REMEMBER...

- ALL concussions are serious
- Most concussions occur without a loss of consciousness
- Recognition and proper response to concussions when they <u>first occur</u> can help aid in recovery and prevent long term issues, or even death
- Symptoms will vary from person to person and so will recovery time, but in many cases, it will take at least 2-3 weeks for youth and adolescent aged athletes to recover fully.



Equipment Considerations

Whether it is protective headgear, padded helmet covers, or specialized mouth guards, there are many products on the market today that either claim to offer or seem to offer a *shock absorbing* quality that can help athletes prevent concussion. It is important for parents, coaches, and athletes to understand that no product will prevent concussion. Parents and coaches should exercise extreme caution before purchasing products that either claim or infer the ability to prevent concussion. Recent research has shown that often times, the prevalence of concussion to athletes who wear such after market products often increase, often due to the fact that players often feel they are no longer vulnerable to concussion and take additional risks.

Kids Will Hide Concussion Symptoms

Critical to concussion management is creating an environment where athletes feel comfortable reporting their injuries. Athletes continue to underreport concussion even when they know the signs and symptoms of the injury. A 2013 study revealed that as many as 56% of NFL players and 78% of college athletes will choose to conceal their concussion-like symptoms. High school athletes, too, often subscribe to this "code of silence." Reasons why athletes hide their injuries:

- Do not think it was serious enough.
- Do not want to be removed from the game or practice.
- Do not want to let teammates down.
- Do not want to let coaches down.
- Do not think the injury was a concussion.

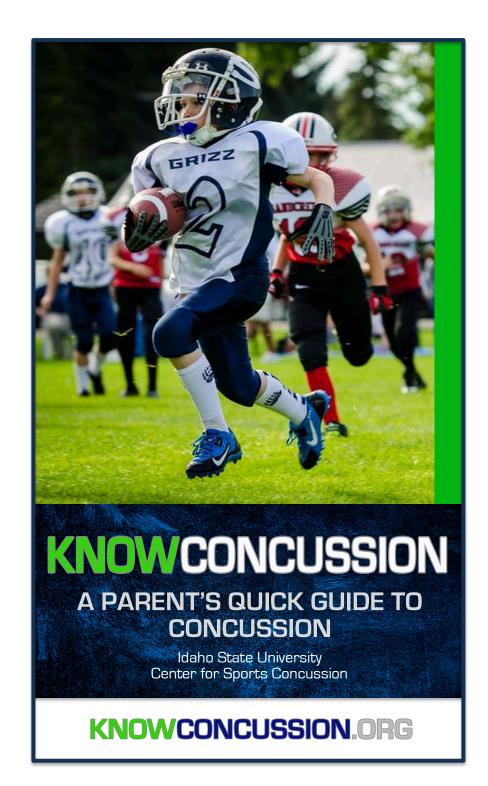






"WHEN IN DOUBT, SIT 'EM OUT!"

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WHAT IS CONCUSSION?

Understanding The Injury...

A concussion is an injury to the brain's cells that causes a disturbance in normal brain function. Concussion can be caused by either getting hit directly on the head or by a hit to another part of the body that causes the head to accelerate forward or backward [like whiplash]. Most athletes who experience concussion will exhibit any one of more of a variety of symptoms. Every year, an estimated 300,000 sport-related concussions occur annually in the United States with high school football players suffering nearly one quarter of those injuries. However, concussion is not isolated to football, and it is also not isolated to boys. By the time their high school playing career is complete, more than 60 percent of all teenage athletes will have experienced some type of concussive injury.

You cannot see a concussion, but you can observe the signs and symptoms of the injury. No matter the severity, concussion is serious. Less than 10% of concussions involve a loss of consciousness. Undiagnosed (even so-called "mild") concussions can cause significant long-term effects if not managed appropriately and given adequate time to heal. Even what appears to be a mild jolt or blow to the head or body may cause stretching and tearing of brain cells, damaging the cells and creating chemical changes in the brain. These chemical changes result in physical, emotional, and cognitive symptoms. Once these changes occur, the brain is vulnerable to further injury and sensitive to any increased stress until it fully recovers.

Young athletes appear to be particularly vulnerable to the effects of concussion. They are more likely than older athletes to experience problems after concussion and often take longer to recover. Teenagers also appear to be more prone to a second injury to the brain that occurs while the brain is still healing from an initial concussion. This second impact can result in long-term impairment or even death. If concussion is suspected,

- Always seek advice from a Physician and/or Certified Athletic Trainer, and
- <u>Never</u> return the young athlete to play the same day as the concussive injury is sustained. If symptoms are present, the athlete SHOULD NOT return to play. Only a licensed medical provider can make that call.

SIGNS & SYMPTOMS OF CONCUSSION

- Headache
- Nausea/Vomiting
- Blurred Vision
- Dizziness
- Sleeping More or Less Than Usual
- Difficulty Concentrating
- Difficulty Remembering
- Fatigue/Low Energy
- · Feeling "Foggy"
- Feeling "Slowed Down"
- Unusually Emotional
- Irritable, Nervous, or Sad

- Personality Changes
- Poor Balance or Coordination
- Sensitive to Bright Lights
- Sensitive to Loud Noise
- Glassy Eyes/Vacant Stare

Concussed athletes may experience one or more of any of these symptoms.

Symptoms may worsen with mental/physical activity.

THE RECOVERY PROCESS

How Long Will It Take To Recover?

The recognition of concussion is especially critical for those working with younger athletes. Leading experts agree that high school athletes have a significantly greater risk of sustaining a concussion, and those concussions are taking significantly longer to heal when compared to older athletes. There are many potential reasons for this, but most researchers agree that the vounger brain is more vulnerable because it is not fully developed. No matter the age, the key to concussion management is physical and cognitive rest until symptoms resolve followed by a gradual return to physical exertion. The majority of injuries will recover spontaneously. Typically, for younger athletes (under 19), the process takes between several days to several weeks. depending on the injury. During the recovery period while the athlete is symptomatic, it is important to emphasize physical and cognitive rest. Activities that require concentration and attention (e.g., scholastic work, video games, text messaging) may exacerbate symptoms and possibly delay recovery. In such cases, apart from limiting relevant physical and cognitive activities (and other risk-taking opportunities for re-injury) while symptomatic, no further intervention is required during the period of recovery and the athlete typically resumes sport without further problem.

What Can I Do To Help My Child?

It takes a village to manage a concussion. Working with a physician who knows a lot about sports-related concussion is important. Parents also play a crucial role in the healing process, especially when it comes to making sure the concussed child gets plenty of rest and avoids certain physical and cognitive stressors. The best thing parents can do is to understand that the injury and symptoms their child is experiencing are real and significant. Creating a culture of acceptance for the injury and supporting the child through his/her discomfort and frustration can help. Make sure your child gets plenty of food (lots of small meals works best) and liquids. Avoid spicy foods, as they tend to increase the metabolic rate in some people. It is OK to have your child take acetaminophen [Tylenol], eat a light diet, return to school, sleep, and rest. There is no need to interrupt sleep. If child's condition worsens, he/she should be taken to the hospital. The child should be symptom-free without the use of drugs (e.g., Tylenol) before being allowed to return to physical activity. Only a licensed medical provider can make that call.

HELP IN THE CLASSROOM

The healing process takes time. Going to school is fine, but you may want to consider some accommodations:

- Frequent breaks (every 20 min.)
- Written instructions/notes
- Extra time for assignments
- No significant or standardized tests
- Limit time spent reading or on computer

