

Shaken Baby Syndrome and Abusive Head Trauma: Idaho's Progress Toward Prevention

Over the past several years Idaho has seen a significant increase in Shaken Baby Syndrome and Abusive Head Trauma in young children. In response, the Early Childhood Coordinating Council (EC3), The Idaho Children's Trust Fund and Child Welfare have formed a small working committee, the Child Safety Initiative, to identify methods of prevention for implementation, statewide.

Conceptual Framework:

Shaken Baby Syndrome (SBS) is a form of Abusive Head Trauma (AHT) where an adult aggressively and forcefully shakes an infant or small child, typically in frustration to the child's crying. Abusive Head Trauma can occur with or without shaking or impact. Shaking, however, leads to a whiplash effect in the child, shearing blood vessels in the head, and causing bleeding in the brain and eyes. Nearly all children shaken or experiencing Abusive Head Trauma have lifelong health problems, including communication, motor and, cognitive disabilities. One in four of these children die." In 2012, the Idaho Department of Health and Welfare reported at least nine substantiated cases of children who suffered from Shaken Baby Syndrome or Abusive Head Trauma. With some possibility of duplication in reporting numbers, St. Luke's CARES program reports five substantiated cases, of which two were fatal. Paul McPherson, MD of the CARES program, cautions that there is no way to know the full extent of the injuries children will have sustained, or the life altering conditions they will face from being shaken, as some of the long-term complications may not be evident until the victims are older.²

Shaken Baby Syndrome is 100% preventable! The Idaho State Legislative Joint Resolution of April 2011 spoke of the importance of education as a strategy to combat Shaken Baby Syndrome and Abusive Head Trauma³. In response to the resolution statement the Early Childhood Coordinating Council designed bookmarks to educate the public about Shaken Baby Syndrome. There were 25,600 bookmarks printed in 2011-2012, both in English and Spanish. The bookmarks were sent to public libraries, birthing hospitals and early childhood programs. Even with these efforts and many others, as a state, there has not been a decrease of children who suffer from Abusive Head Trauma or Shaken Baby Syndrome. On the contrary, there appears to be a continual increase in the number of victims. Studies have demonstrated a relationship between the rise of Abusive Head Trauma cases and the most recent economic recession.

Following a brief look at the different types of educational programs that are being used and implemented in Idaho, the committee proposed a joint statement that identifies and promotes the best practice models for educating parents and reducing Shaken Baby Syndrome. Three prominent models were found in Idaho: 1) *The Period of Purple Crying*, 2) *The Happiest Baby on the Block*, and 3) *All Babies Cry*. Each of these methods have a different approach to Shaken Baby Syndrome prevention, but each have the same goal, to keep infants and young children safe.

The Period of Purple Crying is used by 33 of 40 hospitals throughout the state as their education model for Shaken Baby Syndrome prevention; however, not all of the hospitals fully implement the program.

The Happiest Baby on the Block is used by a large hospital system and in some home visiting models.

All Babies Cry is training available through Child Care Health Consultants in some child care settings.

Definitions:

Shaken Baby Syndrome: is defined as a “severe form of physical child abuse resulting from violently shaking an infant by the shoulders, arms, or legs. SBS may result from both shaking alone or from shaking with impact.”⁶

Abusive Head Trauma: is defined as “an injury to the skull or intracranial contents of an infant or young child (< 5 years of age) due to inflicted blunt impact and/or violent shaking.”⁶

Period of Purple Crying: the *Period of PURPLE Crying* is a Shaken Baby Syndrome prevention program that was developed by Dr. Ronald Barr. The program defines the frustration of having a newborn baby and helps parents understand that when their baby goes through uncontrollable bouts of crying it is a normal developmental process. The program uses the acronym PURPLE to define what parents are witnessing in their children as normal. The acronym PURPLE stands for: **Peak** of crying, **Unexpected**, **Resists** soothing, **Pain-like** face, **Long** lasting, **Evening**. With this program parents and caregivers are encouraged to put the baby down and walk away.⁸ Each of the parts of the acronym has a definition as listed:

- **Peak of Crying:** babies cry more and more each week with the peak at around two months
- **Unexpected:** crying comes and goes and there is not any reason for it.
- **Resists Soothing:** babies may not stop crying no matter what is tried
- **Pain-Like face:** a crying baby may look like they are in pain even when they are not.
- **Long lasting:** crying can go on for five hours a day or more
- **Evening:** babies may cry more in the late afternoon and evening⁸

The Period of Purple Crying is found in many Idaho hospitals. The DVD that describes the program is shown or given to new parents prior to maternal release from the hospital.

The Happiest Baby on the Block: this program focuses on helping calm babies down during bouts of crying. The model is based on five S's: **Swaddling**, **Side/stomach** position, **Shushing** sounds, **Swinging**, and **Sucking**. *The Happiest Baby on the Block* method suggests that all babies can be soothed if the proper technique is used.⁷

- **Swaddling:** “Tight swaddling provides the continuous touching and support your baby is used to experiencing within the womb.”

- **Side/ Stomach position:** “The infant is placed on their left side to assist in digestion, or on their stomach to provide reassuring support.”
- **Shushing sounds:** “These imitate the continual whooshing sound made by the blood flowing through arteries near the womb.”
- **Swinging:** “Newborns are used to the swinging motions within their mother’s womb, so entering the gravity driven world of the outside is like a sailor adapting to land after nine months at sea.”
- **Sucking:** “Triggers the calming reflex and releases natural chemicals within the brain.”⁷

The method of *The Happiest Baby on the Block* provides parents both new and traditional methods for consoling their crying baby. Dr. Harvey Karp, the author of the program introduces the idea of the “fourth trimester”. This concept provides that a baby is not ready to be in the outside world until they are three months old, triggering crying, and consequently frustration in parents. Keeping the idea of the fourth trimester in mind, the program provides the “5 S’s” to help calm a crying baby.

The Happiest Baby on the Block is a model that is used in home visiting programs and by hospitals.

All Babies Cry: this program was developed by Vida Health Communications Inc., and the program focuses on the importance of understanding why a baby is crying. After the determination of when and why the baby is crying, it helps focus on taking care of a fussy baby with an emphasis on swaddling, tummy time, neck support, sucking and singing. The program specifically encourages walking away from a baby, after ensuring her/his safety, when a caretaker becomes frustrated or overly emotional. The program also enforces the ideal that calling for help from family and friends is acceptable and encouraged. The *All Babies Cry* brochure talks about the necessity of parents and caregivers to take care of themselves in order to care effectively for an infant.⁹

Concept:

The Child Safety Initiative has started by reviewing a survey taken by the Idaho Perinatal Project in 2010 of all hospitals and birthing centers in Idaho and the form of education they are providing to new parents. This work group will also investigate the increasingly popular midwife and home delivery providers to determine their employed form of education. The goal is to identify what each provider and hospital is offering with patients to educate new parents about the dangers of Shaken Baby Syndrome. After the initial analysis the group will identify any centers or hospitals that are not offering any educational programs at all for new parents. After the centers are identified the Idaho Children’s Trust Fund will work with local organizations and hospitals to adopt and implement Shaken Baby Syndrome prevention programs in their centers.

Even though these programs are present and functioning in Idaho the rise of Shaken Baby Syndrome is staggering. The Child Safety Initiative has started brainstorming how to reduce the numbers of shaken babies. Even with the amount of education that is out in circulation, it was determined that only parents are being educated, and often only at the time of delivery, and not the caregivers of children, beyond the professional child care setting.

Another task for the Child Safety Initiative was to identify who is victimizing these children, while considering that Shaken Baby Syndrome and Abusive Head Trauma are not a premeditated act. Statistically speaking men are more likely to shake a child or inflict Abusive Head Trauma.¹⁰ However, not all men that cause these injuries are the biological parent of the victim; about 25% of the perpetrators of this crime are the significant other of the child's biological mother. Educating the men who are charged with caring for these children has become a topic for discussion in the Child Safety Initiative. This discussion has warranted the question: "how can the message about Shaken Baby Syndrome prevention be relayed to men who have not been informed and yet are in a caregiver role to young children and infants?"

While the average age of a perpetrator of Shaken Baby Syndrome is 22 years old,¹⁰ the Child Safety Initiative is investigating ways to educate these men. One possible way is to develop a curriculum; however, the challenge is in where and how to use it.

The Child Safety Initiative has, and will, maintain focus on prevention of Shaken Baby Syndrome and Abusive Head Trauma through research, education and dissemination of information on dangers and prevention methods in the state of Idaho. Because these issues are 100% preventable, targeting those who come into contact with and care for babies and young children, is paramount in maintaining the safety, health and happiness of Idaho's children.

References:

1. Centers for Disease Control, Prevent Shaken Baby Syndrome <http://www.cdc.gov/concussion/HeadsUp/sbs.html> 17 August 2012
2. McPherson MD, Paul. <mcphersp@slhs.org> SBS Statistics 27 August 2012 professional email, 27 August 2012
3. Berger, R., et al. Abusive Head Trauma During a Time of Increased Unemployment: A Multicenter Analysis. *Pediatrics*. 2011; (128); 637-643.
4. Legislative Joint Resolution (2011) <http://www.legislature.idaho.gov/legislation/2011/HCR005.pdf>
5. “A Journalists Guide to Shake Baby Syndrome: A Preventable Tragedy” (2010) Centers for Disease Control http://www.cdc.gov/Concussion/pdf/SBS_Media_Guide_508_optimized-a.pdf
6. Parks, Anest, Hill, Karch 2012 “Pediatric Abusive Head Trauma: Recommended Definitions for Public Health Surveillance and Research” <http://www.cdc.gov/ViolencePrevention/pdf/PedHeadTrauma-a.pdf>
7. Happiest Baby on the Block <https://www.happiestbaby.com/5-ss-system-may-help-colic-symptoms/> accessed 17 August 2012
8. Barr, Marilyn 2012 “What is the Period of Purple Crying?” 18 August 2012 <http://www.purplecrying.info/sections/index.php?sct=1&>
9. Vida Health Corporation “All Babies Cry: Tried and True tips for comforting your newborn—and yourself” http://allbabiescry.com/assets/docs/ABC_Booklet_English.pdf 18 August 2012
10. Dontshakejake.org Accessed 18 August 2012 <http://www.dontshakejake.org/did-you-know.html>