

CONCUSSION PROTOCOL RETURN TO PLAY

1. PURPOSE

- a. In response to the growing concern over concussions in athletics, there is a need for High Schools to develop and utilize a “Concussion Management Plan.” This plan will function to describe and coordinate the responsibilities of the athlete, family, coach, medical staff, school faculty, and administration for the High School athlete.
- b. This policy will also align with the Elkhorn Area School District policy for Return to Learn.

2. WHAT IS A CONCUSSION

- a. Concussion, as defined by the 4th International Conference on Concussion in Sport, is a brain injury, and is characterized by a complex pathophysiological process caused by biomechanical forces.
- b. Concussions are complex in nature. Diagnoses are primarily based on reported symptoms. Although CT and MRI scans rule out serious injury such as skull fracture and brain bleeding, they cannot be used to diagnose a concussion.
- c. Symptoms of a concussion include: headache, nausea, dizziness, drowsiness, sensitivity to light, sensitivity to sound, blurred vision, balance disturbances, fatigue, depression, anxiety, and inability to focus.
- d. Signs of a concussion include: slurred speech, loss of consciousness, amnesia (anterograde or retrograde), vacant stare, glassy eyes, or inappropriate emotions.

3. EDUCATION

- a. All athletes must sign the WIAA concussion form prior to participation.
- b. Prior to each athletic season (fall, winter, and spring) the athletic trainer will give a short speech on the signs, symptoms, and treatment of concussions.
- c. Student-athletes will need to read, sign, and obtain the signature from a parent/guardian on the WIAA form entitled “Parent and Athlete Agreement” (*Available online during Athletic Registration*).
- d. Materials are available, free of charge, from the CDC. To order or download, go to the CDC concussion webpage: www.cdc.gov/concussion.

4. PRE-SEASON ASSESSMENT

- a. A concussion history will be included as part of a student/athlete’s pre-participation physical health examinations with their healthcare professional.
- b. It is recommended that every two years, in certain sports, student-athletes complete a baseline assessment prior to the beginning of the school year or their individual sports seasons, as appropriate.
- c. **Neurocognitive Testing** Pre-season neurocognitive testing of athletes in certain sports is required and will be accomplished through a computerized system. Elkhorn Area School District has chosen to partner with ImPACT applications for this purpose.
 - i. The ImPACT program is designed to measure specific brain functions that may be altered following a concussion. The program is designed in such a way as to allow athletes to be tested pre-season so that post-injury performance may be compared to the athlete’s own baseline.
 - ii. Neurocognitive testing may be administered by the school’s Licensed Athletic Trainer or other designated school personnel trained in test administration, in a controlled computer lab environment.

- iii. All students must have a signed ImPACT program permission slip prior to taking the test (*Appendix C*).
- iv. Athletes in the following high school sports will be tested: Football, Soccer, Volleyball, Basketball, Wrestling, and Gymnastics.
- v. Every athlete shall be tested so that they have a valid baseline that is not more than two years old at the conclusion of their sport season.
- vi. All freshman athletes in the tested sports will be required to take the ImPACT program test.

5. EVALUATION

- a. Evaluations shall be done by the athletic trainer on staff for all injuries occurring during home games, or regularly scheduled practices.
 - i. Evaluation shall consist of the SCAT3 form.
 - ii. All findings shall be documented.
- b. If an athletic trainer or medical professional is not present, the coach should follow the guidelines put forth by the State of Wisconsin:
 - i. When in doubt, sit them out.
 - ii. If an athlete is suspected of having a concussion, they should not be allowed to re-enter a contest, competition, or practice until cleared by a certified healthcare provider.

6. MANAGEMENT OF CONCUSSION

- a. Once a student/athlete exhibits signs, symptoms, or behavior consistent with a concussion or head injury, the parent/guardian(s) must be informed to monitor deterioration of condition.
- b. Appropriate school personnel must also be notified. Appropriate school personnel includes the school nurse, administration, and teachers.
- c. If injury occurs on the road, the coach shall notify the parent/guardian(s) (if they are not in attendance), the athletic trainer, and appropriate school personnel.
- d. Parent/Guardian(s) are given the Post-Concussion Fact Sheet (*Appendix B*), which includes signs and symptoms to watch out for in the case of worsening symptoms, instructions on eating, hydration, and pain management, as well as recovery strategies, and **Return to Play** procedure.
- e. Student/Athlete is held out of competition until cleared to begin **Return to Play** protocol by a licensed healthcare provider.

7. RETURN TO PLAY

- a. Students/Athletes can begin **Return to Play** protocol when asymptomatic for 24 hours.
 - i. ImPACT testing must show a return to baseline.
 - ii. Students/Athletes must follow-up with their healthcare provider and receive clearance to begin **Return to Play**.
 - 1. Testing results will be done before the final visit and sent to their healthcare provider.
- b. **Return to Play** should follow a step-wise progression, in accordance with WIAA recommendations (*Appendix C*).
 - i. Step One – Light aerobic exercise
 - ii. Step Two – Heavy aerobic exercise, such as sprinting, plus may return to lifting
 - iii. Step Three – Non-contact participation in practice
 - iv. Step Four – Full contact practice
 - v. Step Five – Return to competition

POST-CONCUSSION INJURY FACT SHEET AND RECOVERY GUIDE

Prepared by Marcus Sojka, MS, LAT, Athletic Trainer for Mercy Health Systems.
815-222-9559 | msojka@mhsjvl.org

What is a concussion?

A concussion is an injury to the brain caused by a blow to the head. This injury causes the brain to not function normally for a period of time. Concussions can be referred to as mild traumatic brain injuries and get better with time. However, occasionally there can be more significant problems, and it is important that the symptoms from a concussion be monitored.

When you suffer this injury, you may have problems with concentration and memory, notice an inability to focus, feel fatigued, have a headache, or feel nauseated. Bright lights and loud noises may bother you. You may feel irritable or unable to tolerate your normal school and activity schedule. Resting the brain is the first step in treatment.

What should I watch for?

After evaluation by your athletic trainer or physician, it may be determined that it is safe to go home. Otherwise, you may have to go to the hospital. Parent/guardians, if your athlete is sent home, they should not be left alone. A responsible adult should be with the athlete to ensure there is no worsening or dramatic change in symptoms. Symptoms from the concussion may persist when your athlete is sent home, but should not worsen. You should watch for such things as:

1. Increasing headache
2. Increasing, or onset, of vomiting
3. Increasing confusion
4. Unusual sleepiness or difficulty being awakened
5. Trouble using arms or legs
6. Garbled speech
7. Convulsions or seizures

If you notice any of these problems or have any other problem that appears to worsen as compared to how you felt at the time you left the stadium or practice, **immediately go to the hospital.**

Is it okay to go to sleep?

A concussion can make someone feel drowsy or tired. As long as you are not getting worse, it is all right for you to sleep. We do want a responsible adult to be home with you, in case any problems arise. You do not need to wake the athlete up periodically, but someone should check on the athlete every few hours.

May I take something for the pain?

Normally, we advise against taking anything stronger than Tylenol. Initially, avoid the use of aspirin, Motrin (ibuprofen), Aleve, or any other anti-inflammatory medication that you may have been taking. We also ask that you not consume any alcohol and avoid caffeine and any other stimulants. If you are taking supplements, we would suggest that you discontinue the use of them as well.

May I eat after the game?

It is fine for you to eat if you are hungry. Remember, some players do have a sense of nausea and fatigue, and find that their appetite is depressed immediately after a concussion.

Do I need to go to the ER to have a CT scan or MRI Examination?

If the athletic trainer or team physician has determined that you are able to go home after the game, these types of diagnostic tests are generally not necessary. If you are sent to the hospital with a more serious injury, a CT scan or MRI examination may be performed based on your symptoms. If your symptoms linger for several days after a concussion, a CT scan or MRI examination may be a consideration.

How long will it take to recover?

Each athlete responds differently and recovers at different rates. You can help recovery by ensuring that you get adequate **rest from physical, cognitive, and external stimulation**. This means that you may have to stay home from school or adjust your schedule. It may also mean that you have to miss out on some desirable activities, for example video games, texting, or a school dance. Any time you increase the demands on your brain to concentrate, focus, or engage, you can delay recovery and actually make the symptoms worse. You will know that you are doing too much if you feel symptoms increase (e.g. headache, foginess, feeling “out of it”) while you are involved in a specific activity.

What about school?

Concussion symptoms often worsen because of ordinary school activities. Working on computers, looking at the chalkboard, and the general noise of school hallways can become unbearable for students with a concussion. Therefore, it is advisable to stay home and rest the day after a concussion occurs. Parent/Guardians should call the school to notify administrators of their student’s condition so that individual teachers can be informed. A **Return to Learn** plan will be instituted to accommodate your student’s recovery.

When can I return to sports?

A specific sport concussion protocol, **Return to Play**, will be followed. You will take a neuro-cognitive test and your symptoms will be monitored. Return to Play decisions vary by individual, and will be based on the physical exam and a return to baseline or normal neuro-cognitive function. Once you no longer have symptoms at both rest and exertion, and your cognitive scores are normal, then you will be released for a gradual return to participation.



RETURN TO PLAY

CONCUSSION MANAGEMENT PROTOCOL *(Trainer use only)*

Athlete _____ DOI _____ Sport _____ Grade _____
 School _____ Athlete Contact # _____

CLEARED BY PHYSICIAN TO BEGIN RETURN TO PLAY _____

RETURN TO PLAY PROTOCOL

No activity (physical or cognitive) until all symptoms (headache, nausea, dizziness, confusion, etc.) are no longer present.

ImPACT Test #1 _____ ImPACT Test #2 _____ ImPACT Test #3 _____

Day 1 | Light aerobic exercise (stationary biking or treadmill walking) for 20 minutes.

Rate all symptoms on a scale 0-6 | 0 no symptoms; 1-2 mild; 3-4 moderate; 5-6 severe

Headache		Fatigue		Sadness		Feeling slowed down	
Nausea		Drowsiness		Nervousness		Feeling like "in a fog"	
Dizziness		Sensitivity to light/noise		Numbness/Tingling		Difficulty concentrating	
Confusion		More emotional		More irritable		Difficulty remembering	

Day 2 | Return to lifting and heavy aerobic exercise (hard running, such as sprints) for 30 minutes.

Rate all symptoms on a scale 0-6 | 0 no symptoms; 1-2 mild; 3-4 moderate; 5-6 severe

Headache		Fatigue		Sadness		Feeling slowed down	
Nausea		Drowsiness		Nervousness		Feeling like "in a fog"	
Dizziness		Sensitivity to light/noise		Numbness/Tingling		Difficulty concentrating	
Confusion		More emotional		More irritable		Difficulty remembering	

Day 3 | Sport-specific, non-contact drills. Individualized drills to minimize risk of contact.

Football – No helmet or shoulder pads (example: routes with no defenders, individual technique drills, basic agility drills including speed ladders).

Rate all symptoms on a scale 0-6 | 0 no symptoms; 1-2 mild; 3-4 moderated; 5-6 severe

Headache		Fatigue		Sadness		Feeling slowed down	
Nausea		Drowsiness		Nervousness		Feeling like "in a fog"	
Dizziness		Sensitivity to light/noise		Numbness/Tingling		Difficulty concentrating	
Confusion		More emotional		More irritable		Difficulty remembering	

Day 4 | Full contact practice for entire length of practice.

Rate all symptoms on a scale 0-6 | 0 no symptoms; 1-2 mild; 3-4 moderated; 5-6 severe

Headache		Fatigue		Sadness		Feeling slowed down	
Nausea		Drowsiness		Nervousness		Feeling like "in a fog"	
Dizziness		Sensitivity to light/noise		Numbness/Tingling		Difficulty concentrating	
Confusion		More emotional		More irritable		Difficulty remembering	

Day 5 | Return to full competition