

## Brain Injury Information

### Two types of Acquired Brain Injury

- Acquired – any brain injury that happens after a child is born. Two types of acquired brain injury
  - Non-traumatic
    - Anoxic – lack of oxygen to the brain
    - Toxic – introductions of toxins to the brain, such as lead poisoning, overdosing of medicine or street drugs
  - Traumatic – any blow or jolt to the brain from an outside source

### Three levels of severity

- Mild Traumatic Brain Injury I– sometimes called concussion – may or may not have loss of consciousness, may have memory loss of several minutes to several hours
- Moderate Traumatic Brain Injury - resulting in a loss of consciousness from 20 minutes to 6 hours and a Glasgow Coma Scale of 9 to 12
- Severe Traumatic Brain Injury -resulting in a loss of consciousness of greater than 6 hours and a Glasgow Coma Scale of 3 to 8

Also brain differences and subsequent learning and health issues due to issues such as:

- Seizures ranging from mild seizures controlled with medication to intractable seizures that require removal of portions of the brain
- Tumors – range from small and/or slow growing to more malignant tumors that are aggressive and take over larger portions of the brain
- Illnesses – encephalitis, meningitis, abscesses and strokes

Most brain injuries in children are mTBI (concussion). They occur any time a child's head comes into contact with a hard surface, such as, a desk, floor, another student's head or body. This is more likely anytime children are engaged in physical activity such as, PE, recess, sports activities or recreational activities.

Children with a suspected concussion should NOT return to any sports, physical or recreational activity on the day of the injury. The parents should be notified and a health care professional should assess the student to determine if a concussion has occurred. If there is a concussion then any physical activity such as physical education class, sports practices or games or activity at recess should be determined by the health care professional and not resumed until cleared.

The state of Arkansas has a return to play protocol that is law. Any student in Arkansas engaged in an organized sport that is diagnosed with a concussion must follow the return to play protocol. It is a MINIMUM of 5 days, with most returns being longer.

Parents, teachers, coaches, counselors and other adults may see changes in the student's behavior, thinking or physical abilities. These may include but not be limited to:

Sadness, being more emotional than unusual

Feeling sluggish, hazy or foggy

Sleeping more or less than usual

Headache or pressure in the head

Nausea or vomiting

Blurry or double vision

Cannot recall events prior to or after the blow to the head

Most of our time has been spent on the milder type of brain injury as these are the ones that may be missed or missed diagnosed. Most students' concussions resolve with no issues within two (2) weeks. If they do not then the student needs to return to the health care professional.

Students with brain injury may not need any intervention, may need a 504 plan or may need special education. Most students with moderate to severe head injuries need some type of modification of the curriculum and need those modifications to benefit from instruction. Students with mild injuries, especially those who have sustained multiple mild injuries, typically need some type of intervention.

For more information, please feel free to contact me. Please find my contact information below.

Aleecia Starkey, MSP, CCC-SLP, CBIS  
Consultant for Students with Brain Injury  
1401 West Capitol Avenue, Suite 425  
Little Rock, AR 72201  
Office: 501-319-7333  
Mobile: 501-681-3143  
Fax: 501-379-8387  
[aleecia.starkey@arkansas.gov](mailto:aleecia.starkey@arkansas.gov)

Information for today's call taken from Centers for Disease Control Heads Up Concussion [www.cdc.gov/traumaticbraininjury/index.html](http://www.cdc.gov/traumaticbraininjury/index.html) and, Brain Injury in Children and Youth: a Manual for Educators (2013), Colorado Department of Education