



Concussion In Sports

WHAT YOU NEED TO KNOW



Management of Sports-Related Concussions Smallville School District

Medical management of sports-related concussion continues to evolve. Recently, there has been a significant amount of new research regarding sports-related concussions in high school athletes. Smallville School District (SSD) has established this protocol to provide education about concussion for coaches, school personnel, parents, and athletes. This protocol outlines procedures for staff to follow in managing concussions, and outlines school policy as it pertains to return to play issues following a concussion.

SSD seeks to provide a safe return to activity for all athletes following any injury, but particularly after a concussion. In order to effectively and consistently manage these injuries, procedures have been developed to aid in insuring that concussed athletes are identified, treated and referred appropriately, receive appropriate follow-up medical care during the school day (including academic accommodations) and are fully recovered prior to returning to activity.

In addition to recent research, two primary documents were consulted in developing this protocol. The *"Summary and Agreement Statement of the 3rd International Conference on Concussion in Sport, Zurich 2008"* (referred to in this document as the Zurich Statement), and the *"National Athletic Trainers' Association Position Statement: Management of Sport-Related Concussion"* (referred to in this document as the NATA Statement).

This protocol shall be reviewed annually by the athletic department and nursing staff of SSD. Any changes or modifications will be reviewed and given to athletic department staff, including coaches and other appropriate school personnel in writing.

All athletic department staff shall attend a yearly in-service meeting in which procedures for managing sports-related concussion are discussed.

Recognition of Concussion

Common signs and symptoms of sports-related concussion

Signs (observed by others):

- Athlete appears dazed or stunned
- Confusion
- Forgets plays
- Unsure about game, score, opponent
- Moves clumsily (altered coordination)
- Balance problems
- Personality change
- Responds slowly to questions
- Forgets events prior to hit
- Forgets events after the hit
- Loss of consciousness (any duration)



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Symptoms (reported by athlete):

- Headache
- Fatigue
- Nausea or vomiting
- Double vision, blurry vision
- Sensitive to light or noise
- Feels sluggish
- Feels "foggy"
- Problems concentrating
- Problems remembering

These signs and symptoms following a witnessed or suspected blow to the head or body are indicative of probable concussion. Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest or practice and shall not return to play until cleared by an appropriate health care professional. (per Max's Law, approved by Oregon Legislature in 2009).

Management and Referral Guidelines for All Staff

1. The following situations indicate a medical emergency and require activation of the Emergency Medical System:

- Any athlete with a witnessed loss of consciousness (LOC) of any duration should be spine boarded and transported immediately to nearest emergency department via emergency vehicle.
- Any athlete who has symptoms of a concussion, and who is not stable (i.e., condition is worsening), is to be transported immediately to the nearest emergency department via emergency vehicle.
- An athlete who exhibits any of the following symptoms should be transported immediately to the nearest emergency department, via emergency vehicle.
 - deterioration of neurological function
 - decreasing level of consciousness
 - decrease or irregularity in respirations
 - any signs or symptoms of associated injuries, spine or skull fracture, or bleeding
 - mental status changes: lethargy, difficulty maintaining arousal, confusion or agitation
 - seizure activity

2. An athlete who is symptomatic but stable, may be transported by his or her parents. The parents should be advised to contact the athlete's primary care provider, or seek care at the nearest emergency department, on the day of the injury.



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Guidelines and Procedures for Coaches:

RECOGNIZE • REMOVE • REFER

Recognize concussion

1. All coaches should become familiar with the signs and symptoms of concussion that are described above.
2. Annual training will occur for coaches of every sport.

Remove from activity

Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional.

When in doubt, sit 'em out

Refer the athlete for medical evaluation

1. The coach is responsible for notifying the athlete's parents of the injury.
 - a. Contact the parents to inform them of the injury. Depending on the injury, either an emergency vehicle will transport or parents will pick the athlete up at the event for transport. (see Section II).
 - b. A medical evaluation is required to begin the process of "Return to Play".
2. In the event that an athlete's parents cannot be reached, and the athlete is able to be sent home (rather than directly to MD):
 - The coach should insure that the athlete will be with a responsible individual, who is capable of monitoring the athlete and understanding the home care instructions, before allowing the athlete to go home.
 - The coach should continue efforts to reach a parent.
 - If there is any question about the status of the athlete, or if the athlete is not able to be monitored appropriately, the athlete should be referred to an Emergency Department for evaluation. A coach should accompany the athlete and remain with the athlete until a parent arrives.

Athletes with suspected head injuries should not be permitted to drive home.

3. Coaches should seek assistance from the host site certified athletic trainer (ATC) or team physician, if available at an away contest.



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Follow-Up Care of the Athlete During the School Day

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

1. The athlete will be instructed to report to the school nurse upon his or her return to school. At that point, the school nurse will:
 - Re-evaluate the athlete utilizing a graded symptom checklist.
 - Provide an individualized health care plan based on both the athlete's current condition, and initial injury information provided by the parent.
2. Notify the student's guidance counselor and teachers of the injury immediately.
3. Notify the student's P.E. teacher immediately that the athlete is restricted from all physical activity until cleared by his or her treating physician.
4. Monitor the athlete on a regular basis during the school day.
5. Notify the local/regional TBI liason.

Responsibilities of the student's guidance counselor

1. Monitor the student closely and recommend appropriate academic accommodations for students who are exhibiting symptoms of post-concussion syndrome.
2. Communicate with school nurse on a regular basis, to provide the most effective care for the student.

Return to Play (RTP) Procedures After Concussion

1. Return to activity and play is a medical decision. The athlete must meet all of the following criteria in order to progress to activity:

Asymptomatic at rest and with exertion (including mental exertion in school) AND have written clearance from their primary care provider or concussion specialist (athlete must be cleared for progression to activity by a physician other than an Emergency Room physician, if diagnosed with a concussion).
2. Once the above criteria are met, the athlete will be progressed back to full activity following the step-wise process detailed below. (This progression must be closely supervised by a Certified Athletic Trainer. If your school does not have an athletic trainer, then the coach must have a very specific plan to follow as directed by the athlete's physician).
3. Progression is individualized, and will be determined on a case by case basis. Factors that may affect the rate of progression include: previous history of concussion, duration and type of symptoms, age of the athlete, and sport/activity in which the athlete participates. An athlete with a prior history of concussion, one who has had an extended duration of symptoms, or one who is participating in a collision or contact sport may be progressed more slowly.



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4. Stepwise progression as described below:

Step 1. Complete cognitive rest. This may include staying home from school or limiting school hours (and studying) for several days. Activities requiring concentration and attention may worsen symptoms and delay recovery.

Step 2. Return to school full-time.

Step 3. Light exercise. This step cannot begin until the athlete is no longer having concussion symptoms and is cleared by a physician for further activity. At this point the athlete may begin walking or riding an exercise bike. No weight-lifting.

Step 4. Running in the gym or on the field. No helmet or other equipment.

Step 5. Non-contact training drills in full equipment. Weight-training can begin.

Step 6. Full contact practice or training.

Step 7. Play in game. Must be cleared by physician before returning to play.

- The athlete should spend 1 to 2 days at each step before advancing to the next. If post concussion symptoms occur at any step, the athlete must stop the activity and the treating physician must be contacted. Depending upon the specific type and severity of the symptoms, the athlete may be told to rest for 24 hours and then resume activity at a level one step below where he or she was at when the symptoms occurred.

Potential Problem Areas

While current Oregon law designates that an athlete may be returned to play by “an appropriate health care provider” it is the prerogative of each school district to designate the credentials of the providers from whom they will accept clearance. This is a very important decision and should be made after careful consideration by the athletic director, principal, and superintendent. The school district’s liability carrier may also be consulted.

Serious consideration must also be given as to what the school will do in the case where an athlete is clearly still having concussion symptoms, yet given return to play clearance by a health care provider. A formal policy should be developed which designates a specific individual (preferably an expert in the field of concussion management- typically a physician or neuropsychologist) who shall evaluate the athlete and make the final decision regarding return to play.

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