POLICY FOR MANAGEMENT OF SPORTS-RELATED CONCUSSIONS

______________________ has developed this protocol to educate coaches, school personnel, parents, and athletes about appropriate concussion management. 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.

A safe return-to-activity protocol is important for all athletes following any injury, but it is essential after a concussion. The following procedures have been developed to ensure that concussed athletes are identified, treated, and referred appropriately. Consistent application of this protocol will ensure athletes receive appropriate follow-up medical care and academic accommodations and are fully recovered before returning to activity.

This protocol will be reviewed annually by the ____________ concussion management team. Changes or modifications will be reviewed, and written notification will be provided to the athletic department staff, including coaches and other appropriate school personnel.

All athletic department staff will be required to attend a yearly in-service meeting to review procedures for managing sports-related concussions.

Recognition of Concussion

These signs and symptoms—following a witnessed or suspected blow to the head or body—are indicative of probable concussion.

<table>
<thead>
<tr>
<th>Signs (observed by others)</th>
<th>Symptoms (reported by athlete)</th>
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</thead>
<tbody>
<tr>
<td>• Appears dazed or stunned</td>
<td>• Headache</td>
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<tr>
<td>• Exhibits confusion</td>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Forgets plays</td>
<td>• Nausea or vomiting</td>
</tr>
<tr>
<td>• Unsure about game, score, opponent</td>
<td>• Double vision, blurry vision</td>
</tr>
<tr>
<td>• Moves clumsily (altered coordination)</td>
<td>• Sensitivity to light and noise</td>
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<tr>
<td>• Balance problems</td>
<td>• Feels “sluggish”</td>
</tr>
<tr>
<td>• Personality change</td>
<td>• Feels “foggy”</td>
</tr>
<tr>
<td>• Responds slowly to questions</td>
<td>• Problems concentrating</td>
</tr>
<tr>
<td>• Forgets events prior to hit</td>
<td>• Problems remembering</td>
</tr>
<tr>
<td>• Forgets events after the hit</td>
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<tr>
<td>• Loss of consciousness (any duration)</td>
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</tbody>
</table>

Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion must be removed immediately from the competition or practice and may not be allowed to return to play until cleared by an appropriate healthcare professional.
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 of any duration should be spine boarded and transported immediately to the nearest emergency department via emergency vehicle.
   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) Any 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) decreased level of consciousness
      iii) decrease or 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 (not worsening) may be transported by his/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.

Guidelines and Procedures for Coaches:

Recognize concussion

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

Remove from activity

1) Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion such as: loss of consciousness, headache, dizziness, confusion, or balance problems must be removed immediately from the competition or practice and may not return to play until cleared by an appropriate healthcare professional.

“When in doubt, sit them 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, an emergency vehicle or the parents will transport the athlete from the event.
b) In the event that an athlete’s parents cannot be reached and the athlete is able to be sent home rather than transported directly to a medical facility:
   i) The coach should ensure the athlete will be with a responsible individual able to monitor the athlete and understand the home care instructions before allowing the athlete to leave.
   ii) The coach should continue efforts to reach a parent.

c) If the coach has any question about the athlete being monitored appropriately, a coach or designated adult should remain with the athlete until a parent arrives.

2) If at an away competition, the coach should seek assistance from the host site certified athletic trainer (ATC) or team physician.

   *Athletes with a suspected head injury should not be permitted to drive home.*

**Follow-Up Care of the Athlete During the School Day**

**Responsibilities of the Concussion Management Team after Notification of a Student’s Concussion**

1) The injured athlete will be instructed to report to the school nurse or other trained designee from the Concussion Management Team upon his/her return to school. At that point, the appointed person will:
   a) Re-evaluate the athlete using a [graded symptom checklist](#).
   b) Provide an individualized healthcare plan based on both the athlete’s current condition and initial injury information provided by the parent.
   c) Immediately notify the student’s counselor and teachers of the injury.
   d) Immediately notify the student’s P.E. teacher that the athlete is restricted from all physical activity until cleared by his or her treating physician.
   e) Monitor the athlete regularly throughout each school day.

2) If the student’s symptoms are expected to last 45 days or longer and there is a need for ongoing support, notify your Oregon Regional TBI Liaison.

**Responsibilities of the Student’s Counselor or Designee**

1) Monitor the student closely and recommend appropriate academic accommodations.

2) Communicate regularly with school nurse or Concussion Management Team leader 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 to progress to activity:
   a) Asymptomatic at rest and with exertion (including mental exertion in school) AND
   b) Have written clearance from a physician (MD), physician’s assistant (PA), or doctor of osteopathic medicine (DO) licensed by the Oregon State Board of Medicine or nurse practitioner licensed by the Oregon State Board of Nursing in accordance with OAR 581-022-0421.
2) Once the above criteria are met, the athlete will progress back to full activity following the step-wise process detailed below as supervised by the athletic trainer or other healthcare professional.

3) Progression is individualized and will be determined on a case by case basis. Factors that may affect the rate of progression include:
   a) previous history of concussion
   b) duration and type of symptoms
   c) age of the athlete
   d) sport/activity in which the athlete participates.

The athlete should spend 1–2 days at each step before advancing to the next. If post-concussion symptoms occur at any step, the athlete must stop activity, and the treating healthcare professional must be contacted. The athlete will probably be told to rest for 24 hours and resume activity at a level one step below where s/he was when the symptoms occurred, but other action might be needed depending upon the specific type and severity of the symptoms. 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 will probably be progressed at a slower rate.

<table>
<thead>
<tr>
<th>Step 1. Complete Cognitive Rest</th>
<th>• This might include staying home from school or limiting school hours (and studying) for several days. Activities requiring concentration and attention can worsen symptoms and delay recovery.</th>
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<td>Step 2. Return to School Full Time</td>
<td>• Learning accommodations might be required.</td>
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<td>Step 3. Light Exercise</td>
<td>• 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.</td>
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<td>Step 4. Running in the gym or on the field</td>
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<td>• Must be cleared by MD before returning to play.</td>
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<td>Step 7. Play in game.</td>
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</table>
Assemble a Concussion Management Team

A Concussion Management Team (CMT) can create and implement a concussion management plan to support an athlete with a concussion. Each organization will have different needs and different resources. A CMT of about 4-5 members usually works best. Here are some suggestions for CMT membership.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Administrator</td>
<td>Administrative support is needed to change the culture around sports concussion, put systems in place to manage concussions effectively, and provide the programs necessary to return students to full activity safely.</td>
</tr>
<tr>
<td>Athletic Director (AD)</td>
<td>The Athletic Director’s leadership is a crucial component of good concussion management. An AD can support coach, athlete, and parent training, promote a culture of awareness, ensure the teaching of safe techniques, ensure proper and well maintained equipment, monitor appropriate incident protocols, promote good officiating, and encourage effective tracking of injuries.</td>
</tr>
<tr>
<td>Certified Athletic Trainer (ATC)</td>
<td>Certified athletic trainers (ATCs) are medical experts in preventing, recognizing, managing, and rehabilitating injuries that result from physical activity. An ATC works under the direction of a licensed physician and in cooperation with other healthcare professionals, athletic administrators, coaches, and parents.</td>
</tr>
<tr>
<td>Coach</td>
<td>Coaches play a key role in concussion management. They are responsible for pulling an athlete from competition or practice immediately after a concussion. Securing buy-in from the coaching staff is crucial to the success of the return-to-play protocol. Having a coach serve as the liaison between the CMT and the other coaching staff can help ensure that everyone is on board.</td>
</tr>
<tr>
<td>School Counselor</td>
<td>The school counselor is an ideal point-person to inform teachers of needed learning accommodations while a student is symptomatic. S/he can provide information about return to activity or refer a student to more formalized supports, such as a 504 plan or IEP.</td>
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<td>School Psychologist or Neuropsychologist</td>
<td>Some schools are fortunate enough to have psychologists on staff. School psychologists can help with assessment and test results interpretation. Neuropsychologists have training to interpret more in-depth neurocognitive test results. If you do not have such experts on your staff, consider inviting a community resource to your team.</td>
</tr>
<tr>
<td>School Nurse</td>
<td>A school nurse can work in conjunction with an athletic trainer, school faculty, counselors, administrators, and the student-athlete’s physician and family to provide the best possible healing environment. In the case of a concussion, school nurses need to be able to recognize signs and symptoms, be aware of risks associated with recurrent injury, and make recommendations to student-athletes, parents, and school officials on proper care and recovery.</td>
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Teachers are critical to student success post-concussion. Teachers need to have a strong understanding of the potential cognitive, behavioral, emotional, and physical symptoms of a concussion. A CMT representative from the teaching staff can work with affected students’ teachers to ensure appropriate classroom accommodations.

**Teacher**

Consider inviting a parent leader to your team who could be influential with your booster club or athlete parent group.

**Parent/Guardian**

Empowering student-athletes to self-assess symptoms and report them can be a challenge. Consider inviting an influential student-athlete to your team. Help create an atmosphere of acceptance for concussion and encourage athletes to report their own or a fellow athlete’s symptoms.

**Student-Athlete**

In many schools, the team medical provider is a volunteer from the community who offers services to the school at minimal or no charge. It’s important that the provider your school works with is appropriately trained in current knowledge about concussion and the recommended assessment tools. A team’s medical provider might be given the final say for return to play.

**Team Medical Provider**

An effective concussion management plan results from a community-wide effort. It is important that schools, sports organizations, and hospital emergency departments build relationships that allow them to share important information about concussions. Local hospitals might be able to help schools with funding for computerized neurocognitive baseline assessment programs, such as ImPACT.

**Hospital Healthcare Professionals**

Pediatricians, family practitioners, and other community healthcare providers need to be included in the conversation about community-wide concussion management. A representative from the local medical community can provide guidance to the CMT on how best to improve knowledge about sports-related concussion among community health care providers.

**Community Healthcare Professionals**
Create a Concussion Management Plan

Youth athletes dealing with the effects of a concussion are best served with a coordinated effort that includes the athlete, parents/guardians, coach/referee, healthcare professional(s), and other appropriate stakeholders. An effective protocol and good communication are two key components to ensure that each athlete in your organization receives optimal support during recovery from a concussion.

Best practice recommends that all youth sports organizations build a protocol and assemble a concussion management team in advance to effectively deal with concussion when it happens. The best protocols are built with all appropriate stakeholders at the table. A protocol can be extensive or simple, but all protocols need to create clear procedures and appoint specific individuals to carry out the protocol plan from the moment a suspected concussion occurs to the day the athlete is safely returned to activity.

Your protocol should ensure the following:

1. Designated individuals mobilize the plan immediately when concussion is suspected; establish and maintain channels of communication with appropriate stakeholders; and see the plan through until the athlete is safely returned to activity.

2. Appropriate emergency healthcare professionals are designated and available.

3. Parents/guardians are notified and given information at the time of suspected concussion and throughout the return-to-academics and return-to-play processes.

4. Healthcare professionals, parents, coaches, referees, and other stakeholders work together on a return-to-activity plan that includes symptom monitoring and lines of clear, ongoing communication.
Return-to-Play Protocol After Concussion/mild TBI

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

- Asymptomatic at rest and with exertion (including mental exertion in school).
- Written clearance from a licensed healthcare provider.

Once the above criteria are met, the athlete may progress back to full activity following the stepwise process detailed below with careful supervision from a Certified Athletic Trainer or the athlete’s physician.

Progression must be determined on a case-by-case basis. Factors that can 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 should be progressed more slowly. If post-concussion symptoms occur at any step, the athlete must stop the activity, and the treating physician must be contacted.

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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. The athlete will probably be told to rest for 24 hours and then resume activity at a level one step below where he or she was when the symptoms occurred, though longer rest or further treatment might be required depending on the specific type and severity of the symptoms.
Return to Academics Protocol After Concussion/mild TBI

When a concussion occurs, a child looks normal, and teachers might be unaware of a student’s cognitive difficulties during recovery. Rest is needed for the brain to recover from a concussion. Taxing the brain with academic activity can impede or prolong recovery. Most students will recover fully in days or weeks, but some will take longer to heal. Each child and each brain injury is different. If full recovery is not evident in three months, an IEP may be helpful to meet the specific learning challenges.

Not all students will need academic accommodations following concussion; consult with each student’s healthcare provider. All steps in this academics protocol must be completed before a student-athlete is ready to proceed to a return-to-play protocol.

| Step 1. Total rest. | • No mental exertion (computer, texting, video games, or homework), stay at home, no driving. |
| Step 2. Light mental activity. | • Up to 30 minutes of mental exertion, but no prolonged concentration, stay at home, no driving.  
• Progress to next level when able to handle up to 30 minutes of mental exertion without worsening of symptoms. |
| Step 3. Part-time School. | • Maximum accommodations (shortened day/schedule, built-in breaks, provide quiet place for mental rest, no significant classroom or standardized testing, modify rather than postpone academics, provide extra time, extra help, and modified assignments).  
• Progress to next level when able to handle 30–40 minutes of mental exertion without worsening of symptoms. |
| Step 4. Part-time School. | • Moderate accommodations (no standardized testing, modified classroom testing, moderate decrease of extra time, help, and modification of assignments).  
• Progress to next level when able to handle 60 minutes of mental exertion without worsening of symptoms. |
| Step 5. Full-time School. | • Minimal accommodations (no standardized testing, but routine testing ok; continued decrease of extra time, help, and modification of assignments; may require more supports in academically challenging subjects).  
• Progress to next level when able to handle all class periods in succession without worsening of symptoms AND medical clearance for full return to academics. |
| Step 6. Full-time School. | • Full academics with no accommodations (attends all classes, full homework). |

Should symptoms continue beyond 3–4 weeks, prolonged in-school support is required. Request a 504 meeting to plan and coordinate. If you have questions, contact Oregon’s TBI coordinator at 1-877-872-7246.

**REMEMBER**

Progression is individual. Every concussion is different. Student may start at any step as symptoms dictate and remain at each step as long as needed. Return to previous step if symptoms worsen. No return-to-play protocol should be implemented until after the student has returned to full academics.
Post-Concussion Academic Accommodation Protocol

Most students who sustain a concussion return to pre-injury functioning within 3–4 weeks of their injury. However, symptoms will linger beyond this time in approximately 10–20% of concussions. When this happens, the school team must continue academic adjustments and physical restrictions for a longer time. Symptoms might continue for weeks or even months. It is best practice for a school district to have a system in place by which a student can be evaluated for additional services (e.g., Section 504 plan, special education).

A school-wide academic accommodation protocol for students with concussions or brain injuries can be effectively implemented in most schools using the following progression.

1. **Tier 1**: The majority of students with a concussion will respond positively to a well-orchestrated system of cognitive reduction, physical rest, simple classroom adjustments to the existing classroom curriculum, and slight environmental changes to support physical and cognitive rest. At Tier 1, the Concussion Management Team (CMT) can collect data on symptoms to monitor progress and make modifications as needed.

2. **Tier 2**: The 10–20% of students who experience symptoms beyond the typical 3–4 week recovery period can be systematically moved on to Tier 2 for Targeted Intervention. At Tier 2, a more formalized academic plan might be required for the student (Health Plan, RTI Plan, or Section 504 Plan). The objective of Tier 2 is to expand and strengthen academic accommodations to effect greater recovery from the concussion.

3. **Tier 3**: The 1–5% of students who do not adequately respond to concussion management efforts at Tiers 1 and 2 experience severe, long-term neurocognitive and physical effects for weeks or months. Students who do not benefit from management attempts at Tiers 1 or 2 would be advanced to the most intensive level of assessment and intervention provided at Tier 3. At this level, modification of curriculum and protection under IDEA, including an IEP, may be necessary.