

Child Abuse & Neglect Tips

"DID YOU KNOW?"

Did you know that **pediatric healthcare specialists** other than forensic pediatricians are considered "experts" in child abuse?

- **Pediatric Neurologists** – have special training to care for disorders of the nervous system (the spinal cord, nerves and the brain) in children.
- **Pediatric Neurosurgeons** – are specialists who evaluate and treat children with a range of surgical disorders involving the brain and nerves; such as brain tumors, hydrocephalus (fluid on the brain), head injuries (with brain injury and bleeding around the brain), and other deformities of the skull and spine.

Shaking, with or without the sudden deceleration or impact of the head and brain can cause the following:

- **Subdural hematoma** - a collection of blood between the surface of the brain and the dura (the outer membrane covering the brain.) This occurs when the veins that bridge from the brain to the dura are stretched beyond their elasticity, causing tears and bleeding.
- **Subarachnoid hemorrhage** is bleeding between the arachnoid (web-like membrane surrounding the brain which is filled with spinal fluid) and the brain.
- **Direct trauma to the brain** itself when the brain tissue strikes the inner surface of the skull.
- **Shearing off or breakage of nerve cell branches** (axons) in the superficial or deeper structures of the brain caused by violent motion to the brain.
- **Irreversible damage to the brain tissue** from the lack of oxygen if the child stops breathing during or after shaking.
- **Further damage** to the oxygen-deprived brain cells **when the injured nerve cells release chemicals from cell death.**



Very large collection of subdural blood which is compressing the brain tissue. This required Pediatric Neurosurgical intervention and the placement of 2 shunts to take the pressure off the brain.

Questions to Ask:

- ☑ What types of injuries are there to the brain? (Bleeding around the brain, bleeding & injury to the brain tissue itself, injury to the spinal cord?)
- ☑ If more than one: Could they have all been caused by the same mechanism of injury?
- ☑ Are they similar appearing in age?
- ☑ Are these injuries most consistent with a single event or multiple events?
- ☑ Are these injuries consistent with a disease process? If so, have tests been done to rule in or rule out this/these disease processes?
- ☑ Are these injuries most consistent with an accidental or non-accidental injury?

The Major Portions of the Brain Include the Cerebrum, Cerebellum and Brain Stem

