

Concussions: The Basics

Lock Haven Athletic Training

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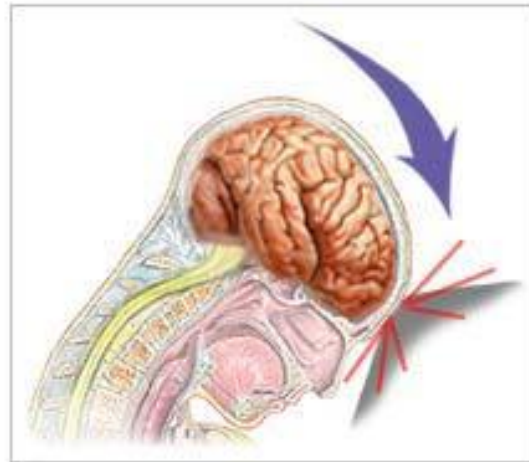
Preston Plevretes' Story...

- ▶ Dangers of returning to play too soon
- ▶ <http://espn.go.com/video/clip?id=5163151>



What is a Concussion?

- ▶ An injury sustained to the brain resulting from a direct blow to the head or body that causes the brain to move rapidly inside the skull (CDC Fact Sheet)



Common Causes

Football

- ▶ Spearing
- ▶ Tackling
- ▶ Deceleration
- ▶ (Junge)

Wrestling Suplex

<http://www.youtube.com/watch?v=5RtbXeWvh8g&feature=fvw>



Wrestling

- ▶ Takedowns
- ▶ Slam
- ▶ Suplex
- ▶ (Yard)



Signs & Symptoms

- ▶ Headache
- ▶ Dizziness
- ▶ Blurred vision
- ▶ Poor balance
- ▶ Nausea
- ▶ Loss of memory
- ▶ Sensitivity to light
- ▶ Loss of consciousness
- ▶ Altered mental state
- ▶ Irritable
- ▶ Fatigue
- ▶ Trouble concentrating to
- ▶ Athlete does not have all symptoms listed to have a concussion

Philadelphia Eagle's Player

<http://www.youtube.com/watch?v=kbm88CQB7YI>



If You Suspect Your Athlete has a Concussion What Should You Do?

- ▶ Pull athlete from practice or competition
- ▶ Have athlete evaluated by athletic trainer or qualified health care professional
- ▶ Initiate emergency action plan if needed
- ▶ Contact athletes' parents (important when dealing with minors)
- ▶ (CDC Fact Sheet)



How to Tell if Your Athletes' Concussion is Getting Worse

- ▶ Headache intensifies
- ▶ Vomiting
- ▶ Seizures
- ▶ Loss of consciousness
- ▶ Depression
- ▶ Unequal pupils



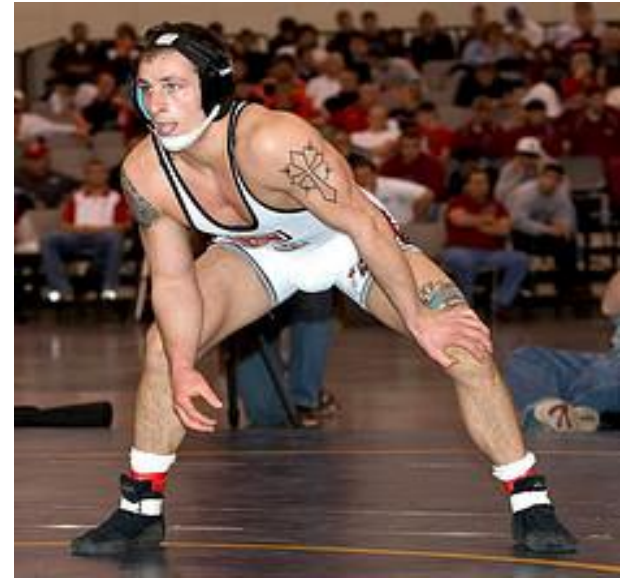
Concussion Treatment

- ▶ Best treatment for the athlete is to rest
- ▶ Athlete should not participate in any level of sport or activity that will increase his/her heart rate

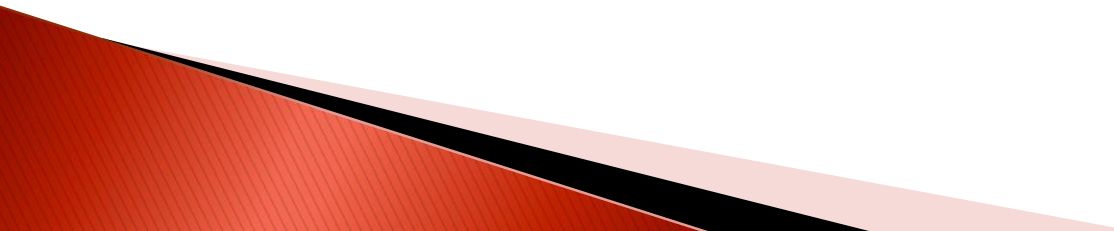


When to Return to Play

- ▶ The only way an athlete should return to play is after they have been cleared by a physician
- ▶ Physicians base their decisions on:
 - Athlete is symptom free for 7 days
 - Athletes heart rate can be increased and can remain symptom free
 - Cognitive testing
 - Neurological testing



Did You Know?

- ▶ In PA referees are allowed to pull a player out of competition if they suspect a concussion (PIAA)
 - ▶ 198,000 concussions happen each year and only 47.3% are reported to a health care provider (Onate, Guilmette, Gessel)
 - ▶ You can still have a concussion even if you DO NOT lose consciousness
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Sources to Get More Info

- ▶ **NCAA Concussion Fact Sheet**
 - <http://www.lhup.edu/deptofathletics/studentathlete-forms/ConcussionFactSheet-StudentAthlete.pdf>
- ▶ **Medline Plus**
 - <http://www.nlm.nih.gov/medlineplus/ency/article/000799.htm>
- ▶ **NCAA Guidelines**
 - <http://www.ncaapublications.com/p-4203-2010-2011-sports-medicine-handbook.aspx>
- ▶ **Center for Disease Control**
 - <http://www.cdc.gov/concussion/HeadsUp/youth.html>

References

- ▶ <http://www.piaa.org/assets/web/documents/2009%20Football%20Preseason%20Bulletin.pdf>
- ▶ http://www.cdc.gov/concussion/pdf/coaches_Engl.pdf
- ▶ E. Yard, C. Collins, R. Dick, R. Comstock. (2008). An epidemiological Comparison of High School and College Wrestling Injuries. *The American Journal of Sports Medicine*. 35(1), 57–64.
- ▶ A. Junge, J. Dvorak, J. Chomiak, T. Graf–Baumann, L. Peterson, D. Rosch, R. Hodgson. (2000). Risk Factor Analysis for Injuries in Football Players: Possibilities for a Prevention Program. *The American Journal of Sports Medicine*. 28(5), 69–74.

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- ▶ T.J. Guilmette, L.A. Malia, M.D. McGuiggan. (2007). Concussion Understanding and management among New England high school football coaches. *Brain Injury, 21 (10), 1039-1047.*
- ▶ L.M. Gessel, S.K. Fields, C.L. Collins, R.W. Dick, R.D. Comstock. (2007) Concussions Among United States High School and Collegiate Athletes. *Journal of Athletic Training, 42 (3), 495-503.*