

# Shaken Baby Syndrome (SBS)



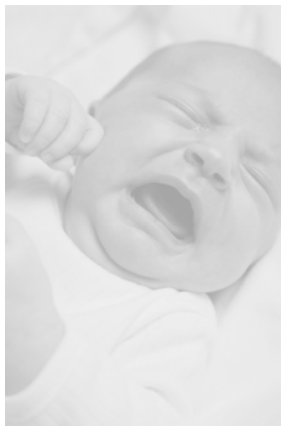
## Oregon Injury Prevention and Epidemiology SBS Fact Sheet

### BASIC FACTS

- Shaken Baby Syndrome (SBS) is a type of head trauma caused by the vigorous shaking of a baby or young child that can result in severe injury or death.
- Long-term consequences for a child include life-long physical and cognitive disabilities, behavioral disorders, blindness, hearing impairment, speech disabilities.
- Small children—especially those under 1— are especially at risk for this type of abuse. Their heads are large in comparison with their bodies, muscles are weak, and shaking usually occurs in response to inconsolable crying. Babies tend to experience a natural peak in periods of crying around 6-8 weeks of age.
- On average, 2 children die each year in Oregon due to SBS.
- About 9 children are hospitalized each year in Oregon due to SBS.
- Perpetrators of SBS are usually the father
- Never, ever, shake a baby.

### What happens?

- When a baby is shaken, torsional forces are exerted on the brain; damage to the brain, blood vessels and retina can occur.
- Lack of external injury and non-specific complaints means that some cases go undetected.



### Why?

- A baby's muscles are too weak to support its head. Babies' brains and blood vessels are very susceptible to injury.

### When?

- Babies' experience a period of peak crying around 6-8 weeks of age.
- Many SBS cases occur in the weeks following the period of peak crying. This may be because the final shaking incident that resulted in death or hospitalization followed subsequent shaking events over an extended period of time.

### Who?

- In Oregon, it has been determined that the perpetrator is the father for 56% of SBS cases seen in emergency departments or hospitalized; the mother is the perpetrator 12% of the time, and the mother's boyfriend 12% of the time.

### How often?

- Estimates from recent SBS studies suggest that as many as 30 cases per 100,000 children occur in the general population.

### SBS Deaths in Oregon

- From 2003 to 2006, eight Oregon children—on average two per year— died due to SBS.

- Of eight children, four were male and four were female; seven were white, one was American Indian; three were of Hispanic ethnicity.
- Their ages ranged from one month to 2 years. Four were less than 5 months of age.
- Two children died due to the sequelae of prior SBS.
- Among suspects involved in the eight deaths, seven were male; six were the victim's father and one was a boyfriend of the victim's mother.

### SBS Hospitalizations in Oregon

- Between 2002 and 2006, there were 44 hospitalizations in Oregon associated with SBS among children under 2 years of age—an average of just under 9 cases per year.\*
- Between 2002 and 2006 the average age of a baby hospitalized for SBS in Oregon was 9 months.
- 66% of hospitalized SBS cases were male.
- The average cost per hospitalization (2002-2006) was \$21,000; Medicaid or The Oregon Health Plan was the payer in 86% of cases. The total hospitalization charges for these 44 cases was over \$1.3 million.
- Hospitalizations and deaths do not likely account for all cases of SBS— some cases may not be recognized and diagnosed due to lack of external signs of injury. It is therefore difficult to assess the total number of SBS cases that occur in Oregon.

### Prevention

- SBS may be preventable, but warning about the dangers of shaking cannot alone prevent SBS. Educating new parents about the dangers of shaking in conjunction with helping them develop realistic expectations of how much their baby will cry and how to handle crying might effectively reduce the incidence of SBS.

\* Using a specific case definition of SBS: any hospitalization among children < 2 years with an ICD-9 discharge code of 995.55. This definition may not be representative of all cases.