

HEADS UP: CONCUSSION IN YOUTH SPORTS

A Fact Sheet for COACHES

On May 14, 2009 the Governor of Washington Christine Gregoire signed the **Zackery Lystedt Law**. Effective July 26, 2009, the Lystedt Law directly affects youth sports and head injury policies particularly how you, as a coach, need to respond to player injuries. The new law requires that:

- 1) An informed consent must be signed by parents and youth athletes acknowledging the risk of head injury prior to practice or competition
- 2) A youth athlete who is suspected of sustaining a concussion or head injury must be removed from play – “when in doubt, sit them out”
- 3) A youth athlete who has been removed from play **must receive written clearance from a licensed health care provider prior to returning to play**

THE FACTS

- A concussion is a **brain injury**.
- All concussions are **serious**.
- Concussions can occur **without** loss of consciousness.
- Concussions can occur **in any sport**.
- Recognition and proper management of concussions when they **first occur** can help prevent further injury or even death.

WHAT IS A CONCUSSION?

A concussion is an injury that changes how the cells in the brain normally work. A concussion is caused by a blow to the head or body that causes the brain to move rapidly inside the skull. Even a “ding,” “getting your bell rung,” or what seems to be a mild bump or blow to the head can be serious. Concussions can also result from a fall or from players colliding with each other or with obstacles, such as a goalpost, even if they do not directly hit their head.

The potential for concussions is greatest in athletic environments where collisions are common.¹ Concussions can occur, however, in **any** organized or unorganized sport or recreational activity. As many as 3.8 million sports and recreation-related concussions occur in the United States each year.²

RECOGNIZING A POSSIBLE CONCUSSION

To help recognize a concussion, you should watch for the following two things among your athletes:

1. A forceful blow to the head or body that results in rapid movement of the head.
-and-
2. Any change in the athlete's behavior, thinking, or physical functioning. (See the signs and symptoms of concussion.)

SIGNS AND SYMPTOMS

SIGNS OBSERVED BY COACHING STAFF
<ul style="list-style-type: none">▪ Appears dazed or stunned▪ Is confused about assignment or position▪ Forgets sports plays▪ Is unsure of game, score, or opponent▪ Moves clumsily▪ Answers questions slowly▪ Loses consciousness (even briefly)▪ Shows behavior or personality changes▪ Can't recall events prior to hit or fall▪ Can't recall events after hit or fall
SYMPTOMS REPORTED BY ATHLETE
<ul style="list-style-type: none">▪ Headache or "pressure" in head▪ Nausea or vomiting▪ Balance problems or dizziness▪ Double or blurry vision▪ Sensitivity to light▪ Sensitivity to noise▪ Feeling sluggish, hazy, foggy, or groggy▪ Concentration or memory problems▪ Confusion▪ Does not "feel right"

Adapted from Lovell et al. 2004

Athletes who experience any of these signs or symptoms after a bump or blow to the head should be kept from play until given permission to return to play by a **health care professional** with experience in evaluating for concussions. Signs and symptoms of concussion can last from several minutes to days, weeks, months, or even longer in some cases.

Remember, you can't see a concussion and some athletes may not experience and/or report symptoms until hours or days after the injury. If you have any suspicion that your athlete has a concussion, you should keep the athlete out of the game or practice.

PREVENTION AND PREPARATION

As a coach, you can play a key role in preventing concussions and responding to them properly when they occur. Here are some steps you can take to ensure the best outcome for your athletes and the team:

- **Educate athletes and parents about concussion.** Talk with athletes and their parents about the dangers and potential long-term consequences of concussion. For more information on long-term effects of concussion, view the following online video clip: http://www.cdc.gov/ncipc/tbi/Coaches_Tool_Kit.htm#Video. Explain your concerns about concussion and your expectations of safe play to athletes, parents, and assistant coaches. Pass out the concussion fact sheets for athletes and for parents at the beginning of the season and again if a concussion occurs.
- **Insist that safety comes first.**
 - Teach athletes safe playing techniques and encourage them to follow the rules of play.
 - Encourage athletes to practice good sportsmanship at all times.
 - Make sure athletes wear the right protective equipment for their activity (such as shin guards). Protective equipment should fit properly, be well maintained, and be worn consistently and correctly.
 - Review the athlete fact sheet with your team to help them recognize the signs and symptoms of a concussion.
- **Teach athletes and parents that it's not smart to play with a concussion.** Sometimes players and parents wrongly believe that it shows strength and courage to play injured. Discourage others from pressuring injured athletes to play. Don't let athletes persuade you that they're "just fine" after they have sustained any bump or blow to the head. Ask if players have ever had a concussion.
- **Prevent long-term problems.** A repeat concussion that occurs before the brain recovers from the first—usually within a short period of time (hours, days, or weeks)—can slow recovery or increase the likelihood of having long-term problems. In rare cases, repeat concussions can result in brain swelling, permanent brain damage, and even death. This more serious condition is called *second impact syndrome*.^{4,5} Keep athletes with known or suspected concussion from play until they have been evaluated and given permission to return to play by a health care professional with experience in evaluating for concussion. Remind your athletes: "It's better to miss one game than the whole season."

ACTION PLAN

WHAT SHOULD A COACH DO WHEN A CONCUSSION IS SUSPECTED?

1. **Remove the athlete from play.** Look for the signs and symptoms of a concussion if your athlete has experienced a bump or blow to the head. Athletes who experience signs or symptoms of concussion should not be allowed to return to play. When in doubt, keep the athlete out of play.

2. **Ensure that the athlete is evaluated right away by an appropriate health care professional.** Do not try to judge the severity of the injury yourself. Health care professionals have a number of methods that they can use to assess the severity of concussions. As a coach, recording the following information can help health care professionals in assessing the athlete after the injury:
 - Cause of the injury and force of the hit or blow to the head
 - Any loss of consciousness (passed out/knocked out) and if so, for how long
 - Any memory loss immediately following the injury
 - Any seizures immediately following the injury
 - Number of previous concussions (if any)
3. **Inform the athlete's parents or guardians about the possible concussion and give them the fact sheet on concussion.** Make sure they know that the athlete should be seen by a health care professional experienced in evaluating for concussion.
4. **Allow the athlete to return to play only with permission from a health care professional with experience in evaluating for concussion.** A repeat concussion that occurs before the brain recovers from the first can slow recovery or increase the likelihood of having long-term problems. Prevent common long-term problems and the rare second impact syndrome by delaying the athlete's return to the activity until the player receives appropriate medical evaluation and approval for return to play.

Licensed Health Care Providers

What licensed health care providers are trained in the evaluation and treatment of concussions/brain injuries and authorized to allow the athlete to return to play?

Medical Doctors (MD)
Doctor of Osteopathy (DO)
Advanced Registered Nurse Practitioner (ARNP)
Physicians Assistant (PA)
Licensed Certified Athletic Trainers (ATC)

Research is currently being done to determine which other licensed health care providers may have sufficient training to qualify to authorize return to play. Washington Youth Soccer will update clubs/associations and the wsysa.com website as this information becomes available.

***If you think your athlete has sustained a concussion...
take him/her out of play, and
seek the advice of a health care professional experienced in evaluating for
concussion.***

REFERENCES

1. Powell JW. Cerebral concussion: causes, effects, and risks in sports. *Journal of Athletic Training* 2001; 36(3):307-311.
2. Langlois JA, Rutland-Brown W, Wald M. The epidemiology and impact of traumatic brain injury: a brief overview. *Journal of Head Trauma Rehabilitation* 2006; 21(5):375-378.
3. Lovell MR, Collins MW, Iverson GL, Johnston KM, Bradley JP. Grade 1 or "ding" concussions in high school athletes. *The American Journal of Sports Medicine* 2004; 32(1):47-54.
4. Institute of Medicine (US). Is soccer bad for children's heads? Summary of the IOM Workshop on Neuropsychological Consequences of Head Impact in Youth Soccer. Washington (DC): National Academy Press; 2002.
5. Centers for Disease Control and Prevention (CDC). Sports-related recurrent brain injuries-United States. *Morbidity and Mortality Weekly Report* 1997; 46(10):224-227. Available at: www.cdc.gov/mmwr/preview/mmwrhtml/00046702.htm.

Concussion Information Sheet

A concussion is a brain injury and all brain injuries are serious. They are caused by a bump, blow, or jolt to the head, or by a blow to another part of the body with the force transmitted to the head. They can range from mild to severe and can disrupt the way the brain normally works. Even though most concussions are mild, **all concussions are potentially serious and may result in complications including prolonged brain damage and death if not recognized and managed properly.** In other words, even a “ding” or a bump on the head can be serious. You can’t see a concussion and most sports concussions occur without loss of consciousness. Signs and symptoms of concussion may show up right after the injury or can take hours or days to fully appear. If your child reports any symptoms of concussion, or if you notice the symptoms or signs of concussion yourself, seek medical attention right away.

Symptoms may include one or more of the following:

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| <ul style="list-style-type: none">• Headaches• “Pressure in head”• Nausea or vomiting• Neck pain• Balance problems or dizziness• Blurred, double, or fuzzy vision• Sensitivity to light or noise• Feeling sluggish or slowed down• Feeling foggy or groggy• Drowsiness• Change in sleep patterns | <ul style="list-style-type: none">• Amnesia• “Don’t feel right”• Fatigue or low energy• Sadness• Nervousness or anxiety• Irritability• More emotional• Confusion• Concentration or memory problems (forgetting game plays)• Repeating the same question/comment |
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Signs observed by teammates, parents and coaches include:

- Appears dazed
- Vacant facial expression
- Confused about assignment
- Forgets plays
- Is unsure of game, score, or opponent
- Moves clumsily or displays incoordination
- Answers questions slowly
- Slurred speech
- Shows behavior or personality changes
- Can’t recall events prior to hit
- Can’t recall events after hit
- Seizures or convulsions
- Any change in typical behavior or personality
- Loses consciousness

Concussion Information Sheet

What can happen if my child keeps on playing with a concussion or returns too soon?

Athletes with the signs and symptoms of concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (second impact syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage athlete will often under report symptoms of injuries. And concussions are no different. As a result, education of administrators, coaches, parents and students is the key for student-athlete's safety.

If you think your child has suffered a concussion

Any athlete even suspected of suffering a concussion should be removed from the game or practice immediately. No athlete may return to activity after an apparent head injury or concussion, regardless of how mild it seems or how quickly symptoms clear, without medical clearance. Close observation of the athlete should continue for several hours. The new "Zackery Lystedt Law" in Washington now requires the consistent and uniform implementation of long and well-established return to play concussion guidelines that have been recommended for several years:

"a youth athlete who is suspected of sustaining a concussion or head injury in a practice or game shall be removed from competition at that time"

and

"...may not return to play until the athlete is evaluated by a licensed health care provider trained in the evaluation and management of concussion and received written clearance to return to play from that health care provider".

You should also inform your child's coach if you think that your child may have a concussion. Remember, it's better to miss one game than miss the whole season. And when in doubt, the athlete sits out.

For current and up-to-date information on concussions you can go to:

<http://www.cdc.gov/ConcussionInYouthSports/>

My player(s) and parent(s)/guardian acknowledge that we have read the above information.

Thank you for your attention, you are now in compliance.