

Omaha Public School District
Secondary Schools
Concussion Management Guidelines

Diagnostic Criteria and Grading Scale for Concussions

All concussions will be diagnosed according to the guidelines established in the 5th Consensus Statement on Concussion in Sport (McCroory et al. 2016)

A concussion will be defined as the following:

“Sport related concussion (SRC) is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilized in clinically defining the nature of a concussive head injury include:

1. SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.
2. SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.
3. SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.
4. SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.

The clinical signs and symptoms cannot be explained by drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc) or other comorbidities (eg, psychological factors or coexisting medical conditions).” (McCroory et al. 2016)

All athletic trainers should familiarize themselves with the full definition.

Concussion Management and Return to Sport Criteria

In accordance with Nebraska Concussion Awareness Act (2012) and recommendations established in Berlin in 2016, the following management strategies shall be utilized in all instances in which a concussion is reasonably suspected. These strategies are:

1. A student participating on a school athletic team shall be removed from a practice or game when he or she is reasonably suspected of having sustained a concussion or brain injury after observation by a coach or a licensed health care professional who is affiliated with or contracted by the school. The student will not be permitted to participate in any school supervised team athletic activities involving physical exertion, including, but not limited to, practices or games,

until the student (i) has been evaluated by a licensed health care professional, (ii) has received written and signed clearance to resume participation in athletic activities from the licensed health care professional, and (iii) has submitted the written and signed clearance to resume participation in athletic activities to the school accompanied by written permission to resume participation from the student’s parent or guardian.

2. The school shall notify the parent of the date and approximate time of the injury suffered by the student, the signs and symptoms of a concussion or brain injury that were observed, and any actions taken to treat the student.
3. If an OPS Athletic Trainer is not present, all reasonably suspected head injuries must be reported to the OPS Athletic Trainer as soon as possible.
4. The student-athlete should continue to be monitored for any changes in physical or mental status.
5. When treating a concussion, a graduated return to sport (RTS) strategy may begin once the athlete has been cleared by a licensed health care professional. The RTS must follow a medically supervised progression. The following is the recommended strategy for Athletic Trainers in OPS:
6. -Table 1. Graduated return-to-sport (RTS) strategy (McCrary et al. 2016)

Step	Aim	Activity	Goal
1	Symptom limited activity	Daily activities that do not provoke symptoms	Gradual reintroduction of work/school activities
2	Light aerobic exercise	Walking or stationary cycling at a slow to medium pace. No resistance training	Increase heart rate in a controlled environment
3	Moderate aerobic exercise	Running or agility drills: NO head impact activities	Add functional movement
4	Non-contact drills training	Increase intensity of activities; drills, re-introduce resistance training.	Exercise, coordination, and increased thinking during activity
5	Full contact practice	Following medical clearance participate in full activities	Restore confidence and assess functional skills
6	Return to sport	Normal game play	

“NOTE: An initial period of 24–48 hours of both relative physical rest and cognitive rest is recommended before beginning the RTS progression. There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, the athlete should go back to the previous step. Resistance training should be added only in the later stages (stage 3 or 4 at the earliest). If symptoms are persistent for greater than one month, the athlete should be referred to a healthcare professional who is an expert in the management of concussions.” (McCrary et al. 2016)

7. At any point following a suspected concussion any of the following individuals reserves the right to voice concern for the safety of the student- athlete and prohibit them from returning to play:
- a. Physician
 - b. Athletic Trainer
 - c. School Nurse
 - d. Coach
 - e. Parent
 - f. Student-Athlete

WHEN IN DOUBT- SIT THEM OUT!

Baseline Computer Neuropsychological Screening (BCNS)

The tool that will be utilized by the district will be the Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT) computer program.

BCNS will be required for the following sports which are considered to be “high” risk:

- Football
- Soccer
- Wrestling

Student-athletes in sports other than football, soccer and wrestling will be provided with the opportunity to acquire BCNS. Such testing will be done individually or in a group through arrangements made with the Certified Athletic Trainer at their respective school.

Post-injury BCNS may be used to assist return-to-play decisions and is typically performed when the athlete is clinically asymptomatic. There may be particular situations where testing is performed early to assist in determining aspects of management. However, it must be emphasized that BCNS should not be the sole basis of management decisions.” (McCrory et al. 2016) Seeking out the assistance of medical professionals who have completed training on BCNS administration and interpretation should be an important priority.

Education and Implementation.

1. All OPS secondary school Coaches will be educated about the district concussion guidelines through e-mail communication, in-services and/or meetings.
2. All OPS secondary school coaches will be educated about home care guidelines after a suspected concussion.
3. Athletic Directors will be educated about the concussion guidelines.
4. Parent/guardian and Student Athletes will be educated about the concussion guidelines through the use of parent/guardian meetings and information available on the OPS web-site and other written forms.

5. Nebraska Concussion Awareness Act requires that concussion and brain injury information be provided on an annual basis to students and a students' parents or guardians prior to students initiating practice or competition. To ensure that this information is being disseminated and read, all parents or guardians will be required to sign a form indicating that they have received, read and understand the information that is available. Records of this will be tracked as a part of each students "Sport Check-Out." Students will not be allowed to participate until this form has been signed and returned to the school.
6. ALL secondary school coaches will be required to receive training, approved by the Chief Medical Officer on how to recognize the symptoms of a concussion or brain injury and how to seek proper medical treatment for a concussion or brain injury **PRIOR TO THE START OF PRACTICES.**

Guidelines for Coaches to follow in the absence of a Certified Athletic Trainer.

1. In accordance with the Nebraska Concussion Awareness Act and OPS Concussion Guidelines, any student athlete reasonably suspected of having sustained a concussion or brain injury shall be immediately removed from a practice or game. Such student shall not be permitted to participate in any school supervised team athletic activities involving physical exertion, including, but not limited to, practices or games until the student (i) has been evaluated by a physician or OPS Athletic Trainer, (ii) has received written and signed clearance to resume participation in athletic activities from the physician or OPS Athletic Trainer, and (iii) has submitted the written and signed clearance to resume participation in athletic activities to the school accompanied by written permission to resume participation from the students parent or guardian.
2. A school representative shall notify the parent at the conclusion of the activity with date and approximate time of the head injury suffered by the student, the signs and symptoms of a concussion or brain injury that were observed, and any actions taken to treat the student.
3. All reasonably suspected head injuries must be reported to the secondary schools Athletic Trainer as soon as reasonably possible.
4. Unusual behavior or unresponsiveness, deteriorating condition, loss of consciousness, or a concern about neck and spine injury, **activate Emergency Medical Services (call 911).**

The above guidelines were adapted from Nebraska Concussion Awareness Act, The 5th Consensus Statement on Concussion in Sport, and the recommendations made by the National Federation of State High School Associations.