

## Guidelines for Management of Head Trauma in Sports

### Even a Minor Concussion without Loss of Consciousness can have Devastating Results.

Head trauma is a common problem in sports and has the potential for serious complications if not managed correctly. Use these guidelines as a protocol, but not in place of, the central role physicians, nurses and trainers must play.

#### 1. Problems in Brain Function:

**a. Confused state** – Dazed look, vacant stare, confusion about what happened or is happening.

**b. Memory problems** – Can't remember assignment on play, opponent, score of game, or period of the game. Can't remember how or with whom he or she traveled to the game, what he/she was wearing, what was eaten for breakfast, etc.

**c. Symptoms reported by athlete** – Headache, nausea or vomiting, blurred or double vision, oversensitivity to sound, light or touch, ringing in ears, feeling foggy or groggy.

**d. Lack of Sustained Attention** – Difficulty sustaining focus adequately to complete a task or a coherent thought or conversation.

2. Speed of Brain Function: Slow response to questions, slow slurred speech, incoherent speech, slow body movements, slow reaction time.

3. Unusual Behaviors: Behaving in a combative, aggressive or very silly manner, or just atypical for the individual. Repeatedly asking the same question over and over. Restless and irritable behavior with constant motion and attempts to return to play or leave.

Reactions that seem out of proportion and inappropriate. Changing position frequently and having trouble resting or finding a comfortable position. These can be manifestations of post-head trauma difficulties.

#### 4. Problems with Balance and Coordination:

Dizzy, slow, clumsy movements, inability to walk a straight line or balance on one foot with eyes closed.

**Reference:** [www.KeepYourHeadInTheGame.org](http://www.KeepYourHeadInTheGame.org)

## Sideline Management of Acute Head Injury

1. Did a head injury take place? Based on mechanism of injury, observation, history and unusual behavior and reactions of the athlete, even without loss of consciousness (LOC), assume a concussion has occurred if the head was hit.
2. Does the athlete need immediate referral for emergency care? If confusion, unusual behavior or responsiveness, deteriorating condition, LOC, or concern about neck and spine injury exist, the athlete should be referred at once for emergency care.
3. If no emergency is apparent, how should the athlete be monitored? Every 5-10 minutes mental status, attention, balance, behavior, speech and memory should be examined until stable over a few hours.
4. No athlete demonstrating symptoms of concussion should return to practice or play (RTP) the day of injury. RTP should be on a following day after appropriate neurological testing and the school physician's clearance.
5. Close observation of athlete should continue for a few hours. Parents or guardians of the athlete should be made aware of proper protocol, symptoms to watch for – contact medical personnel if concerned.
6. After medical clearance, RTP should follow a stepwise protocol with provisions for delayed RTP based on return of any signs or symptoms.

### MEDICAL CLEARANCE RTP PROTOCOL

1. No exertional activity until asymptomatic
2. When the athlete appears clear, begin low-impact activity such as walking, stationary bike, etc.
3. Initiate aerobic activity fundamentals to specific sport such as skating, running, etc.
4. Begin non-contact skill drills specific to sport such as dribbling, ground balls, batting, etc.
5. Then full contact in practice setting.
6. If athlete remains without symptoms, he/she may return to play.
  - a. Athlete must remain asymptomatic to progress to the next level.
  - b. If symptoms return, the athlete must return to the previous level.
  - c. Medical check should occur before contact.