a child who is rarely spoken to or read to in the early years may have difficulty mastering language skills later on. By the same token, a child who is rarely played with may have difficulty with social adjustment as he or she grows.



Brain cells are designed for making connections. Each cell sends signals out to other brain cells and receives input from other cells. The signals, in the form of electrical impulses, travel down the length of the nerve cell. With the help of chemicals (such as serotonin) they travel from cell to cell, creating connections. Repeated activation of networks of neurons strengthens these connections.

Principles of brain development:

- The outside world shapes the brain's wiring
- The outside world is experienced through the senses – seeing, hearing, smelling, touching and tasting – enabling the brain to create or modify connections
- The brain operates on a “use it or lose it” principle
- Relationships with other people early in life are the major source of development of the emotional and social parts of the brain.

What should be done to encourage appropriate brain development?

As a mother feeds her child, she gazes lovingly into his eyes. A father talks gently to his newborn daughter as he changes her diaper. A care-giver sings a child to sleep. These are the everyday moments, the simple, loving encounters that provide essential emotional nourishment.

Touching, rocking, talking, smiling and singing all affect brain development. Babies experience relationships through their senses. They read the way you look into their eyes. They see the expressions on your face. They hear you cooing, singing, talking and reading. They feel you holding or rocking them, and they take in familiar smells. Touch is especially important, holding and stroking stimulates the brain to release important hormones necessary for growth.