

## CONCUSSION POLICY

A concussion is a type of traumatic brain injury that interferes with normal function of the brain. All concussions are brain injuries. A concussion can be caused by a blow to the head or even a blow to the body. The force moves or twists the brain in the skull. It is important to know that loss of consciousness is not required to have a concussion. In fact, less than 10% of athletes lose consciousness. A concussion is a very complex physiologic event that causes a problem with brain function and not brain structure. Even what appears to be a mild blow to the head or body can cause the brain to suddenly shift or move. This motion can injure and damage brain cells. Research has shown that this damage may take up to 2 weeks to heal, but it can take longer.

There are unique concerns surrounding concussions in high school sports:

1. Adolescents are more vulnerable and get concussions more often.
2. Adolescents take longer than adults to heal from a concussion, unlike musculoskeletal injuries.
3. High school players can be reluctant to admit their symptoms for fear of removal from the contest.

A concussion can affect people in four different areas of function:

1. Physical – This describes how they feel, headache, nausea, vomiting, dizziness, tired and loss of consciousness.
2. Thinking – Poor memory and concentration, responds to questions more slowly and asks repetitive questions. A concussion can cause an altered state of awareness and thinking.
3. Emotions – A concussion can make a person more irritable or sad and cause mood swings.
4. Sleep – Concussions frequently cause trouble falling asleep and may wake athletes up overnight, which can make them more fatigued throughout the day.

Concussions can happen to anyone in any sport. Everyone involved in high school athletics must be alert for potential injuries on the field and be able to recognize signs and symptoms of a concussion. While coaches are not expected to make a diagnosis of a concussion, it is expected for coaches to be aware that their athletes may have a concussion and then hold them out of all activity until they are medically cleared by a healthcare provider. Signs are what can be seen by others, like clumsiness, while symptoms are what the injured player feels, like a headache. Athletes should report symptoms, but they may not unless they are asked and even then it is important to consider that athletes may not be telling the truth. Thus, it is important for schools to educate their athletes, coaching staff and parents in the preseason about the seriousness of concussions and the importance of athletes honestly reporting their symptoms and injuries.

There are some concussions signs to look for: (what others can see)

1. Dazed or stunned appearance
2. Change in the level of consciousness
3. Confused about assignment
4. Forgets plays
5. Unsure of score, game, opponent
6. Clumsy
7. Answers more slowly than usual
8. Shows behavior changes
9. Loss of consciousness
10. Asks repetitive questions or memory concerns

These are the some of the more common symptoms of a concussion: (what player feels)

1. Headache
2. Nausea
3. Dizzy or unsteady
4. Sensitive to light or noise
5. Feeling mentally foggy
6. Problems with concentration and memory
7. Confused
8. Slow

Injured athletes can exhibit many or just a few of the signs or symptoms of a concussion. However, if a player exhibits and signs or symptoms of a concussion, the responsibility is simple: they should be removed from participation. **“When in doubt sit them out.”**

If it is suspected a player may have a concussion, that athlete should be immediately removed from play. The injured athlete should be kept out of play until they are cleared to return by an appropriate health care provider. If the athlete has a concussion, that athlete should **NEVER** be allowed to return to activity that day. Athletes with a concussion should never be allowed to return to activity while they still have symptoms.

A player with a concussion must be carefully observed throughout the practice or competition to be sure that they are not getting worse. Even though the athlete is not playing, never send a concussed athlete to the locker room alone and never allow them to drive home.

Most concussions are temporary and they resolve without causing residual problems. However, in the adolescent population, 10-20% of athletes that have a concussion have signs and symptoms that persist past 2 weeks. These symptoms of headache, difficulty concentrating, poor memory and sleep disturbances can lead to academic troubles among other problems. Concussion symptoms may even last weeks to months.

Rest is the essential component of concussion treatment. Further contact is to be avoided at all costs due to the risk of a repeat concussion. Physical exertion can also worsen symptoms and prolong concussion recovery. Physical activity should not be started without authorization by an appropriate health care provider. It is important that injured athletes sleep as often as possible. It is also helpful for parents to decrease brain stimulation at home by limiting video games, computer time, text messaging and TV.

Neuropsychological testing has become more commonplace in concussion evaluation as a means to provide an objective measure of brain function. It's best used as a tool to help ensure safe return to activity and not as the only piece of the decision process. With neuropsychological testing, a baseline or pre-injury test is obtained prior to the season. This baseline should be done in a quiet environment when the athlete is well rested. Wonec-Center staff use the IMPACT test and we test all 7<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> graders. This is a mandatory test that all of these student/athletes need to take. Baseline testing should be repeated every 2 years for the developing adolescent brain. The WIAA advocates that neuropsychological testing can be a very useful tool with regards to concussion management.

In order to resume activity, the athlete must be symptom free and off any pain control or headache medications. The athlete should be carrying a full academic load without any significant accommodations. Finally, the athlete must have clearance from an appropriate health care provider.

We use a 5 step program before athletes can return to play after a concussion. Before we even put them into the 5 step program they must be symptom free and cleared by their doctor. Our program allows for 1 step per 24 hours. The program is a gradual increase in heart rate/physical exertion, coordination and then allows contact. If symptoms return, the athlete will stop activity and notify their healthcare provider before progressing to the next step.

Step One: 30 minutes of light exercise, stationary biking or jogging.

Step Two: More sport specific running or sprinting in the gym or field without equipment.

Step Three: Begin non-contact drills in full uniform. May also resume weight lifting.

Step Four: Full practice with contact.

Step Five: Full game clearance

We want to promote concussion education and bring a positive change in concussion culture by discussing this topic with all coaches, athletes, and parents.

APPROVED: