**Omaha Public School District**

**Secondary Schools**

**Concussion Management Guidelines**

**Definition of Sport Related Concussion (SRC)**

All diagnosed concussions will use the guidelines established in the 6th Consensus Statement on Concussion in Sport (Patricios et al. 2023) for treatment and management. A concussion will be defined as the following:

“Sport related concussion (SRC) is a traumatic brain injury caused by a direct blow to the head, neck or body resulting in an impulsive force being transmitted to the brain that occurs in sports and exercise-related activities.

1. SRC initiates a neurotransmitter and metabolic cascade, with possible axonal injury, blood flow change and inflammation affecting the brain,
2. Symptoms and signs may present immediately, or evolve over minutes or hours, and commonly resolve within days, but may be prolonged.
3. SRC may or may not involve loss of consciousness.
4. SRC clinical symptoms and signs cannot be explained soley by (but may occur concomitantly with) 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).” (Patricios et al. 2023)

All athletic trainers should familiarize themselves with diagnostic criteria developed by the Mild Traumatic Brain Injury Task Force of the American Congress of Rehabilitation Medicine (ACRM).

**Concussion Management and Return to Sport Criteria**

In accordance with Nebraska Concussion Awareness Act (2012) and recommendations established in Amsterdam in 2022, 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 sport related concussion 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.

1. 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.
2. The student-athlete should continue to be monitored for any changes in physical or mental status.
3. When treating a concussion, a graduated return to sport (RTS) strategy, and Return-to-learn (RTL) strategy should be used following a medically supervised progression. The following is the recommended strategy for Athletic Trainers and academic personnel in OPS:
4. Table 1. Graduated return-to-sport (RTS) strategy (Patricios et al. 2023)

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Aim | Activity | Goal |
| 1 | Symptom limited activity | Daily activities that do not exacerbate symptoms | Gradual reintroduction of work/school activities |
| 2 | Light to moderate aerobic exercise | Walking or stationary cycling at a slow to medium pace. May start light resistance training that does not result in more than mild and brief exacerbation of symptoms. | Increase heart rate in a controlled environment |
| 3 | Individual sport-specific exercise | Sport specific training away from team environment Running or agility drills: NO activities at risk for head impact  | Add functional movements, change of directions. |
| 4 | Non-contact drills training | Exercise to high intensity including more challenging training drills. | Resume usual intensity of exercise, coordination and increased thinking |
| 5 | Full contact practice | Particiapte in normal training activities. | Restore confidence and assess functional skills |
| 6 | Return to sport | Normal game play |  |

“NOTE: Athletes may begin step 1 within 24 hours of injury, with progression through each subsequent step typically taking a minimum of 24 hours. If more than a mild exacerbation of symptoms occurs during steps 1-3, the athlete should stop and attempt to exercise the next day. Athletes experiencing concussion-related symptoms during steps 4-6 should return to step 3 to establish full reloutions of symptoms with exertion before engaging in at-risk acitivies.” (Patricios et al. 2023)

Table 2 Retrun-to-learn (RTL) Strategy

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Mental activity | Activity at each step | Goal |
| 1 | Daily activities that do not result in more than a mild exacerbation of symptoms. | Typical activities during the day while minimizing screen time. Start with 5-15 min at a time and increase gradually | Gradual return to typical activities |
| 2 | School activities | Homework, reading or other cognitive activities outside of the classroom | Increase tolerance to cognitive work |
| 3 | Return to school part-time | Gradual introduction of schoolwork. May need to start with a partial day or with greater access to rest breaks during the day. | Increase academic activities |
| 4 | Return to school full-time | Gradually progress in school activities until a full day can be tolerated without more than a mild symptom exacerbation | Return to full academic activities and catch up on missed work |

\*Note: following an initial period of rest (24-48 hours following an injury at step 1), athletes can begin a gradual and incremental increase in their cognitive load. Progression through the strategy for students should be slowed when there is more than a mild and brief symptom exacerbation.

1. 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 further discussion on treatment:
	1. Physician
	2. Athletic Trainer
	3. School Nurse
	4. Coach
	5. Parent
	6. Student-Athlete

WHEN IN DOUBT- SIT THEM OUT!

**Baseline Computer Neuropsychological Screening (BCNS)**

The tool that will be utilized by the OPS district will be the SWAY computer application 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.” (Patricios et al. 2023) 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.

1. 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 6th Consensus Statement on Concussion in Sport, and the recommendations made by the National Federation of State High School Associations.*