# Shaken Baby Syndrome Simulator<sup>™</sup>

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Assessing and identifying SBS for emergency response personnel



# My Background

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As a nurse for over forty-four years, I have had experience working in Surgery, Pediatrics, Ped's Rehabilitation, Neurosurgical Physician Office and Injury Prevention, all with direct ties to Shaken Baby Syndrome. This experience is what led me to invent the Shaken Baby simulator.



### Definitions

- <u>Clinical Definition</u>—Shaken Baby Syndrome, or SBS, is a form of Abusive Head Trauma (AHT) that causes bleeding over the surface of the brain, swelling of the brain, bleeding at the back of the eyes, and other injuries not seen together in any other disease or medical condition.
- <u>Layperson's Definition</u>—Child abuse involving the shaking of a baby.



## **Product Purpose**

- Prevent Shaken Baby Syndrome (SBS) by teaching caregivers the child care and stress management skills needed to avoid shaking a baby in frustration.
- Raise awareness of:
  - The brain damage caused by SBS
  - Why and how shaking can cause permanent brain damage in infants
  - The mental state of caregivers who've caused Shaken Baby Syndrome
  - Skills to manage frustration that can be caused by a crying baby

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## **SBS** Facts

- Shaken Baby Syndrome accounts for more than 50 percent of non-accidental injuries in children
- It's estimated that somewhere between 1,200-1,400 cases of Shaken Baby Syndrome are reported each year in the United States alone
- 25 percent of all shaken babies die from their injuries
  - The remaining 75 percent suffer severe brain damage
- Approximately 60 percent of SBS victims either die from their injuries at a later time or suffer lifetime disabilities



#### Who needs to know about the dangers of SBS?

#### Anyone who cares for an infant!!

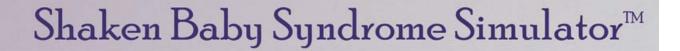
- Middle School Students
- High School Students
- Babysitters
- Parents
- Non-Biological Partners
- Grandparents
- Day Care Providers
- Foster Care Providers
- Prenatal Classes
- Postnatal Classes
- Offenders Close to Release from Prison



## **Questions for First Responders**

- Where was caregiver?
- Where was child?
- What exactly did caregiver say?
- Did you see or smell any evidence of cleaning?





### **First Responders**

What is evidence?

#### ANYTHING

Tyworks

Evidence With Potential: Trash

Baby food jars, bottles, vomit, bibs, diapers, etc.



# How the Simulator Works

- Two accelerometers in the simulator's brain measure the amount of force caused by a shaking incident.
- Six LEDs illuminate to illustrate brain damage caused by shaking:
  - Damage to occipital lobe (vision)
  - Damage to frontal lobe (memory and emotion)
  - Damage to middle of brain (arms, legs, speech, hearing)



## How the Simulator Works (cont.)

- Turn the Simulator "ON"
  - LEDs in head cycle three (3) times
  - Simulator starts to cry

- Shaking Demonstration
  - Inconsolable crying is #1 "trigger" that causes shaking incidences
  - LEDs illuminate in order:
    - Back
    - Front
    - Middle
  - Crying continues until frontal lobe is damaged



### Curriculum

- Comprehensive 109-page curriculum
- National (U.S.) FACS and Health Standards
- Seven Activities
  - Pretest
  - Shaking Demonstration
  - SBS Video and Discussion
    - (Portrait of Promise or Elijah's Story)
  - 30-Page Overhead Presentation
  - Q&A Review with Simulator
  - My Plan to Manage Frustration
  - Posttest and Pledge Not to Shake



# **Realityworks' Web Site**

http://www.realityworks.com/sbss/

- Three (3) downloadable files
  - 30-Page PowerPoint Presentation "Shaken Baby Syndrome: A Preventable Tragedy"
  - "What Happens During a Shaking?"
  - "Pledge Not to Shake"
- Links to SBS Prevention, Brain Injury Prevention, Child Abuse Prevention, Medical and Child Health Organizations

