

### Test Your Knowledge

#### Q: What are the health outcomes of SBS?

**A:** Hearing loss, blindness, brain damage, speech and learning disorders, intellectual disability, seizures, neck and spinal cord damage, motor dysfunction, paralysis, and death are some of the permanent health outcomes that accompany SBS.<sup>1</sup>

#### Q: Which age groups are most often affected by SBS?

**A:** SBS is most commonly seen in infants up to one year old. Infants between the ages of 2 and 4 months are at the highest risk.<sup>1</sup>

**Shaken Baby Syndrome (SBS), a type of abusive head trauma (AHT),** occurs when a person violently shakes a baby or young child. Permanent brain damage can be caused after only seconds of shaking due to the fragile nature of a baby's brain.<sup>2</sup> SBS is a form of child abuse and the vast majority of states have legislation that punishes offenders as well as mandates newborn mothers to complete SBS prevention training.<sup>3</sup>

### KNOW THE FACTS

- As many as 3,000 babies suffer from SBS in the United States each year.<sup>2</sup>
- There are between 16 and 33 SBS cases per 100,000 children each year in the United States during the first two years of life.<sup>4</sup>
- 1/4 of SBS victims die due to their injuries.<sup>2</sup>
- 80% of SBS survivors suffer permanent brain damage.<sup>2</sup>
- The average age of SBS abuse is 6.7 months.<sup>4</sup>
- 82% of victims have retinal hemorrhages.<sup>4</sup>
- 41% of victims suffer from both primary and secondary brain injury.<sup>4</sup>



Illustration of the common appearance of an infant suffering from SBS<sup>6</sup>

### SBS SIGNS & SYMPTOMS<sup>7, 8</sup>

- Lethargy
- Poor suckling or swallowing
- Poor feeding or eating
- Irritability
- Difficulty staying awake
- Vomiting
- Rigidity
- Tremors
- Inability to lift head
- Pale or bluish skin
- Difficulty breathing
- Paralysis
- Coma

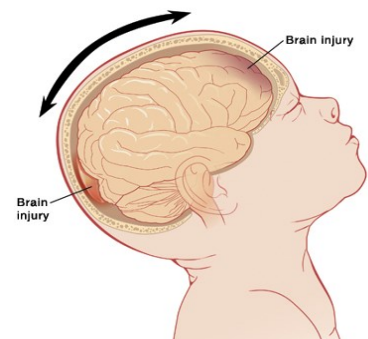


Diagram of brain injuries due to SBS<sup>5</sup>

# ThinkFirst about...

... the safety of the child! A moment of anger could change all of your lives forever. Ensure infants and children are safe with everyone they are in contact with.

## Shaken Baby Syndrome *Fast Facts*



### Test Your Knowledge

**Q: What circumstances most contribute to SBS?**

**A:** Excessive infant crying is the most common trigger of SBS.<sup>9</sup> Other triggers include irregular infant sleeping or feeding patterns, as well as parental fatigue or depression.

### ABUSIVE HEAD TRAUMA

- Pediatric Abusive Head Trauma (AHT) is defined by the CDC as “an injury to the skull or intracranial contents of an infant or young child due to inflicted blunt impact or violent shaking.”<sup>10</sup>
- SBS is one of the most common forms of AHT in young children and infants.
- Approximately 30 per 100,000 children under the age of one are injured from a form AHT annually.<sup>11</sup>
- Subdural hemorrhages, cerebral edema, injuries to white matter of the brain, and retinal hemorrhages are some of the most common injuries seen in AHT.<sup>11</sup>
- AHT victims may exhibit other signs of physical abuse upon physical examination.<sup>11</sup>

### SBS/AHT

#### PREVENTION TIPS<sup>9, 12</sup>

- Parents and caregivers of infants are the first line of prevention.
- Understand that crying is worse during the first few months of life.
- Try calming an infant by rocking, offering a pacifier, going for a walk, or singing.
- If you are getting upset with your child, focus on calming down before tending to him/her.
- If crying persists, check for signs of illness and call your doctor if necessary.
- Call another trustworthy adult for assistance or consult with a healthcare professional. Contact police if necessary.
- Consider joining a parent support group in your community.

# ThinkFirst

National Injury Prevention Foundation

[www.thinkfirst.org](http://www.thinkfirst.org)

The ThinkFirst Foundation is a 501c3 nonprofit organization dedicated to preventing brain, spinal cord and other traumatic injuries through education, research and advocacy. Visit our website to learn more and use our chapter directory to locate a chapter near you — your resource for injury prevention presentations.

### Sources

<sup>1</sup>Cleveland Clinic Children's: Diseases and Conditions- Shaken Baby Syndrome [Online]. Jan. 5, 2011. Available from URL: <https://my.clevelandclinic.org/childrens-hospital/health-info/diseases-conditions/hic-Shaken-Baby-Syndrome> Cited Mar. 23, 2016.

<sup>2</sup>New York State Government- Department of Health. Shaken Baby Syndrome: Facts and Figures [Online]. June 2010. Available from URL: [https://www.health.ny.gov/prevention/injury\\_prevention/shaken\\_baby\\_syndrome/sbs\\_fact\\_sheet.pdf](https://www.health.ny.gov/prevention/injury_prevention/shaken_baby_syndrome/sbs_fact_sheet.pdf) Cited Mar. 23, 2016.

<sup>3</sup>National Conference of State Legislators (NCSL). Shaken Baby Syndrome Prevention Legislation [Online]. Jan. 2014. Available from URL: <http://www.ncsl.org/research/human-services/shaken-baby-syndrome-prevention-legislation.aspx> Cited Mar. 24, 2016.

<sup>4</sup>National Center on Shaken Baby Syndrome. All About SBS/AHT [Online]. Available from URL: <http://www.dontshake.org/sbs.php?topNavID=3&subNavID=317&navID=842> Cited Mar. 24, 2016.

<sup>5</sup>KGWN Cheyenne. Effects of Shaken Baby Syndrome [Online]. June 12, 2015. Available from URL: <http://www.kgwn.tv/home/headlines/Effects-of-Shaken-baby-Syndrome-307067311.html> Cited Mar. 28, 2016.

<sup>6</sup>National Institutes of Health (NIH). U.S. National Library of Medicine. MedLine Plus: Medical Encyclopedia, Shaken Baby Syndrome [Online]. Feb. 21, 2013. Available from URL: <https://www.nlm.nih.gov/medlineplus/ency/article/007578.htm> Cited Mar. 28, 2016.

<sup>7</sup>Children's Hospital Colorado. Facts About Shaken Baby Syndrome [Online]. Jan. 2016. Available from URL: <http://www.childrenscolorado.org/wellness-safety/calm-a-crying-baby/parents/about-shaken-baby-syndrome> Cited Mar. 31, 2016.

<sup>8</sup>May Clinic Staff, Mayo Clinic. Diseases and Conditions: Shaken baby syndrome [Online]. Oct. 18, 2014. Available from URL: <http://www.mayoclinic.org/diseases-conditions/shaken-baby-syndrome/basics/symptoms/con-20034461> Cited Mar. 31, 2016.

<sup>9</sup>Centers for Disease Control and Prevention (CDC). Preventing Abusive Head Trauma in Children [Online]. Aug. 10, 2015. Available from URL: <http://www.cdc.gov/violenceprevention/childmaltreatment/abusive-head-trauma.html> Cited Mar. 28, 2016.

<sup>10</sup>Parks, Sharyn E., Annest, Joseph L., Hill, Holly A., Karch, Debra L. Centers for Disease Control and Prevention (CDC). National Center for Injury Prevention and Control- Division of Violence Prevention. Pediatric Abusive Head Trauma: Recommended Definitions For Public Health Surveillance and Research [Online]. Apr. 2012. Available from URL: <http://www.cdc.gov/violenceprevention/pdf/pedheadtrauma-a.pdf> Cited Apr. 1, 2016.

<sup>11</sup>American Academy of Pediatrics. Abusive Head Trauma (Shaken Baby Syndrome) [Online]. Available from URL: <https://www.aap.org/en-us/about-the-aap/aap-press-room/aap-press-room-media-center/Pages/Abusive-Head-Trauma-Fact-Sheet.aspx> Cited Apr. 1, 2016.

<sup>12</sup>Childhelp. Resources for Parents: Shaken Baby Syndrome [Online]. Available from URL: <https://www.childhelp.org/story-resource-center/shaken-baby-syndrome/> Cited Apr. 1, 2016.