

# CONCUSSION IN SPORTS

## SIGNS AND SYMPTOMS

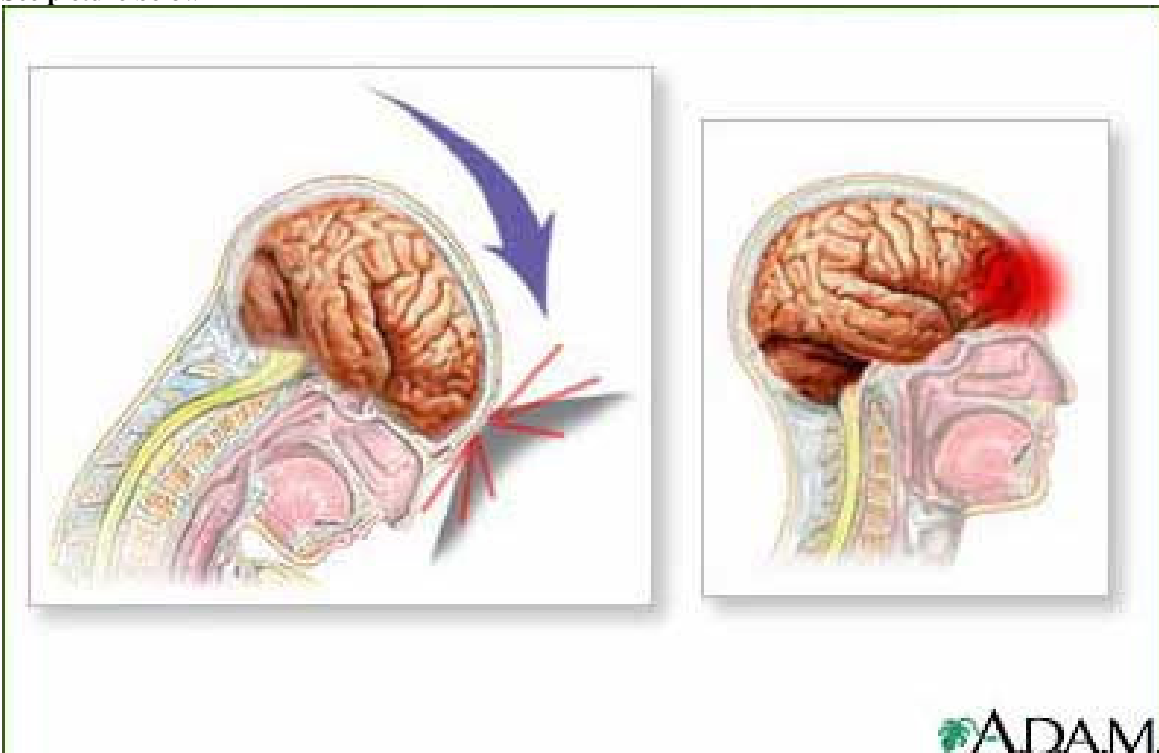
### Symptoms Reported by Athlete

- Headache or “pressure” in head
- Nausea
- Balance problems or dizziness
- Double vision
- Sensitivity to light
- Sensitivity to Noise
- Feeling sluggish or slowed down
- Feeling foggy or groggy
- Does not “feel right”

### Signs of deteriorating Neurological function. An athlete should be taken to the emergency room in any of the following signs/symptoms are present

- Headache worsens
- Seizures
- Can’t focus
- Looks very drowsy or can’t be awakened
- Repeated vomiting
- Slurred speech
- Can’t recognize people or places
- Increasing confusion or irritability
- Weakness or numbness in arms or legs
- Neck Pain
- Unusual behavior
- Significant irritability
- Any loss of consciousness greater than 30 seconds

See picture below



## Care of Concussed Athlete

When an athlete sustains a concussion injury many times they do not understand what a concussion really is. It can be a bruise to the brain, with a minimal amount of bleeding similar to a bruise on your body. It can also be a significant bruise that slowly bleeds and the situation can become more serious.

When the brain is injured it needs time to recover. Often times the symptoms will dissipate making the athlete think they can return to play. However, the risk of returning to play too soon can lead to **second impact syndrome**. When an athlete sustains a second concussion or returns to play too soon the severity and long-term consequences increase. Most concussions that are mild take 5 to 10 days or longer to recover from fully.

### **RETURN TO PLAY CRITERIA**

**It is important to avoid Second Impact Syndrome**-sustaining a second impact happens if the first injury has not healed and can be very serious. When an athlete sustains a concussion and is cleared to return to play they must pass an exertional test. The athletic trainer usually administers this test. The athlete is asked to jog for a few minutes, then run progressively faster for a few minutes and then do a few push ups and sit-ups to raise their blood pressure. If none of the symptoms return the athlete is then allowed to exercise in a non-contact activity for that day. If not symptoms return the athlete will be allowed to return to play gradually until full contact is resumed.

### **POST-CONCUSSIVE SYNDROME**

After a person sustains a concussion they may experience symptoms that are known as post-concussion syndrome. The athlete may exhibit this syndrome when they try to read, watch television or enter a classroom or area with bright lights and noise. This situation will cause them to experience the feelings of a concussion. They may be able to read material but not retain the information. Their headache may return along with feeling irritable and their eyes may hurt. This is why we encourage the athlete to stay at home and not return to school or social activities for a day or two or until these symptoms are no longer present. If the post-concussive syndrome symptoms remain present for a week or more the athlete should follow up with a physician who is experienced in evaluating concussions. Sports medicine physicians are best because they are most familiar with the signs and symptoms of concussion injuries and are experienced in educating the athlete, coach and parent about a reasonable amount of time for recovery to take place.

### **NUMBER OF CONCUSSIONS SUSTAINED BY AN INDIVIDUAL**

Concussion injuries are cumulative. Each time a person sustains a concussion the recovery time increases. Physicians may vary on how many concussions an athlete may sustain and return to play during the season and over their career. If your son/daughter has sustained several concussions a physician who is experienced in evaluation of this type of injury should be consulted.

#### **References:**

1. *Impact concussion testing services:* [www.impacttest.com](http://www.impacttest.com)
2. [www.Sportsconcussion.net](http://www.Sportsconcussion.net)
3. *Dr. Robert Cantu, Emerson Hospital and Harvard University*
4. *Center for disease Control and Prevention*