

Sports Concussion Education for Coaches, Parents, and Athletes



Jeff Manning M.D. Amity Rubeor D.O.

Affinity Sports Medicine East Greenwich, RI

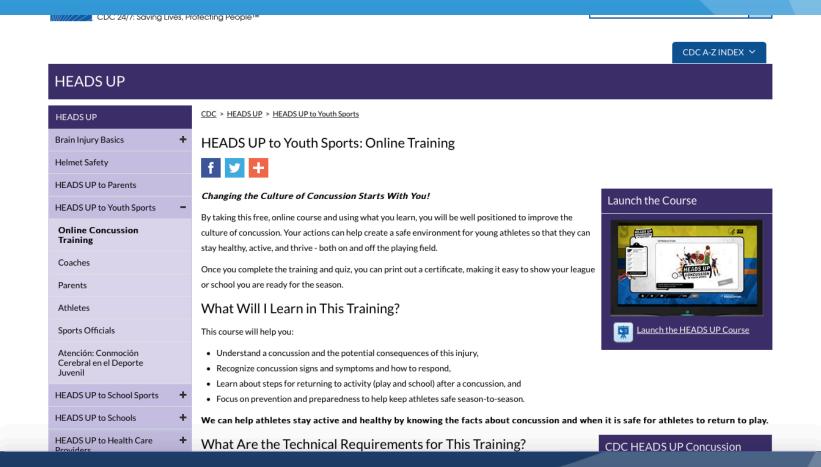


Objectives

- 1. Understand the basic definition of concussion.
- 2. Recognize signs and symptoms of concussion in athletes.
- 3. Understand what to do if an athlete sustains a suspected concussion.
- Understand the precautions, treatment, and "return to play" concerns for the concussed athlete.

CDC Concussion Education and Test

http://www.cdc.gov/headsup/youthsports/training/index.html



What is a Concussion?

- A disturbance in brain function caused by a direct blow or transmitted force to the head. It results in a variety of non-specific symptoms and <u>does not always involve a loss of</u> consciousness.
- A concussion should be suspected in the presence of any one or more of the following symptoms, following an observed or suspected blow to the head or body:

Immediate Signs and Symptoms

- Headache
- Confusion
- Dizziness
- Loss of consciousness
- Cognitive problems
- Amnesia
- Blurred vision
- Nausea/vomiting
- Lightheadedness
- Balance disturbance
- Difficulty concentrating



Delayed Signs and Symptoms



- Sleep irregularities
- Fatigue/lethargy
- Depression
- Personality changes
- Inability to perform usual daily activities

"Red Flag Signs and Symptoms"

- One pupil larger than the other
- Deteriorating level of consciousness
- Inability to revive injured athlete with loss of consciousness
- Slurred speech, facial droop, weakness in one part of the body, increasing confusion



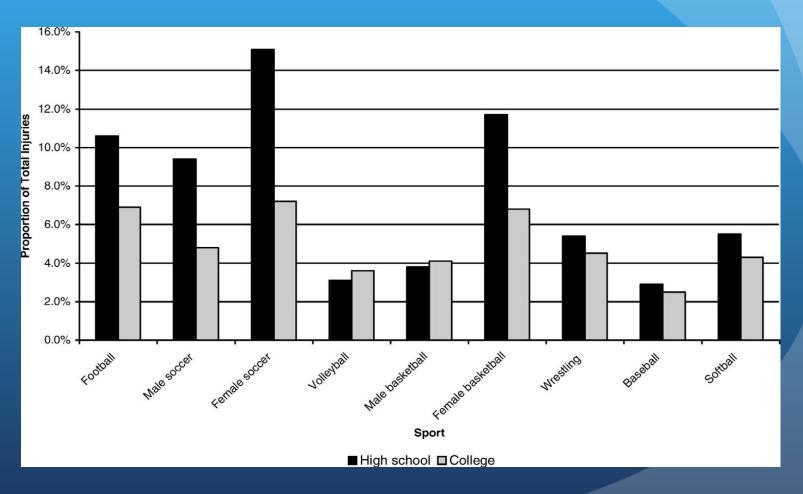
Suspected or Confirmed Concussion

- Effective January 1, 2015:
- participant who is suspected of sustaining a concussion in a practice, game or competition shall be removed from practice, play or competition at that time.
- If a qualified medical professional is available on-site to render an evaluation, that person shall have final authority as to whether or not a concussion is suspected.
- If applicable, the participant's parent or guardian should be made aware that the participant is suspected of sustaining a concussion.



Concussions as Percentage of Total Injuries in HS & Collegiate Athletes

Gessel 2007



Concussions in Children

(Purcell 2008, 2009)

- Concussive symptoms take longer to resolve.
- Increased vulnerability to additional brain injury during acute recovery period (7– 14d).
- High school athletes take significantly longer to recover than collegiate athletes.
- At least 25% of high school football players take up to four weeks to recover.



What To Do if you Suspect Concussion

- Recognize ***
- Remove ***
- Refer
- Rest (Physical and Mental)
- Return (Only After Full Recovery)



When a Player Shows <u>ANY</u> Features of Concussion

- a) Evaluate onsite with particular attention to excluding a cervical spine injury.
- b) A healthcare provider trained in concussion recognition and management should evaluate the athlete onsite if available. Otherwise, the player should be safely removed from practice or play and urgent referral to a healthcare provider trained in concussion recognition and management should be arranged.
- c) The player should not be left alone following the injury, and serial monitoring for deterioration is essential over the <u>initial few hours</u> following injury. (NOT ALL night...let them rest)
- d) A player with diagnosed concussion should not be allowed to return to play until asymptomatic <u>AND</u> cleared by a healthcare provider experienced in concussion management.

Concussion Management

- The cornerstone of concussion management is physical and cognitive rest until symptoms resolve.
- Activities that require concentration and attention (such as school work, computer use, text messaging, etc.) and physical exertion (sports, weight lifting, P.E. class, etc.) may increase symptoms and delay recovery.

Step-wise Return to Play Protocol

This RTP protocol takes a <u>minimum</u> of 8 days to complete, allowing 24 hours between each step. Athletes progress through the protocol if they remain asymptomatic with each progressive increase in activity level. If symptoms recur they must rest an additional 24 hours (or until asymptomatic for 24 consecutive hours) and then resume the protocol at the last step completed without symptoms.

ACTIVITY
Athlete reports asymptomatic
Athlete asymptomatic for 24-48 consecutive hours
Exertional Testing - 15 minutes non-impact cardio
Conditioning - Stretching, sprints, positional drills
Non-Contact Practice
Unrestricted <u>practice</u> participation
Unrestricted return to play (game)

Special Olympics Return to Play

A participant who has been removed from practice, play or competition due to a suspected concussion may not participate in Special Olympics sports activities until either of the following occurs:

 At least seven (7) consecutive days have passed since the participant was removed from play and a currently licensed, qualified medical professional provides written clearance for the participant to return to practice, play and competition

-OR-

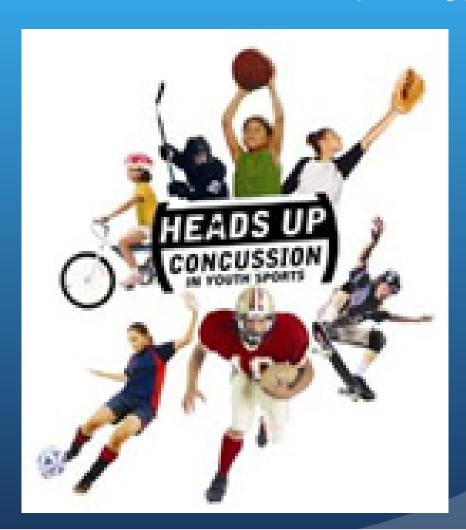
 A currently licensed, qualified medical professional determines that the participant did not suffer a concussion and provides written clearance for the participant to return to practice play immediately.



Written clearance in either of the scenarios above shall become a permanent record.

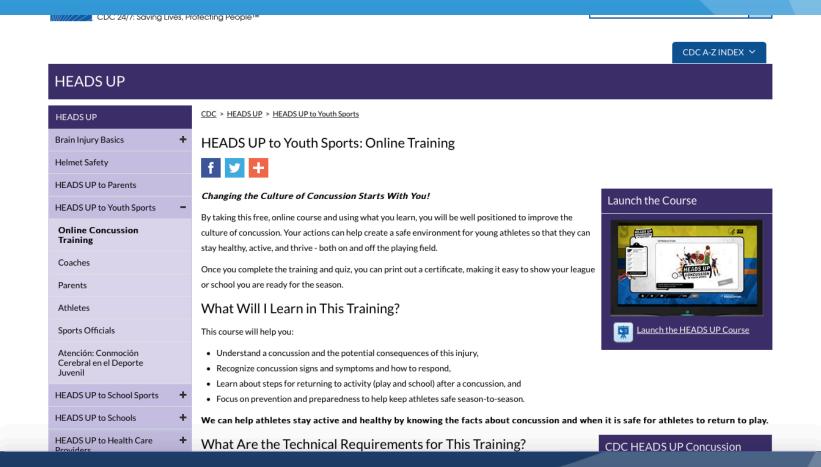
For More Information about Concussion

www.cdc.gov/concussion www.connecticutconcussiontaskforce.org



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Questions?



References

- Gessel LM, Fields SK, Collins CL, Dick RW, Comstock RD. Concussions among United States High School and Collegiate Athletes. *J Athletic Training* 2007;42(4):495-503.
- McCrory P, Meeuwisse W, Johnston K, Dvorak J, Aubry M, Molloy M, Cantu R. Consensus Statement on Concussion in Sport: the 3rd International Conference on Concussion in Sport held in Zurich, November 2008. *Clinical J of Sports Medicine 2009*;19: 185-200.
- Patel D, Reddy V. Sport-related Concussion in Adolescents. *Pediatr Clin N Am* 2010; 57: 649-670.