

## **RSU #57 CONCUSSION MANAGEMENT**

In response to growing concern over concussion in athletics, there is a need for schools to develop and utilize a policy for the management of concussive and other head injuries as outlined in Legislative document 1873. The following document serves as this standard for concussion management.

**The following components will be outlined as part of a comprehensive concussion management policy:**

- Part 1: Concussion overview
- Part 2: Concussion education for participants and parents/guardians
- Part 3: Concussion education for coaches
- Part 4: Baseline Testing (ImPact)
- Part 5: Concussion Action Plan
- Part 6: Immediate Post Concussion Home Care Instructions
- Part 7: Return to play protocol
- Part 8: Academic Accommodations
- Part 9: Non-Athletic Concussion
- Part 10: Concussion Management Team
- Part 11: Concussion Acknowledgement of Risk Form

### **PART 1: DEFINITION OF CONCUSSION**

A concussion is a traumatic brain injury induced by biomechanical forces. A concussion may be caused by a direct blow to the head, face, neck, or to the body with an impulsive force transmitted to the head. Disturbance of brain function is related to functional disturbance, rather than structural injury and is typically associated with normal structural neuroimaging. Concussions may or may not result in the loss of consciousness (LOC). A concussion can result in a range of physical, cognitive, emotional, and sleep related signs and symptoms. Signs and symptoms may be immediate or delayed.

#### **Signs and Symptoms of Concussion**

The following signs and symptoms are indicative of a possible concussion. Other causes for symptoms should be considered when evaluating a student-athlete. It is imperative that all medical history is reviewed as well as baseline testing.

##### **A. Signs (observed by others)**

1. Confusion
2. Appears dazed or stunned
3. Unsure about game, score, opponent etc.
4. Forgets plays
5. Altered coordination (clumsy)
6. Balance trouble
7. Slow response to questions
8. Forgets events prior to trauma
9. Forgets events after trauma

10. Personality changes
11. Loss of consciousness
12. Excessive eye blinking

**B. Symptoms (reported by student-athlete)**

1. Headache
2. Fatigue (tiredness)
3. Double or blurred vision
4. Sensitivity to light
5. Sensitivity to noise
6. Nausea and/or vomiting
7. Feeling like 'in a fog'
8. Feeling 'sluggish'
9. Difficulty concentrating
10. Difficulty remembering
11. Trouble falling asleep (if reporting day(s) after)
12. Trouble staying asleep (if reporting day(s) after)
13. Mood swings
14. Sadness
15. Irritability
16. Hyperactivity (ADHD like symptoms)

**PART 2: CONCUSSION EDUCATION FOR STUDENTS AND PARENTS/GUARDIANS**

\*Each year, prior to participation in RSU 57 athletics, students and parents/guardians will be required to review this policy and sign a statement acknowledging the review. By signing the statement, the student accepts the responsibility for reporting their injuries and illnesses to the coaching, athletic training staff and parents including the signs and symptoms of concussion. All students will be required to attend the above education prior to participating in a RSU 57 sanctioned sport.

\*Each year students will be required to attend a mandatory concussion education meeting facilitated by our Athletic Trainer.

**PART 3: CONCUSSION EDUCATION FOR COACHES AND ATHLETIC PERSONNEL**

\*It is required for every RSU 57 coach to complete an educational course provided by the National Federation of State High School Associations at <http://www.nfhslearn.com/electiveDetail.aspx?courseID=15000> and present the certification to the Activities Director.

\*All coaches are required to attend the discussion provided by the certified athletic trainer and physician at the beginning of each school year.

## **PART 4: NEUROPSYCHOLOGICAL BASELINE TESTING**

\*Neuropsychological testing is accomplished using a computer-based program, ImPACT, in partnership with the Maine Concussion Management Initiative (MCMI) Baseline assessments must be taken prior to participation in RSU 57 athletics.

• ImPACT is designed to measure specific brain functions that may be altered after a concussion. The program is designed in such a way as to allow student's post-injury performance to be compared to the student's own baseline.

• Baseline tests will be administered by Certified Athletic Trainer or under the supervision of a coach. Post-concussion tests will be administered by the Certified Athletic Trainer or physician.

### **A. BASELINE IMPACT TESTING PROTOCOL**

1. Prior to the start of any contact or collision practices, all athletes must take a baseline ImPACT test.
2. Baseline Testing Schedule:
  - a. College and above – once;
  - b. High School – every 2 years;
  - c. Middle School and below– annually.
3. Each baseline will be reviewed for validity; if invalid that student-athlete will need to retake before he/she can participate in contact or collision practices. If student has documented ADD, ADHD, learning or intellectual disability they do not need to retake baseline.
4. All student athletes that participate in a contact sport will not be able to participate in any live play, scrimmages, or games/competitions until their baseline test is completed.
5. The AT will inform all coaches which members of their teams must take the ImPACT once a roster has been submitted.
6. Testing should be conducted under the supervision of the AT or an appropriately trained Athletic Training Student (ATS) and when able at least one coach to ensure proper behavior during testing.

### **B. POST INJURY IMPACT TESTING**

#### **A. Repeat Testing**

1. 24-72 hours post injury or as requested by treating health care provider.
2. After subjective symptoms have returned to baseline, before student-athlete participates in a contact practice.

3. Repeat tests will be given at request of the Team Physician or PCP treating the student-athlete.
4. Repeat tests should not be given more than twice in one week unless specified by treating health care provider.
5. AT will notify the treating health care provider once ImPACT tests are completed.

### **PART 5: CONCUSSION ACTION PLAN**

When a student is suspected of having sustained a concussive or other head injury the student shall be removed immediately from any activity, practice, class or competition and evaluated by a qualified health care professional with specific training in the evaluation and management of a concussion.

#### **Management and Referral Guidelines**

##### When AT is present:

1. All student-athletes suspected of having sustained a head injury will be removed from play for evaluation.
2. The AT will use the appropriate sideline tools available to assess orientation, memory, concentration, balance, cranial nerves and other signs and symptoms associated with a sports related concussion.

History, verbal examination, special tests, and if appropriate, physical exertion will be used to determine presence and severity of the signs and symptoms of concussion.

3. Any student-athlete suspected of having sustained a head injury (including opposing teams' student-athletes) will be removed from practice/game and not allowed to return.
4. AT will notify Parent/Guardian as soon as possible about the student-athlete's injury:
  - a. The parent/guardian will decide if the student-athlete is evaluated by the Team Physician, if present, or their own Primary Care Provider (PCP).
5. The AT will document initial evaluation and all subsequent evaluations; all documentation should be provided to the treating health care provider:
  - a. Daily symptom checks;
  - b. Documentation of graduated return to play protocol;
  - c. Post-injury ImPACT test results.
6. AT will coordinate care, and will remain in contact with the treating provider until the student-athlete is fully cleared to return to unrestricted activity.

7. AT will notify the School Nurse of injury:
  - a. School nurse may notify all teachers, guidance counselors, and other personnel involved in the student-athletes academics and school day;
  - b. As the student-athlete progresses during his/her injury, the school nurse will be notified in order to update the above mentioned personnel.

When the Athletic Trainer is NOT present:

1. Any student-athlete with observed LOC of any duration should be transported to the nearest emergency department via emergency services.
  - a. Coaches should not allow student-athlete to move their head or neck in case a cervical spine injury has occurred until EMS arrives.
  - b. Parent/guardian of the student-athlete should be contacted immediately and informed of the situation.
  - c. Refer to the site specific Emergency Action Plans (EAPs) for activation of EMS.
2. Any student-athlete who has symptoms of a concussion, and who is not stable (i.e. their condition changing or deteriorating) is to be transported immediately to the nearest emergency department via emergency vehicle.
  - a. Parent/guardian is to be informed immediately.
  - b. If parent/guardian is present they are able to transport the student/athlete to the emergency department on their own at their discretion.
  - c. Any student-athlete that exhibits any of the following symptoms is to be immediately transported to the nearest emergency department:
    - i. Decreasing level of consciousness
    - ii. Deterioration of neurological function
    - iii. Decrease or irregularity in respiration
    - iv. Decrease or irregularity in pulse
    - v. Unequal, dilated, or unresponsive pupils
    - vi. Changes in mental status
    - vii. Seizure
    - viii. Vomiting
3. Any student-athlete who is stable can be sent home with a parent/guardian.
  - a. A parent/guardian must be informed by the coaching staff of the injury and what has been observed.
  - b. Coaches are to inform the student-athlete and parent/guardian to follow up with the AT as soon as possible.
  - c. Parent/guardian can be given a Home Care Instruction for Athletic Head Injuries sheet.
  - d. Parent/guardian can be advised to have the student-athlete seek care with his/her Physician, Walk-In Clinic, or Emergency Department on the day of the injury.

- e. If student-athlete is sent to the emergency department, coaching staff must tell the parent/guardian to supply the AT staff with appropriate documentation of evaluations.
- f. Coaches must inform the AT as soon as possible about any head injuries and all necessary action taken.

## **PART 6: IMMEDIATE POST CONCUSSION HOME CARE INSTRUCTIONS**

### Home Care Instructions for Athletic Head Injuries

\_\_\_\_\_ has sustained a suspected head injury while participating in an athletic contest on \_\_\_\_\_.

The following is a list of instructions for this student-athlete's care over the next 24+ hours:

1. Complete brain rest (limit computer, TV, video games, texting etc.).
2. Do not drive a vehicle.
3. Stay hydrated and eat easily digestible foods.
4. Allow athlete to sleep uninterrupted.
5. Unless directed by a physician no medications for the first 24 hours, including Tylenol or Ibuprofen (Advil).

If any of the following occur have the athlete evaluated by a medical professional (ER, Primary Care Physician etc.):

1. Repeated vomiting.
2. Convulsions/seizures.
3. Difficulty using arms.
4. Difficulty seeing.
5. One pupil larger than the other.
6. Drastic changes in emotional control.
8. Dizziness/unsteady walking that progressively worsens.
9. Difficulty speaking or slurred speech.
10. Difficulty being awakened.
11. Progressive or sudden impairment of consciousness.
12. Bleeding or drainage of fluids from the ears or nose.

Athletes must be back to their baseline for symptoms before starting the progression and must maintain their baseline during the entire progression. This is tracked by filling out a daily symptom check list.

## **PART 7: RETURN TO PLAY PROTOCOL**

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. Participants with history of prior concussion, extended duration of symptoms, or participation in collision or contact sports may progress more slowly.

### **Return to Play (RTP) Procedures for Student-Athletes after Sustaining a Concussion**

- a. Any student-athlete who is exhibiting signs or symptoms of a concussion or has abnormal cognitive findings will not be allowed to return to play on the same day as injury.
- b. All student-athletes will follow the graduated RTP progression.
- c. All student-athletes must meet the following criteria in order to progress to activity:
  1. Symptoms back to baseline for a minimum of 24 hours at rest and during mental exertion in school.
  2. Must progress into academics before athletics.
- d. In case of a disagreement between medical professionals, the more conservative approach will be taken.

### **Graduated Return to Sport**

1. Symptom limited activity:
  - a. Cannot progress to step 2 until symptoms are back to baseline for a minimum of 24 hours.
2. Light aerobic exercise (Walking, stationary bike).
3. Sports-specific training:
  - a. Ex: running in field hockey, skating in hockey.
4. Non-contact training drills.
5. Full-contact training drills:
  - a. ImPACT repeat testing must be at baseline prior to initiation of full contact practice.
6. Game Play with health care provider clearance.

### **In Addition:**

- i. If an athlete experiences an increase in baseline symptoms at any time during the progression they will immediately stop participation and report to AT.
- ii. Student-athlete and coaches will be given written and/or verbal instructions about their activity level during the day.
- iii. If practices are held off site, the coaching staff will be in charge of monitoring the student-athlete during participation.

- iv. If a student athlete does not complete a graduated RTP prior to the start of the next sport season; he/she will be required to complete the progression prior to the start of the first practice.

## **PART 8: ACADEMIC ACCOMMODATIONS**

\*A Health Plan or 504 may be developed for any student displaying post concussive symptoms that affect academic performance.

### **Academic Guidelines**

Student-athletes who sustain a head injury may need reduction in academics. Academic adjustments may include:

- a. Partial school days;
- b. No physical education participation;
- c. No tests or quizzes will be given;
- d. Limit screen time (computers, movies, iPads, cell phones);
- e. Limit reading;
- f. Do not allow student to listen to music;
- g. Allow to take breaks during class from work;
- h. Decrease work load by about 50-75% depending on student-athlete's symptoms;
- i. More one-on-one time may be needed to ensure comprehension of material;
- j. Limit homework to no more than 20 minutes per night.

### **As symptoms reduce**

Accommodations may be altered or changed throughout the recovery process by the treating health care professional.

### **Once cleared from their concussion by health care provider:**

- a. Teachers should be informed by school nurse;
- b. May participate in physical education;
- c. No academic restrictions.

## **PART 9: Non-Athletic Related Concussion**

Students suffering concussions from non-school sponsored athletic activity or other non-athletic related accidents, on or off campus, will be afforded academic support and accommodations based on the severity of the concussion. Those accommodations will be included in the students ACE (Acute Concussive Evaluation) provided to the school nurse by the student's primary care provider. The school nurse and building administration will be responsible for ensuring the accommodations included in the plan are communicated to staff and followed.

Clearance for students in these circumstances will be provided by the students PCP and will be required to return to regular academic programming, including physical education and intramural activity.



If staff suspect a student has suffered a concussion during the school day or has arrived at school demonstrating concussion like symptoms, it is the responsibility of the staff to communicate that concern to building administration or the school nurse.

### **PART 10: CONCUSSION MANAGEMENT TEAM**

The RSU 57 Management Team will be headed by the Activities Director who is responsible, under the administrative supervision of the Superintendent, to make recommendations related to the implementation of this policy. The Concussion Policy Management Team includes the School Nurse, the Activities Director, the Athletic Trainer, the Guidance Department Director and the Dean of Students.

The team shall oversee and implement this policy and related protocols for concussive head injuries based on the generally accepted protocols. This team will identify the school personnel who shall be trained in concussion signs and symptoms and the school activities covered by this policy.

#### **MHS Concussion Team**

Activities Director  
School Nurse  
Athletic Trainer  
Guidance Dept.  
Assistant Principal

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Activities Director  
School Nurse  
Athletic Trainer  
Guidance Dept.  
Assistant Principal

Adopted: September 26, 2018

**PART 11: CONCUSSION RISK ACKNOWLEDGEMENT FORM****Mild Traumatic Brain Injury (MTBI)/Concussion Annual Statement  
and Acknowledgment Form**

I, \_\_\_\_\_ (student), acknowledge that I have to be an active participant in my own health and have direct responsibility for reporting all my injuries and illnesses to the Sports Medicine Team (e.g. Certified Athletic Trainer, School Nurse, Coaches, and Physician). I acknowledge that my physical health is dependent upon providing an accurate medical history and full disclosure of any symptoms, complaints, prior injuries and/or disabilities experienced before, during, or after athletic activities.

By signing below, I acknowledge:

1. My High School has given me specific educational material on what a concussion is and has given me an opportunity to ask questions.
2. I have fully told the Sports Medicine Team of any prior medical conditions and will also tell them about my future conditions.
3. There is a chance that my participation in my sport(s) may result in a head injury and/or concussion. In rare cases, these concussions can cause permanent brain damage, or even death.
4. A concussion is a brain injury, which I am responsible for reporting to the School Staff
5. A concussion can affect my ability to perform everyday activities, and affect my reaction time, balance, sleep, and classroom performance.
6. Some of the symptoms of a concussion may be noticed right away while other symptoms can show up hours later.
7. If I think a teammate has a concussion, I am responsible for reporting the injury to the School Staff.
8. I will not return to play in a game or practice if I have received a blow to the head or body that results in concussion related symptoms.
9. I will not return to play in a game or practice until my symptoms have resolved AND I have written clearance to do so by a licensed health care professional trained in concussion management.
10. Following a concussion, the brain needs time to heal and I am much more likely to have a repeat concussion or further damage if I return to play before my symptoms resolve.
11. I will follow all school protocols related to concussions, including return to learning and return to play.
12. SMHC Sports Performance Center, and their affiliated High Schools, is not responsible or liable for any head injury that I may sustain while participating in athletic events. I represent and certify that I and my parent/guardian have read the entirety of this document and fully understand the contents, consequences, and implications of signing this document and that I agree to be bound by this document.

Student Athlete:

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Parent or Legal Guardian

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_ 9