



## Management of Sports-Related Concussions Crater High School

Medical management of sports-related concussion continues to evolve. Providence and Crater High School has established this protocol to provide education about concussion for coaches, school personnel, parents and athletes. This protocol outline procedures for staff to follow in managing concussions, and outlines school policy as it pertains to return to play issues following a concussion. For the purposes of this document, parent refers to parents, guardians or emergency contacts as listed on the Annual Pre-participation form.

Providence and Crater High School seek 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 ensuring that concussed athletes are identified, treated and referred appropriately, receive appropriate follow-up medical care (including academic accommodations) and are fully recovered prior to returning to activity.

### Recognition of Concussion

Common signs and symptoms of sports-related concussions

<b>Signs</b> (Observed by others)	<b>Symptoms</b> (Reported by athlete)
• Athlete appears dazed or stunned	• Headache
• Confusion	• Fatigue
• Forgets Plays	• Nausea or vomiting
• Unsure about game, score, opponent	• Double vision, blurry vision
• Moves clumsily (altered coordination)	• Sensitive to light or noise
• Balance Problems	• Feels sluggish/ slowed down
• Personality/Mood Changes	• Feels "foggy"
• Responds slowly to questions	• Difficulty concentrating
• Forgets events prior to hit	• Difficulty remembering
• Forgets events after hit	• Dizziness
• Loss of consciousness (any duration)	• Numbness/ tingling
	• Ringing in Ears
	• Irritability
	• Feeling more emotional
	• Nervousness/ Anxiousness
	• Pressure in head
	• Neck pain
	• Drowsiness
	• Difficulty Sleeping
	• Sadness

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 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:
  - a. Any athlete with a witnessed loss of consciousness (LOC) of any duration should be spine boarded and transported immediately to the nearest emergency department via emergency vehicle, in the event an athletic trainer (AT) is not on site.
  - b. 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.
  - c. An athlete who exhibits any of the following symptoms should be transported immediately to the nearest emergency department via emergency vehicle.
    - i. Deterioration of neurological function
    - ii. Decreasing level of consciousness
    - iii. Decrease of irregularity in respirations
    - iv. Any signs or symptoms of associated injuries, spine or skull fracture, or bleeding
    - v. Mental status changes: lethargy, difficulty maintaining arousal, confusion or agitation
    - vi. Seizure activity
2. An athlete who is symptomatic but stable may be transported by his or her parent. All staff will be instructed to advise the parent to consult an appropriate healthcare professional on the day of the injury.

### **Guidelines and Procedures for Coaches:**

**RECOGNIZE, REMOVE, REFER**

### *Recognize concussion*

All coaches should become familiar with the signs and symptoms of concussions that are described above. Annual training will occur for coaches of every sport as required by the OSAA.

### *Remove from Activity*

Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion shall be immediately removed from the contest and shall not return to play until an AT has determined no concussion was sustained or the athlete is cleared by an appropriate health care professional. The designated team physician has final determination.

### *Refer the athlete for medical evaluations*

The coach will immediately refer any suspected concussion to the AT.

#### **If the AT is unavailable, the following procedure will be followed:**

1. The coach is responsible for immediately notifying the athlete's parents of the injury. (The coach will also notify the AT as soon as possible.
  - a. Contact the parents to inform them of the injury. Depending on the injury, either an emergency vehicle will transport or parent will pick the athlete up at the event for transport.
  - 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 does not need immediate transport:
  - a. The coach should continue efforts to reach a parent.
  - b. The coach will be responsible for transporting the athlete if he/she is symptomatic but stable. The coach will 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 AT or team physician, if available, at an away contest.

### **Follow-Up Care of the Athlete**

1. The athletic trainer will notify the student's guidance counselor, who will notify his/her teachers of the injury. The athletic trainer will 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.
2. The athletic trainer will monitor the athlete daily.

## **Responsibilities of the student's guidance counselor**

1. Monitor the student closely and recommend appropriate academic accommodations for students who are exhibiting prolonged post concussion signs and/ or symptoms.
2. Communicate with the athletic trainer 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), return to baseline neurocognitive measure, AND have clearance from a physician (MD, DO, PA, NP), if diagnosed with a concussion.

**Note: If AT does not feel that the primary care provider is familiar with current concussion guidelines as outline in the International Symposium on Concussion in Sports Consensus Statements, the designated team physician has final say.**

2. Once the above criteria are met, the athlete will be progressed back to a full activity following the step-wise process detailed below. This progression must be closely supervised by the Certified Athletic Trainer.
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.

4. Step wise 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. Before progressing to the next step the athlete must be able to return to school full time and be asymptomatic at rest for 48 hours.

**Step 2.** Light Exercise. This step cannot begin until the athlete 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 3.** Running/ Conditioning in the gym or on the field. No helmet or other equipment.

**Step 4.** Non-contact training drills (in shells only for football). Weight training can begin.

**Step 5.** Full Contact practice or training.

**Step 6.** 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, 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.

For more detailed information please refer to the following documents:

McCrory P, Meeuwisse WH, Aubry M, et al. " Consensus statement on concussion in sport: the 4 th International Conference on Concussion in Sport held in Zurich, November 2012." *BR J Sports Med* 2013; 47:250-258

Broglio, Steven P., Cantu, Robert C., Gioia, Gerard A., Guskiewicz, Kevin M. Jeffery Kutcher, Michael Palm, Tamara C. Valovich McLead. "National Athletic Trainers' Association Position Statement: Management of Sport Concussion." *Journal of Athletic Training* 49 (2014): 245-265. Print.

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