

UHSAA Sports Concussion Management Policy

(Updated and Revised 8/17/2011)

1. Overview

- 1.1. In response to the growing concern over concussion in athletics there is a need for High Schools to develop and utilize a “Concussion Management Policy”. While regional limitations in availability of specifically trained school and medical personnel are acknowledged, the following document serves as a standard for concussion management.
- 1.2. The following components will be outlined as part of a comprehensive concussion management policy:
 - 1.2.1. Concussion Overview (section 2)
 - 1.2.2. Concussion Education for Student-Athletes and Parent(s)/Guardian(s)(section 3)
 - 1.2.3. Concussion Education for Coaches (section 4)
 - 1.2.4. Pre-season concussion assessment (section 5)
 - 1.2.5. Concussion action plan (section 6)
 - 1.2.6. Appendix A: Statement Acknowledging Receipt of Concussion Education
 - 1.2.7. Appendix B: Post Concussion Instructions
 - 1.2.8. Appendix C: Return to School Recommendations
 - 1.2.9. Appendix D: Return to Play Protocol
 - 1.2.10. Appendix F: Memo- Implementation of NFHS Playing Rules Changes Related to Concussion and Concussed Athletes

2. What is a Concussion

- 2.1. Concussion, or mild traumatic brain injury (mTBI), has been defined as “a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces.” Although concussion most commonly occurs after a direct blow to the head, it can occur after a blow elsewhere that is transmitted to the head.
- 2.2. Signs and symptoms of concussions include but are not limited to:

Note: A student/athlete may experience any of the following signs and symptoms

Confusion	Disequilibrium
Post-traumatic Amnesia (PTA)	Feeling ‘in a fog’, ‘zoned out’
Retrograde Amnesia (RGA)	Vacant stare, ‘glassy eyed’
Disorientation	Emotional lability
Delayed verbal and motor responses	Dizziness
Inability to focus	Slurred/incoherent speech
Headache	Excessive Drowsiness
Nausea/Vomiting	Loss of consciousness (LOC)
Visual Disturbances, including light sensitivity, blurry vision, or double vision	

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3. Concussion Education for Student Athletes and Parent(s)/Guardian(s)

- 3.1. At the beginning of individual sport seasons, student-athletes shall be presented with a discussion about concussions and given a copy of the CDC's "Heads Up: Concussion in High School Sports – A fact sheet for Athletes"
 - 3.1.1. If the school has medical coverage in place for their athletes (i.e. physician or licensed athletic trainer), this person shall provide the discussion and educational handout
 - 3.1.2. If no such coverage exists, the coach or other designated school personnel shall be responsible for providing the fact sheets to the student athletes.
- 3.2. At the beginning of individual sport seasons, parent/guardian(s) shall be presented with a copy of the CDC's "Heads Up: Concussion in High School Sports – A Fact sheet for parents"
- 3.3. These materials are available free of charge from the CDC. To order or download go to the CDC concussion web-page or use the following link: <http://www.cdc.gov/concussion>
- 3.4. All student-athletes and their parents/guardians will sign a statement in which the student-athlete accepts the responsibility for reporting their injuries and illnesses to the coaching/athletic training staff, parents, or other health care personnel including signs and symptoms of concussion. This statement will also acknowledge having received the above mentioned educational handouts. **See Appendix A**
- 3.5. All student-athletes shall be **required** to participate in the above education prior to their participation in any sport governed by the UHSAA.
 - 3.5.1. Club sports sponsored by high schools do not fall under the jurisdiction of the UHSAA. UHSAA member high schools are nonetheless encouraged to adopt similar policies to properly manage concussion in the club sports they support.

4. Concussion Education for Coaches

- 4.1. It is required that each year coaches, staff and athletic trainers shall review the UHSAA Concussion management policy, and a copy of the CDC's "Heads Up: Concussion in High School Sports – A Guide for Coaches"
<http://www.cdc.gov/concussion>
- 4.2. All coaches, coaching staff, athletic trainers and administrative personnel shall complete a course dealing with concussion, its signs, symptoms and management. This course shall be completed prior to working with student-athletes. The CDC, in partnership with the National Federation of State High School Associations, has developed a free web based course, "Concussion in Sports: What you need to know", to be used for this purpose.
 - 4.2.1. As determined by the UHSAA, repetition of the course may be required in subsequent years.
 - 4.2.2. The "Concussion in Sports: What You Need to Know" on-line course is available free of charge after registering at <http://www.nfhslearn.com>

5. Pre-season concussion assessment

- 5.1. Optimally a concussion history should be included as part of all of a student/athlete's pre-participation physical health examinations with their health care professional.
- 5.2. It is recommended that every two years, student-athletes complete a baseline assessment prior to the beginning of the school year or their individual sports seasons as appropriate. Baseline assessments may consist of any or all of the following:
 - 5.2.1. Standardized Symptom Checklist
 - 5.2.2. Neuropsychological Testing. Generally, pre-season neuropsychological testing is accomplished through a computerized system. While several computer based programs are available, one program widely used within the State of Utah is, ImPACT (ImPACT Inc.). When used, it is to be completed through a consultant trained in concussion assessment, management and test administration.
 - 5.2.2.1. Neuropsychological testing programs are designed to measure specific brain functions that may be altered after a concussion. The program is designed in such a way as to allow athletes to be tested pre-season so that post injury performance may be compared to the athlete's own baseline.

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5.2.2.2. Neuropsychological testing may be administered by a licensed athletic trainer or other designated school personnel trained in test administration in a controlled computer lab environment.

5.2.2.2.1.1. Neuropsychological testing baseline data shall be reviewed by an individual certified in administration and interpretation of such results, or under the supervision of or in consultation with a qualified neuropsychologist.

5.2.3. Standardized Balance Assessment with the Balance Error Scoring Scale (BESS)

5.2.3.1. BESS is an easily performed measure of balance that has been validated as an effective means to grade postural stability and is a useful part of objective concussion assessment.

5.2.3.2. BESS may be administered during the pre-season by a licensed athletic trainer or other qualified health care professional.

6. Concussion Action Plan

6.1. When a student-athlete shows any signs, symptoms or behaviors consistent with a concussion, the athlete shall be removed immediately from practice or competition and evaluated by a qualified health care professional with specific training in the evaluation and management of concussion. The decision regarding removal from practice or competition may be made by school designated medical personnel or a designated school representative.

6.1.1. School personnel, including coaches are encouraged to utilize a pocket guide on the field to assist them in recognizing a possible concussion. An example pocket guide is available as part of the CDC toolkit "Heads Up: Concussion in High School Sports" available at <http://www.cdc.gov/concussion>

6.2. Where possible, the athlete shall be evaluated on the sideline by a licensed athletic trainer or other appropriate health care professional. Ideally, the sideline evaluation will be completed using the Sports Concussion Assessment Tool ver. 2 (SCAT 2).

6.2.1. The SCAT 2 is comprised of a symptom checklist, standard and sport specific orientation questions, the Standardized Assessment of Concussion (SAC), and an abbreviated form of the Balance Error Scoring Scale (BESS)

6.3. A student-athlete diagnosed with a concussion shall be withheld from the competition or practice and shall not return to activity for the remainder of that day. The student-athlete's parent/guardian(s) shall be notified of the situation.

6.4. The student-athlete should receive serial monitoring for deterioration. Student-athletes and their parent/guardian shall be provided with written instructions upon dismissal from practice/game. **See Appendix B or page 1 of the "Post Concussion Instructions and Return to Play Clearance Form"** <http://www.uhsaa.org/new/images/forms/ConcussionReleaseForm.pdf> for a copy of discharge instructions.

6.5. In accordance with district/school emergency action plans, immediate referral to Emergency Medical Services should be provided for any of the following "Red Flag Signs or Symptoms".

6.5.1. Prolonged Loss of Consciousness

6.5.2. Seizure like activity

6.5.3. Slurring of speech

6.5.4. Paralysis of limb(s)

6.5.5. Unequal pupils or dilated and non-reactive pupils

6.5.6. At any point where the severity of the injury exceeds the comfort level of the on-site medical personnel

6.6. Consultation with a **qualified** health care professional shall occur for all student-athletes sustaining a suspected concussion. Health care professionals with limited experience or training in recognition and treatment of concussion are encouraged to seek consultation with professionals who have expertise in understanding, recognizing and treating concussion and related symptoms. This consultation may occur by telephone between the local health care professional and concussion expert.

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- 6.7. For the purposes of this document, a **qualified** health care professional is defined as one who is trained in management of concussion and who:
 - 6.7.1. is licensed under Utah Code, Title 58, Division of Occupational and Professional Licensing Act; and
 - 6.7.2. may evaluate and manage a concussion within the health care provider's scope of practice; and
 - 6.7.3. has, within three years, successfully completed a continuing education course in the evaluation and management of concussion.
- 6.8. Subsequent management of the student-athlete's concussion shall be under the discretion of the treating health care professional, but may include the following:
 - 6.8.1. Referral to a Concussion Care Clinic
 - 6.8.2. When possible, repeat neuropsychological testing.
 - 6.8.3. Clinical assessment of balance and symptoms, with comparison to baseline data when available.
 - 6.8.4. Medication management of symptoms, where appropriate
 - 6.8.5. Provision of recommendations for adjustment of academic coursework, including the possible need to be withheld from coursework obligations while still symptomatic. **See Appendix C for a list of possible accommodations required.**
 - 6.8.6. Direction of return to play protocol, to be coordinated with the assistance of a licensed athletic trainer or designated school personnel (**see Appendix D for return to play protocol**)
 - 6.8.7. Final authority for Return-to-Play shall reside with the local health care professional (see 6.7), their designee or by a recognized concussion management program. Prior to returning to competition, the concussed student athlete shall have a "UHSAA Concussion Return to Play Clearance Form" signed by their managing health care professional.
- 6.9. The incident, evaluation, continued management, and clearance of the student-athlete with a concussion shall be documented.

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APPENDIX A: Statement Acknowledging Receipt of Education and Responsibility to report signs or symptoms of concussion to be included as part of the "Participant and Parental Disclosure and Consent Document".

I, _____, of _____ High School
Student/Athlete Name *School*

hereby acknowledge having received education about the signs, symptoms, and risks of sport related concussion. I also acknowledge my responsibility to report to my coaches, parent(s)/guardian(s) any signs or symptoms of a concussion.

signature and printed name of student/athlete

Date

I, the parent/guardian of the student athlete named above, hereby acknowledge having received education about the signs, symptoms, and risks of sport related concussion.

signature and printed name of parent/guardian

Date

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APPENDIX B: Immediate Post Concussion Instructions

The following instructions are to be given to each athlete and their parent/guardian after sustaining a concussion, as identified in section 6.4 of the UHSAA Concussion Management Policy, These instructions are included with the "Return to Play Clearance Form" <http://www.uhsaa.org/new/images/forms/ConcussionReleaseForm.pdf>

Head Injury Precautions

During the first 24 hours:

1. Diet – drink only clear liquids for the first 8-12 hours and eat reduced amounts of foods thereafter for the remainder of the first 24 hours.
2. Pain Medication – do not take any pain medication except Tylenol. Dosing instructions provided with pain medications should be followed.
3. Activity – activity should be limited for the first 24 hours, this would involve no school, video games, extracurricular or physical activities or work when applicable.
4. Observation – several times during the first 24 hours:
 - a. Check to see that the pupils are equal. Both pupils may be large or small, but the right should be the same size as the left.
 - b. Check the athlete to be sure that he/she is easily aroused; that is, responds to shaking or being spoken to, and when awakened, reacts normally.
 - c. Check for and be aware of any significant changes. (See #5 below)
5. Significant changes
Conditions may change significantly within the next 24 hours. Immediately obtain emergency care for any of the following signs or symptoms:
 - a. Persistent or projectile vomiting
 - b. Unequal pupil size (see 4a above)
 - c. Difficulty in being aroused
 - d. Clear or bloody drainage from the ear or nose
 - e. Continuing or worsening headache
 - f. Seizures
 - g. Slurred speech
 - h. Can't recognize people or places – increasing confusion
 - i. Weakness or numbness in the arms or legs
 - j. Unusual behavior change – increasing irritability
 - k. Loss of consciousness
6. Improvement
The best indication that an athlete who has suffered a significant head injury is progressing satisfactorily, is that he/she is alert and behaving normally.

Licensed Athletic Trainer/School Designee Phone # _____

Local ER Phone # _____

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APPENDIX C: Return to School Recommendations

In the early stages of recovery after a concussion, increased cognitive demands, such as academic coursework, as well as physical demands may worsen symptoms and prolong recovery. Accordingly, a comprehensive concussion management plan will provide appropriate provisions for adjustment of academic coursework on a case by case basis.

The following provides a framework of possible recommendations that may be made by the managing health care professional:

Inform teacher(s) and administrator(s) about your injury and symptoms. School personnel should be instructed to watch for:

- Increased problems with paying attention, concentrating, remembering, or learning new information
- Longer time needed to complete tasks or assignments
- Greater irritability, less able to cope with stress
- Symptoms worsen (e.g., headache, tiredness) when doing schoolwork

Injured Student _____ Date _____

Until fully recovered, the following supports are recommended: (check all that apply)

May return immediately to school full time.

Not to return to school. May return on (date) _____

Return to school with supports as checked below. Review on (date) _____

Shortened day. Recommend hours per day until (date) _____

Shortened classes (i.e., rest breaks during classes). Maximum class length: minutes.

Allow extra time to complete coursework/assignments and tests.

Reduce homework load by %.

Maximum length of nightly homework: minutes.

No significant classroom or standardized testing at this time.

No more than one test per day.

Take rest breaks during the day as needed.

Other: List: _____

Managing Health Care Professional

Please write legibly

Name _____ Office Phone _____

E-mail _____ Alt. Phone _____

Health Care Professional Signature _____ Date _____

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APPENDIX D: Return to Play Protocol, to be included in “Return to Play Clearance Form”.

- Recovery from concussion and progression through the Return-to-Play stages is individualized and determined on a case by case basis. Many factors influence the rate of progression and include previous concussion history, duration and types of symptoms, age and sport/activity that the athlete participates in. Athletes with history of prior concussion, extended duration of symptoms, or participation in collision or contact sports may progress more slowly.
- The following table is adapted from the 3rd International Conference on Concussion in Sport and provides the framework for the return to play protocol.
- It is expected that student-athletes will start in stage 1 and remain in stage 1 until symptom free.
- The patient may, under the direction of the health care professional, and the guidance of the licensed athletic trainer or recognized concussion management program, progress to the next stage only when assessment battery has normalized, including symptom assessment, cognitive assessment with computerized or other appropriate neuropsychological assessment, and/or balance assessment with the BESS.
- It is anticipated that at least 24 hours will be required, at a minimum, of being asymptomatic with each stage before progressing to the next stage.
- Utilizing this framework, in a **best case scenario**, a patient sustaining a concussion and being asymptomatic by the next day will start in Rehabilitation Stage 1 at post injury day 1 and progress through to stage 6, ‘Return to Play’ by post injury day 6.
- There may be circumstances, based on an individual’s concussion severity, where the return to play protocol may take longer. Under all circumstances the progression through this protocol shall be overseen by the managing health care professional, licensed athletic trainer or recognized concussion management program.
- Each student-athlete with a concussion shall be personally evaluated by a health care professional at least one time during this process.
- When the athlete has successfully passed through stage 5 (Full Contact Practice) and has previously been evaluated by a health care professional or recognized concussion management program, a verbal clearance may be obtained by the licensed athletic trainer or designated school personnel. Otherwise, a visit with a health care professional is required before such clearance to return to play will be granted.
- A completed “Return to Play Clearance Form” indicating the student is medically released to return to full competition shall be provided to school officials prior to a student’s being allowed to resume competition after suffering a concussion.

GRADUATED RETURN TO PLAY PROTOCOL¹		
Stage	Functional Exercise or Activity	Objective
1. No structured physical or cognitive activity.	Only Basic Activities of Daily Living (ADLs). When indicated, complete cognitive rest followed by gradual reintroduction of schoolwork.	Rest and recovery, avoidance of overexertion
2. Light Aerobic Physical Activity.	Non-impact aerobic activity (e.g. swimming, stationary biking) at <70% estimated maximum heart rate for up to 30 minutes as symptoms allow.	Increase heart rate, maintain condition, assess tolerance of activity
3. Moderate aerobic physical activity and Non-contact training drills at half speed.	Non-contact sport specific drills at reduced speed; Aerobic activity at 70-85% estimated maximum heart rate; light resistance training (e.g. weights at <50% previous max ability)	Begin assimilation into team dynamics, introduce more motion and non-impact jarring
4. Non-contact training drills at full speed.	Regular Non-contact training drills; aerobic activity at maximum capacity including sprints; regular weight lifting routine.	Ensure tolerance of all regular activities short of physical contact.
5. Full Contact Practice.	Full Contact Practice.	Assess functional skills by coaching staff, ensure tolerance of contact activities
6. Return to Play.	Regular game competition.	

1. McCrory P, Meeuwisse W, Johnston K, et al. Consensus statement on Concussion in Sport 3rd International Conference on Concussion in Sport held in Zurich, November 2008. *Clin J Sport Med.* May 2009;19(3):185-200.

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APPENDIX E: Memo - Implementation of NFHS Playing Rules Related to Concussion and Concussed Athletes

In its various sports playing rules, the National Federation of State High School Associations (NFHS) has implemented a standard rule in all sports dealing with suspected concussions in student athletes. The basic rule in all sports (the rule may be worded slightly differently in each to reflect the language of the sport) states:

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. (Please see NFHS Suggested Guidelines for Management of Concussion in the Appendix of each NFHS Rules Book)

The responsibility for observing signs, symptoms, and behaviors that are consistent with a concussion rests with school personnel and sports officials. In conjunction with the *UHSAA Concussion Management Policy* <http://uhsaa.org/SportsMed/ConcussionManagementPlan.pdf> and the rule stated above the following guidelines are given:

Role of the contest official in administering the rule:

- Officials are to review and know the signs, symptoms and behaviors consistent with a concussion.
- Officials are to direct the removal an athlete who demonstrates signs, symptoms or behaviors consistent with concussion from the contest according the rules and protocol regarding injured contestants for the specific sport.
- Officials have no other role in the process. The official does not need to receive clearance for an athlete to re-enter the contest.

Role of school personnel in administering the rule:

- All coaches, athletic trainers, and administrative personnel are required to complete a course dealing with concussion prior to working with student/athletes. The NFHS course *Concussion in Sport* available free of charge at www.nfhslearn.com satisfies this requirement.
- All coaches and athletic trainers are required to annually review the *UHSAA Concussion Management Policy* <http://uhsaa.org/SportsMed/ConcussionManagementPlan.pdf> and the CDC publication *Heads Up: Concussion in High School Sports – A Guide for Coaches* available at http://www.cdc.gov/concussion/HeadsUp/high_school.html.
- A student athlete who has demonstrated signs, symptoms or behaviors consistent with concussion shall be removed immediately from the contest or practice and shall not return to play or practice until cleared by an appropriate health-care professional. The student/athlete and their parent/guardian shall be provided with the “*UHSAA Post Concussion Instructions and Return to Play Clearance Form*”.
<http://uhsaa.org/new/images/forms/ConcussionReleaseForm.pdf>

Appropriate health-care professional:

- An appropriate health-care professional is one who is trained in the management of concussion and who:
 - is licensed under Utah Code, Title 58, Division of Occupational and Professional Licensing Act; and
 - may evaluate and manage a concussion within the health care provider’s scope of practice; and
 - has, within three years, successfully completed a continuing education course in the evaluation and management of concussion.
- The UHSAA Sports Medicine Advisory Committee has developed a form for the school to receive written clearance from an appropriate health-care professional for return to play of a concussed student athlete. The form is available on the “Forms” page and the “Sports Medicine” page of the UHSAA website or directly at <http://uhsaa.org/new/images/forms/ConcussionReleaseForm.pdf>.

Links to resources:

- UHSAA Concussion Management Policy: <http://uhsaa.org/SportsMed/ConcussionManagementPlan.pdf>
- NFHS “Concussion in Sports” course: www.nfhslearn.com
- Center for Disease Control & Prevention (CDC) concussion materials: www.cdc.gov/concussion
- UHSAA “Post Concussion Instructions and Return to Play Clearance Form”:
<http://uhsaa.org/new/images/forms/ConcussionReleaseForm.pdf>