



# Lake Health

## Sports Medicine Department Traumatic Brain Injury

[www.lakehealth.org](http://www.lakehealth.org)

A Good Call! 24/7 Sports Injury Hotline 1-866-247-4806

Traumatic brain injuries (TBIs) can be devastating to not only the student athlete that sustains the injury, but they can also have life changing effects on close family and friends. In the past, too many people have shrugged off what they perceived to be minor “bell ringers” and continued to participate in their sport. Current research is demonstrating that these smaller hits to the head are much more significant than previously thought. The research has shown that there is more damage being done and that it can be life threatening. For this reason, the National Football League has adopted a significant number of changes for their 2010 season in regards to how TBIs are handled by their teams’ medical staffs. This action by the NFL has created an increased awareness in the world of collegiate and high school athletics. In response, the National Federation of High Schools (NFHS) and the Ohio High School Athletic Association (OHSAA) have adopted more stringent rules to help protect the safety of the athletes.

Symptoms of TBIs can last for weeks or months, depending on the individual and the severity of the injury. It is extremely important to understand this fact, since repetitive traumas to the head can lead to a devastating condition known as secondary impact syndrome (SIS.) SIS is very

often a life altering event with significant, permanent cognitive changes and can be life altering and even fatal. Unfortunately, because there is such a wide variance in the amount of time required to heal from a TBI, it is a very difficult task to determine when it is safe to return to play.

### Danger Signs

If you observe any of these signs, seek immediate medical attention for the victim.

headache that gets worse	one pupil that is larger than the other
weakness, numbness, or decreased coordination	convulsions or seizures slurred speech
repeated vomiting cannot be awakened	getting more confused, restless, or agitated

These can be signs of a rare, but serious condition where a blood clot can lead to significant damage to the brain.

**Athletes need to report all head injuries or symptoms of TBI to their athletic trainer and not try to hide them. Also, teammates should not be afraid to report to the athletic trainer if they suspect that something “is not right” with a team member.**

## **Athletes should not be allowed to return to play on the same day as the traumatic brain injury.**

The following is a list of signs and symptoms that your school's athletic trainer and team physician will be looking for when evaluating an athlete for traumatic brain injury.

Low-grade headaches or neck pain

Loss of memory about the accident

Confusion

Nausea

Having trouble:

Remembering things

Paying attention or concentrating

Organizing daily tasks

Making decisions and solving problems

Slowness in thinking, acting, speaking, or reading

Feeling fatigued or tired

Loss of balance

Feeling light-headed or dizzy - "in a fog"

Change in sleeping pattern:

Sleeping much longer than usual

Trouble sleeping

Increased sensitivity to:

Sounds

Lights

Distractions

Blurred vision or eyes that tire easily

Decreased sense of taste or smell

Ringing in the ears

Mood changes:

Feeling sad, anxious, or listless

Becoming easily irritated or angry for little or no reason

Lacking motivation

(Smoots, 2006)

### **Stages of Recovery**

1) Rest until asymptomatic (physical and mental rest)

Depending on the severity of the TBI, this could mean simply sitting in a darkened room for a couple of days to eliminate stimuli to the brain and promote healing. This may exclude attending school, doing homework, watching TV, playing video games, texting on phones, even standing or walking around for extended periods. The school should be made aware of the reason for absenteeism.

2) Light aerobic exercise (e.g., stationary cycling)

3) Sport-specific exercise

4) Non-contact training drills (start light resistance training)

5) Full contact training drills after medical clearance (by team physician and athletic trainer)

6) Return to competition

At least 24 hours should be devoted to each stage of recovery.

(This can be longer if athlete shows symptoms)

You should return to Stage One if symptoms recur.

(Gannett Health Services, n.d.)

### **Things to Avoid**

Strenuous exercise

Alcohol

Drugs not approved by your physician

Driving or operating heavy machinery

### References

Gannett Health Services. (n.d.). *Concussion (head injury)*. Retrieved May 15, 2010, from Keeping You At Your Peak: <http://www.gannett.cornell.edu/cms/pdf/upload/Concussion.pdf>

Smoots, E. (2006). *Concussion*. Retrieved May 15, 2010, from Beliefnet: <http://www.beliefnet.com/healthandhealing/getcontent.aspx?cid=11942>