Oxford Area School District

Concussion Management Protocol

Oxford Area School District seeks the safe return to play, and return to learn, of all students and student-athletes. Recent research in sports-related concussion has increased awareness in both the medical community and the general public. This valuable knowledge has led us to rethink our approach to concussion recognition and management. The following recommendations are in part extracted from the Vienna/Prague Conferences and the Consensus Statement on Concussion in Sport (Zurich November, 2012), and also based on information gathered from the American Academy of Neurology (AAN), the National Athletic Trainer's Association (NATA), and the Center for Disease Control (CDC), and in compliance with Pennsylvania state law.

These adapted recommendations provide guidelines for concussion recognition, management, and the safe return to play and learn, for all members of the Oxford Area School District staff, particularly those in a position on a concussion management team. Academic assistance, medical monitoring, and counseling may be necessary during the school day for individuals with a concussion. Appropriate school personnel will be contacted for involvement on a case by case basis.

This protocol will be reviewed annually by the Oxford Area School District Concussion Management Team. Any changes or modifications will be distributed to athletic and administrative staff and appropriate school district personnel in writing. In addition to the District Concussion management Team, each school will create a concussion management team to attend to the return to learn (RTL) needs of individual students at their respective schools.

Approximately 80% of concussions resolve within two weeks. This concussion protocol is designed mostly towards the 20% of concussion patients whose symptoms extend beyond two weeks. These individuals will likely require closer monitoring and may need academic accommodations as well.

It is the understanding of Oxford Area School District that all concussions are different, and so too are the potential management strategies. All management strategies begin with diagnosis, and proper documentation must be in place to begin return to learn (RTL) decision making. Management of return to learn at the individual schools is to be done under the direction of the school nurse and guidance counselors. Management of return to play is to be done under the direction of the school athletic trainer.

In accordance with PA State law, all return to play (RTP) decisions are to be made by a physician, neurologist, or concussion specialist. Management of return to play progressions is to be done under the direction of the certified athletic trainer, or school nurse if no ATC is available.

AT NO TIME WILL AN ATHLETE SUSPECTED OF HAVING A CONCUSSION BE ALLOWED TO PARTICIPATE IN ANY PHYSICAL ACTIVITY RELATED TO ANY ACTIVITIES SPONSORED BY OXFORD AREA SCHOOL DISTRICT. IN ADDITION, NO STUDENT SUSPECTED OF HAVING A CONCUSSION WILL BE ALLOWED TO PARTICPATE IN P.E. CLASS UNTIL CLEARED TO BEGIN SUCH ACTIVITIES BY AN APPROPRIATE MEDICAL PROFESSIONAL.

District Concussion Management Team:

Athletic Trainer- Chris Turpen, ATC/LAT, CMS

Athletic Director- Michael Price

High School Nurse- Tish Foster, MSN

Penn's Grove Nurse- Kassy Reilly-MSN

Oxford Area School District Guidance Department

I. Chain of Communication

The chain of communication is established to facilitate communication between different members of different concussion management teams at different schools within the Oxford Area School District. It is meant to create collaboration between all of the individuals within the chain so as to better manage concussions for all students and student-athletes.

The school nurse at each of the schools will be the hub of all communication regarding concussion. All information and documentation goes through the school nurse and is then distributed to the other members of the chain of command as necessary. Other members of the chain may include, but are not limited to: Parents, teachers, guidance counselors, athletic trainers, doctors, school administrators, neurologists, and concussion specialists. Additional personnel may be included at the discretion of a physician, school nurse or athletic trainer.

II. Flow of a Concussion Patient

- Upon receiving a diagnosis and establishing the date of injury, the school nurse will initiate the concussion protocol and note the two-week benchmark date.
- Members of the chain of command are notified by the school nurse of an individual's diagnosis and provided with a preliminary assessment regarding likelihood of the need for accommodations in classes.
- Academic accommodations are put in place as needed. Symptoms reported to nurse or athletic trainer and treated/documented as appropriate.
- Two-week benchmark is reached. Students with resolved concussions are fully assimilated back into class. PE students follow return to play guidelines for class. Non-complicated student-athletes are referred to the athletic trainer for return to play progression.
- Students with lingering symptoms are listed as having a complicated concussion.
- Students with a complicated concussion are evaluated for further accommodations and recommendations.
- Thirty, sixty, and ninety-day review dates are set. Longer time frames will be used if necessary.
- Communication continues as per the chain of command until resolution.

III. Guidelines

Guidelines For Athletic Trainers:

- The ATC will evaluate the injury when appropriate or provide guidance to a coach/teacher if unable to physically attend to the injury. Immediate referral to the hospital will be made when medically appropriate, as outlined in Appendix B- Immediate Referral Guidelines for All Staff.
- Notify the parents of the patient as soon as possible and offer the appropriate medical referral and follow-up care.
- Inform parent/guardian of the Pennsylvania state law requiring anyone suspected of a head injury will need to be seen by an appropriate medical professional, and generate the documents needed for medical referral and return to play.
- Give parent/guardian verbal (written if possible) home care instructions, as well as follow-up care instructions.
- Maintain communication with the parents regarding the athlete's status including return to play, until the athlete is fully recovered.
- If a parent is unavailable or cannot be reached using the emergency information provided in the PIAA pre-participation physical, the ATC will follow the guidelines in the Immediate Referral Guidelines for All Staff.
- Notify the school nurse of the injury as soon as possible. The nurse will then initiate the appropriate follow-up in the school immediately upon the individuals return to his/her school.
- Supervise student-athlete's return to play status following concussion RTP protocol.
- Perform or assist in functional evaluations on non-athlete students as needed by school nurses.
- When asked, assist teachers with development and implementations of accommodations as needed.

Guidelines For Nurses:

- Obtain written confirmation of concussion.
- Notify building administration, guidance, teachers and athletic trainer (if student athlete).
- Note 14-day benchmark time frame for non-complicated concussion. At 14 days, re-evaluate for 30,60, or 90-day benchmarks for complicated concussions.
- Regular communication with counselor regarding recovery.
- Maintain contact with parents regarding follow-up appointment and recovery.
- Maintain contact with student regarding recovery progress.
- Provide teachers with recommended accommodations from health care provider.
- Provide teachers with additional accommodations as needed.
- When asked, assist teachers with development and implementations of accommodations as needed.
- Refer and utilize health office concussion resources (available on O drive under Health).
- Assess and/or perform functional evaluations on individuals whose symptoms don't match diagnoses. Refer to physician and/or consult with athletic trainer as needed.

Guidelines for PE Teachers:

It is assumed that PE teachers will encounter head injuries during school hours, and that coaches will encounter head injuries after school hours. During school hours, the school nurse at any of the district buildings is responsible for the assessment and management of suspected head injuries.

- If a PE teacher suspects a student has sustained a concussion in class, the student should be removed from activity until medically evaluated by the school nurse. If no medical staff is available, coaches should follow the guidelines set forth in Appendix A- Recognition of Concussion, and Appendix B- Immediate Referral Guidelines for All Staff.
- PE teachers should communicate any student-reported head injuries to the school nurse as soon as possible for medical assessment, diagnoses confirmation, possible referral, management, home instructions, and follow-up care.
- If there is any question about the status of an individual suspected of head injury, or they aren't able to be monitored appropriately, they should be referred to the school nurse for evaluation.
- PE teachers should complete an incident form and submit it properly.

After a student has been given the clearance to begin their academic RTL (return to learn), PE teachers will have to allow more time for restriction from participating in PE class. This restriction continues until the student is completing full days or has documentation on record indicating otherwise. Once the student is back in school in full-day capacity, they may begin their RTP (return to play), as outlined in the RTP protocol. PE teachers should consult with the athletic trainer for details regarding non-athletes.

Guidelines for Coaches:

Coaches with student-athletes who have sustained a concussion need to communicate with the athletic trainer to ensure proper return to play guidelines have been met prior to the athlete coming back to practice. Under no circumstance will a coach allow an athlete to practice or play without clearance from the athletic trainer and documentation from a physician in place stating the athlete is cleared.

- If a coach suspects a possible head injury, the student-athlete should be removed from activity until medically evaluated by the certified athletic trainer. If one is not available, and symptoms are present, then follow the athletic Emergency Action Plan.
- Coaches should seek medical assistance from the host site certified athletic trainer if at an away contest.
- Coaches should report all head injuries to the Oxford certified athletic trainer as soon as possible after injury for medical assessment, management, home instructions, and follow-up care.
- Student-athletes with a suspected head injury should not be allowed to drive.
- Coaches will not allow student-athletes with suspected head injuries to be alone to monitor symptoms and ensure their safety. Someone (coach, another player, manager) will need to accompany them into locker rooms and around facilities until they are with parent/guardian.
- Student-athletes diagnosed with concussion will not be allowed to participate in practices in any capacity until cleared by a physician and having initiated the RTL protocol supervised by the athletic trainer. They may attend practice in a non-participatory role if medically appropriate and no symptoms are exacerbated by doing so.
- Regardless of documentation provided by a physician, the student-athlete must complete the RTP protocol successfully to return to competition.

IV. Follow-up Care During the School Day

Responsibilities of the school nurse after notification of a student's concussion:

- The individual will be instructed to report to the school nurse upon his/her return to school.
- If necessary, the school nurse will re-evaluate the individual when they return to school using appropriate testing method.
- Provide an individualized health care plan based on the current condition, physicians' instructions, and initial injury information provided by the physician or other medical professional.
- Notify the student's guidance counselor and teachers of the injury immediately.
- Notify the student's PE teacher immediately that the individual is restricted from all physical activity until further notice.
- If the school nurse receives notification from someone other than a physician or the ATC that the student has sustained a concussion, the nurse will evaluate the student using SCAT5 form.
- Communicate the individual's condition to the ATC so that coaches can be informed.

Responsibilities of the students' guidance counselor after notification of a student's concussion.

- Monitor the student closely and recommend appropriate academic accommodations to the students' teachers. Strategies employed to help a student during recovery may include:
- Initiate a 504 plan, or an Individualized Education Plan (IEP), if necessary.
- Communicate any changes made to the504 or IEP to the school nurse.

V. ImPACT/Neurological Testing

ImPACT is a computerized neurocognitive assessment tool/service used by athletic trainers, doctors, and other health care professionals to assist them in determining an athlete's readiness to return to play following a concussion. Baseline ImPACT testing is required for all collision and contact sports (football, soccer, field hockey, basketball, wrestling), and is also available to any non-contact sport athlete, or student by request.

Baseline testing will occur at the beginning of each season and will be scheduled with the athletic trainer. Athletes unable to receive baseline testing may test with other teams during their block of time if room exists in the computer lab.

Test information is good for two years and therefore the baseline test will be given every two years, with test times during the first week of each sport season. All post-concussion tests will be administrated under the supervision of either the school nurse or athletic trainer. Anyone with special needs can have appropriate academic assistance while taking the test.

The use of ImPACT is just one of the tools used to assess either baseline or post-injury function. Other assessment and baseline tools used by Oxford Area School District include, but are not limited to:

Neurocognitive Test-	ImPACT, Sway
Balance/Vestibular-	Balance Error Scoring System (BESS), Sway
SCAT 5-	Standardized Concussion Assessment Form
King-Devick-	Saccadic Eye Movement

VI. Return To Play (RTP)

All return to play decisions require successful completion of the RTL (return to learn) protocol. No athlete who is still experiencing symptoms that prohibit unrestricted, full-day activity in school will be allowed to begin the return to play protocol unless instructed by an appropriate medical professional.

Sideline return to play decisions are the responsibility of the athletic trainer. At no time will a student-athlete who is exhibiting symptoms of concussion be allowed to return to practice or competition. Student-athletes who deny symptoms, but have abnormal cognitive or vestibular function, will not be allowed to return without physician clearance. The official position of the school district is: "When in doubt, sit them out."

The return to play progression consists of at least 6 days of activity before being fully cleared. Each step is contingent upon successful completion of the previous step. The steps are as follows:

Day 1- Exertional evaluation consisting of a brief jog, a short sprint, 10 push-ups, and 10 sit-ups. These are to be done without rest and as quickly as possible in effort to elevate the heart rate and exacerbate any symptoms.

Day 2- Unrestricted light lifting and aerobic activity for at least 20 minutes. The purpose of day 2 is to increase activity levels from day 1 but is not intended to be a full workout.

Day 3- Progress to high-intensity sport-specific, non-contact training (i.e. Skating in hockey, running in football/soccer. Day 3 football players may be in helmet only. Full, unrestricted workout in weight room/fitness center.

Day 4- Light-contact drills in practice. Athletes in sports with flying balls (i.e. volleyball, soccer) cannot participate in drills where risk of being hit in the head exist. Day 4 football players may be in shoulder pads/helmet but may only have light contact that does not reach the "thud" contact level.

Day 5- Return to practice for full-contact training. Day 5 football players may participate in "thud" level hitting and controlled tackling drills.

Day 6- Full, unrestricted practice/participation.

NOTE: If an athlete experiences post-concussion symptom during any phase, training for the day stops, and the athlete drops back to the previous asymptomatic level and resumes the progression after 24 hours.

VII. Return to Learn (RTL)

Following a concussion of a student, Oxford Area School District feels that the wellbeing of that student should take priority in all decisions regarding return to learn. It's to that end that we have adopted the Brain Steps program as our return to learn guideline.

Appendix A: Recognition of Concussion

The following are common signs and symptoms associated with concussion:

Signs: Observed by others

- Loss of consciousness (any duration)
- Nausea or vomiting
- Victim appears dazed or confused
- Confusion
- Difficulty remembering things
- Clumsiness
- Balance problems
- Personality/behavior changes
- Responds slowly to questions
- Forgets events prior to/after injury

Symptoms: Reported by victim

- Headache
- Fatigue
- Nausea or vomiting
- Visual distortion (double vision, blurry vision, etc.)
- Sensitivity to light or noise
- Feels sluggish
- Feels “in a fog”
- Problems concentrating
- Problems remembering

These signs and symptoms are indicative of probable concussion. Other causes for any of these signs or symptoms should also be considered. An additional consideration for return to learn or return to play is that the person should not only be free of symptoms but should also not be taking any pharmacological agents or medications that may affect or modify the symptoms of concussion.

Appendix B Immediate Referral Guidelines for all Staff

- An individual with a witnessed loss of consciousness of any duration should be spine boarded and transported to a hospital via ambulance, in accordance with the Emergency Action Plan.
- Anyone who has symptoms of concussion and is not stable (condition is deteriorating), is to be transported to hospital via ambulance, in accordance with the Emergency Action Plan.
- An individual who exhibits any of the following signs is unstable and should be transported to the hospital via ambulance, in accordance with the Emergency Action Plan.
    - decreasing level of consciousness
    - decrease or irregularity in respirations
    - deterioration of neurological function
    - decrease or irregularity in pulse
    - unequal, dilated, or non-reactive pupils
    - any signs or symptoms of skull fracture or spinal injury
    - fluid discharge (clear or blood) from eyes, ears, nose, or mouth
    - mental status changes including lethargy, difficulty maintaining arousal, increasing agitation, increasing confusion
    - seizure activity
    - cranial nerve deficits
    - lucid interval
    - any loss of consciousness
- An individual who is symptomatic but stable (meaning not showing any of the unstable signs listed above) may be transported by his/her parents. The parent/guardian should be advised to contact the primary care physician or seek care at an emergency room within the next 24 hours.
- If the parents are unavailable, a responsible individual may be allowed to transport the person home if they understand and can monitor the signs and symptoms.
- Parents should always have the option of emergency transportation, even if it is not deemed necessary.