



Concussion Management Guidelines

Definition

Concussion is a brain injury that may result from a direct impact to the head, neck or face, or to somewhere else on the body that transmits an impulsive force to the head. Loss of consciousness is not a common feature of most concussions.

Evaluation

There are many signs and symptoms that athletes may experience following a concussion. A concussion should be suspected if an injured athlete exhibits any of these signs or symptoms and appropriate management should be initiated. Symptoms may develop within minutes to hours and sometimes even days following an injury. Most symptoms resolve in 7-10 days, however, in some individuals, symptoms last weeks to months.

Symptoms/Signs	Behavioral Changes	Cognitive Impairment	Sleep Disturbances
Headache Nausea/vomiting Dizziness Visual Disturbances Light sensitivity Noise sensitivity Loss of consciousness Amnesia Loss of balance or poor coordination Decreased playing ability	Irritability Emotional lability Sadness Anxiety Inappropriate emotions	Slowed reaction times Difficulty concentrating Difficulty remembering Confusion Feeling in a fog Feeling dazed	Drowsiness Trouble falling asleep Sleeping more than usual Sleeping less than usual

Any athlete who sustains a head injury while participating in sports should immediately stop the activity. If there is loss of consciousness, a cervical spine injury should be suspected and appropriate precautions should be taken with ambulance transfer to the hospital.

A conscious athlete should be assessed for signs and symptoms of concussion and observed closely by a responsible adult and medical evaluation should be performed as soon as possible to confirm diagnosis of concussion.

Athletes who sustain a concussion during any activity must provide medical clearance prior to returning to play.

Return to Play Guidelines

- Return to play following concussion should be conservative and individualized
- A concussed athlete should not return to sports until all concussion signs and symptoms have resolved and they should be symptom free for 7-10 days
- Athletes must present medical clearance from their physician to return to any sports related activities
- Once symptoms have resolved the athlete must progress through a medically supervised stepwise exertion protocol
- An athlete who has sustained a head injury should be removed from the activity immediately and there should be no same day return to play

Prevention

- Protective equipment, including certified helmets must be worn for all activities with a risk of head injury including cycling and roller skiing
- Helmets must be well fitted, worn properly and well maintained. Damaged helmets must be replaced promptly according to the manufacturers recommendations
- Athletes, coaches and parents must recognize that helmets are not concussion proof
- Care must be taken by all athletes, coaches and trainers to minimize risk of head injury during all activities
- Concussion education is vital to all athletes, parents, coaches and support personnel to recognize the signs and symptoms of concussion and be aware of appropriate management of concussive injuries