

Risk Management Guidelines

Number: 10 – 01 Date Issued: July 17, 2017 Expires: Until Superceded

Subject:

CONCUSSION MANAGEMENT FOR SCHOOL SPORTS

Introduction

A concussion is a type of traumatic brain injury that interferes with normal function of the brain. It occurs when the brain is rocked back and forth or twisted inside the skull as a result of a blow to the head or body. What may appear to be only a mild jolt or blow to the head or body can result in a concussion.

Once considered little more than a "ding" on the head, it is now understood that a concussion has the potential to result in short or long-term changes in brain function, or in some cases, death. Even though most concussions are mild, all concussions are potentially serious and may result in complications including prolonged brain damage and death if not recognized and managed properly.

What is a concussion?

You've probably heard the terms "ding" and "bell-ringer." These terms were once used to refer to minor head injuries and thought to be a normal part of sports. There is no such thing as a minor brain injury. Any suspected concussion must be taken seriously. A concussion is caused by a bump, blow, or jolt to the head or another part of the body with the force transmitted to the head. Basically, any force that is transmitted to the head causes the brain to literally bounce around or twist within the skull, potentially resulting in a concussion.

It used to be believed that a player had to lose consciousness or be "knocked-out" to have a concussion. This is not true, as the vast majority of concussions do not involve a loss of consciousness. In fact, less than 10% of players actually lose consciousness with a concussion.

The sudden movement of the brain causes stretching and tearing of brain cells, damaging the cells and creating chemical changes in the brain. Once this injury occurs, the brain is vulnerable to further injury and very sensitive to any increased stress until it fully recovers. A concussion is primarily an injury that interferes with how the brain works. While there is damage to brain cells, the damage is at a microscopic level and cannot be seen on MRI or CT scans. Therefore, the brain looks normal on these tests, even though it has been seriously injured.

Recognition and Management

If a student-athlete exhibits any signs, symptoms, or behaviors that make you suspicious that he or she may have had a concussion, that athlete must be removed from play immediately and all physical activity, including sports and recreation. Continuing to participate in physical activity after a concussion can lead to worsening concussion symptoms, increased risk for further injury, and even death. There is an increased risk of significant damage from a concussion for a period

of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to not only prolonged recovery, but also severe brain swelling known as second impact syndrome.

| SYMPTOMS REPORTED BY ATHLETE |
|-------------------------------------|
| Headaches |
| "Pressure in head" |
| Nausea or vomiting |
| Balance problems or dizziness |
| Double, blurred or fuzzy vision |
| Sensitivity to light and/or noise |
| Feeling Sluggish or slowed down |
| Feeling foggy or groggy |
| Confusion |
| Drowsiness |
| Amnesia |
| "Don't feel right" |
| Fatigue or low energy |
| Sadness |
| Nervousness or anxiety |
| Irritability |
| More emotional |
| Concentration or memory problems |
| Repeating the same question/comment |

Parents and coaches are not expected to be able to "diagnose" a concussion. That is the role of an appropriate health-care professional. However, you must be aware of the signs, symptoms and behaviors of a possible concussion, and if you suspect that an student-athlete may have a concussion, then he or she must be immediately removed from practice or game competition at that time for the remainder of the day, and all physical activity.

| SIGNS OBSERVED BY PARENTS, FRIENDS, TEACHERS OR COACHES |
|--|
| Appears dazed or stunned |
| Vacant facial expression |
| Is confused about what to do |
| Forgets plays |
| Is unsure of game, score, or opponent |
| Moves clumsily or uncoordinated |
| Answers questions slowly |
| Slurred speech |
| Loses consciousness |
| Shows behavior or personality changes |
| Can't recall events prior to hit |

Can't recall events after hit
Seizures or convulsions
Any change in typical behavior or
personality
Loses consciousness

When in doubt, sit them out!

When you suspect that a player has a concussion, follow the "Heads Up" 4-step Action Plan:

- 1. Immediately remove the student-athlete from all practice, game competition, and physical activity.
- 2. Ensure that the student-athlete is evaluated by an appropriate licensed health-care professional which is limited to a medical doctor (MD) or doctor of osteopathy (DO).
- 3. Inform the student-athlete's parents or guardians about the possible concussion and give them the Concussion Information Sheet.
- 4. Keep the student-athlete out of play the day of the injury and until an appropriate health-care professional trained in the evaluation and management of brain injuries provides a written clearance. The Acute Concussion Evaluation (ACE) Care Plan should be provided for the health-care professional to complete.

The signs, symptoms, and behaviors of a concussion are not always apparent immediately after a bump, blow, or jolt to the head or body and may develop over a few hours. An athlete should be observed following a suspected concussion and should never be left alone.

Student-Athletes must know that they should never try to "tough out" a suspected concussion. Teammates, parents and coaches should never encourage a student-athlete to "play through" the symptoms of a concussion. In addition, there should never be an attribution of bravery to student-athletes who do play despite having concussion signs or symptoms. The risks of such behavior must be emphasized to all members of the team, as well as coaches and parents.

If an athlete returns to activity before being fully healed from an initial concussion, the athlete is at risk for a repeat concussion. A repeat concussion that occurs before the brain has a chance to recover from the first can slow recovery or increase the chance for long-term problems. In rare cases, a repeat concussion can result in severe swelling and bleeding in the brain that can be fatal.

Cognitive Rest

A concussion can interfere with school, work, sleep and social interactions. Many student-athletes who have a concussion will have difficulty in school with short- and long-term memory, concentration and organization. These problems typically last no longer than a week or two, but for some these difficulties may last for months. It is best to lessen the student's class load early

on after the injury. Most student-athletes with concussion recover fully. However, returning to sports and other regular activities too quickly can prolong the recovery.

The first step in recovering from a concussion is rest. Rest is essential to help the brain heal. Student-Athletes with a concussion need rest from physical and mental activities that require concentration and attention as these activities may worsen symptoms and delay recovery. Exposure to loud noises, bright lights, computers, video games, television and phones (including texting) all may worsen the symptoms of concussion. As the symptoms lessen, increased use of computers, phone, video games, etc., may be allowed.

Return to Play

After suffering a concussion, **no athlete should return to play or practice on that same day**. Previously, student-athletes were allowed to return to play if their symptoms resolved within 15 minutes of the injury. Newer studies have shown us that the young brain does not recover quickly enough for a student-athlete to return to activity in such a short time.

An athlete should never be allowed to resume physical activity following a concussion until he or she is symptom free and given the approval to resume physical activity by an appropriate health-care professional.

Once an athlete no longer has signs, symptoms, or behaviors of a concussion **and is cleared to return to activity by a health-care professional**, he or she should proceed in a step-wise fashion to allow the brain to re-adjust to exercise. In most cases, the athlete will progress one step each day. The return to activity program schedule **may** proceed as below **following medical clearance**:

Progressive Physical Activity Program

- **Step 1:** Light aerobic exercise- 5 to 10 minutes on an exercise bike or light jog; no weight lifting, resistance training, or any other exercises.
- *Step 2*: Moderate aerobic exercise- 15 to 20 minutes of running at moderate intensity in the gym or on the field without a helmet or other equipment.
- **Step 3:** Non-contact training drills in full uniform. May begin weight lifting, resistance training, and other exercises.
- Step 4: Full contact practice or training.
- *Step 5*: Full game play.

If symptoms of a concussion re-occur, or if concussion signs and/or behaviors are observed at any time during the return to activity program, the athlete must discontinue all activity and be re-evaluated by their health care provider.

Concussion Management in the Classroom

Following a concussion, many athletes will have difficulty in school. These problems may last from days to months and often involve difficulties with short- and long-term memory, concentration, and organization. In many cases, it is best to lessen the student-athlete's class load early on after the injury. This may include staying home from school for a few days, followed by a lightened schedule for a few days, or longer, if necessary. Decreasing the stress on the brain early on after a concussion may lessen symptoms and shorten the recovery time.

What To Do In An Emergency

Although rare, there are some situations where you will need to call 911 and activate the Emergency Medical System (EMS). The following circumstances are medical emergencies:

- 1. Any time a student-athlete has a loss of consciousness of any duration. While loss of consciousness is not required for a concussion to occur, it may indicate more serious brain injury.
- 2. If a student-athlete exhibits any of the following: decreasing level of consciousness, looks very drowsy or cannot be awakened, if there is difficulty getting his or her attention, irregularity in breathing, severe or worsening headaches, persistent vomiting, or any seizures.

Suggested Concussion Management

- 1. No student-athlete should return to play (RTP) or practice on the same day of a concussion.
- 2. Any student- athlete suspected of having a concussion should be evaluated by an appropriate health-care professional that day.
- 3. Any student-athlete with a concussion should be medically cleared by an appropriate health-care professional prior to resuming participation in any practice or competition.
- 4. After medical clearance, RTP should follow a step-wise protocol with provisions for delayed RTP based upon return of any signs or symptoms.

Concussion and Head Injury information Sheet

Assembly Bill 25 added to the California Education Code a mandate that schools must now follow. On a yearly basis, a concussion and head injury information sheet shall be signed and returned by the student-athlete and the student-athlete's parent or guardian before the student-athlete's initiating try-outs, practice or competition. See attached Concussion Fact Sheet for Parents, Concussion Fact Sheet for Athlete and the Athletic Event and Activity Medical Release, Concussion Consent, Assumption of Risk and Liability Waiver Form. This shall be for all sports activities including non-contact sports such as, but not limited to cheerleading, track and field, soccer, basketball, ice-hockey, lacrosse, and cross country.

Signed Waivers and Releases

On May 7, 2010, the State CIF Federated Council passed Bylaw 313 that now requires a signed medical release before a student-athlete who is suspected to have sustained a concussion can return to play. Parents of athletes must provide evidence of medical insurance. The Athletic Event and Activity Medical Release, Concussion, Consent, Assumption of Risk and Liability Waiver Form must be signed and returned **before** the student/athlete is allowed to access the event premises, including any tryouts, official or unofficial practices, or training. Proof of medical insurance for student-athlete is required.

The school district shall identify the person/s responsible for ensuring that all necessary waivers and forms are returned and verified prior to student-athlete's participation in the school sport program. The coaches shall be provided a written roster of all approved student-athletes. Any student-athlete who turns out for a sports practice/event and is not on the approved student-athlete roster should immediately be referred to the program administrator to complete the required paperwork. All records should be maintained for a minimum of seven (7) years.

Should a suspected concussion occur, the Acute Concussion Evaluation (AEC form-see attached) must be completed by an appropriate medical professional prior to resuming the sports activity.

Medical Insurance Requirements

All student-athletes must have medical/health insurance. Private insurance and Medi-Cal are acceptable. The California Education Code requires public schools to make available for each member of an athletic team insurance protection for medical and hospital expenses resulting from accident bodily injuries. This coverage may be available at an additional cost through a third party provider. It is the responsibility of the parent to notify the school in the event insurance coverage changes or no longer applies to the student-athlete.

Training

Schools shall ensure that all coaches (paid or volunteer) are educated in the nature and risk of concussion or head injury prior to the first practice/competition. This education shall include signs and symptoms of concussion/brain injury. A free 20-minute on-line course is available at www.preventingconcussions.org as well as numerous free educational resources, prevention tips, and assessments & tools. Additional websites with additional free resources are www.cifstate.org (click on health and safety tab) and www.cdc.gov/concussion.