Bangor Public Schools

Concussion Policy and Action Plan

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**Introduction**

The policy and action plan calls for training of every public high school coach, student athlete, parents and guardians to be educated about the risks of participation in contact sports and potential for head injury or concussion. With the advent of new research demonstrating the potential long-term consequences of concussion on the brain, the Nurse Practitioner at the Bangor High School, working collaboratively with the High School Athletic Director and the Bangor Public Schools, recommended development of a consistent approach to:

- Educating youth and families, school and athletic staff on concussion;
- Providing guidance on the identification of head injuries or concussion and the need to exclude a student athlete from play when identified; Referral to an appropriate health care provider for a structured, safe return to school and play;
- Educating youth and families, school and athletic personnel on the risk of not reporting an injury; and Educating the student, family and school staff on appropriate academic accommodations.

The plan also calls for written verification of concussion awareness training for coaches, and acknowledgement of receipt of concussion awareness information by the parent and student athlete. In addition, school personnel should extend appropriate academic accommodations to student athletes with documented concussions/traumatic brain injury.

**Definitions**

**Licensed Health Care Provider** means a licensed physician or physician assistant, a licensed psychologist with specialized training in neuropsychology, or a licensed nurse practitioner.

**Return to Play** means participation in a non-medically supervised practice or athletic competition after a period of exclusion.

**Student-athlete** means a student participating in a try-out, practice or competition event with a school team.
School Personnel means those directly responsible for administrating or coaching athletic programs within a school or county, and those employees of the school or school system with overall responsibility for student-athletes' academic performance and/or well-being. Youth Sports Program means a program organized for recreational athletic competition or instruction for participants under the age of 19 years.

**Concussion Information**

A concussion is an injury to the brain that causes a change in the structure and/or in the way that the brain normally works. They are caused by a bump, blow, or hit to the head, or to another part of the body where the force may be transmitted to the head. Concussions may be mild to severe, and may cause prolonged brain damage, or even death, if not recognized and managed properly. Most concussions are mild, and are difficult to recognize. However, even a slight bump to the head may cause a serious change in the way the brain works. Therefore, it is imperative that coaches and trainers, healthcare personnel, and emergency services personnel work cooperatively to ensure the safety of student athletes.

Symptoms of a concussion may not be readily apparent immediately after injury. Failure to remove an athlete from play, even with suspected injury, may result in greater injury or death if an athlete is allowed to return to play after suffering a concussion. Therefore, it is essential that:

- Student athletes be aware of symptoms and report these symptoms to the coach.
- Athletic staff, coaches and trainers be aware of symptoms and to follow the rule: *When in doubt sit them out.*
- Emergency workers, if available, assist coaches in sideline assessment of student athletes when an injury has occurred.
- Parents be made aware of the injury, signs and symptoms to monitor, and assist with obtaining evaluation from a primary healthcare provider.
- Athletic Director be made aware of injuries by the coaching and training staff, and not allow return to play until a healthcare provider confirms that a concussion did not occur, and/or in the case of a concussion, a step-wise approach for gradual return to play has been followed, prior to athlete being cleared for participation.
Emergency room personnel are not appropriate providers to clear an athlete for participation following a concussion.

- Although emergency personnel are qualified to diagnose a concussion, return to play of a student athlete must be done by a primary care provider, or a specialist familiar with traumatic brain injury.

The following Protocol outlines the recommended procedures for: Identifying student athletes for probable head injuries

- Ensuring that the parent is made aware of the injury and obtains appropriate medical care.
- Communication between the health care provider and athletic department is streamlined.
- Athletic staff, school staff, athletes and parents are made aware of concussion signs, symptoms and potential adverse short and long term consequences.

**Coach Education**

Bangor Public Schools has a responsibility to assure that each coach is trained in concussion risk and management. At a minimum, the coach’s training should include:

- The nature of the risk of a head trauma and brain injury.
- The risk of not reporting a head injury that may result in brain injury.
- Criteria for removal from and return to play.

The following program is recommended to be used for concussion awareness training for coaches:

The Center for Disease Control (CDC) tools for youth and high school sports coaches, that provide important information on preventing, recognizing, and responding to a concussion.

The program is available at: [http://www.cdc.gov/concussion/HeadsUp/online_training.html](http://www.cdc.gov/concussion/HeadsUp/online_training.html)

If the above program is not used, the concussion awareness training program shall include the following components:

- Understanding concussions
- Recognizing concussion
Signs and symptoms of concussion
Responses and Action Plan (Appendix A)

Proof of Completion

Presentation of a certificate of completion from a coaches training course as a condition of participation provides a simple and clear mechanism for our school system to assure compliance (Appendices B and C).

Best Practices

The following are a list of resources that should be at every practice or competition where a student-athlete could possibly sustain a concussion:

- On field quick reference guide for concussion, such as the CDC’s “Heads Up Concussion in High School Sports” Pocket Card (Appendix D)
- SCAT-2 Assessments in Paper Form or Smart Phone Application   (Appendix E)
- A CDC clipboard or CDC clipboard sticker available at http://www.cdc.govconcussion/pdf/Clipboard_Sticker~a.pdf (Appendix F)
- Copies of the BPS “Notification of Probable Head Injury” Form   (Appendix G)

Concussion Awareness and Prevention Strategies for Student-Athletes, Parents or Guardians and School Personnel

Bangor Public Schools shall develop policies that assure student-athletes, parents or guardians, and school personnel receive an informational sheet describing:

- The nature and risk of a concussion or head injury.
- The criteria for removal from play and return to play.
- The risk of not reporting an injury and continuing to play.
- Appropriate academic accommodations for a student with a diagnosed concussion.
Informational materials can be obtained from the Center’s for Disease Control (CDC) tools for youth and high school sports that provide information on preventing, recognizing, and responding to a concussion. This program “Heads Up to Schools: Know Your Concussion ABC’s” can be accessed at:

http://www.cdc.gov/concussion/HeadsUponline_training.html

Parents and Student-Athletes should all receive a copy of the CDC “Heads Up Concussion in Youth Sports: Parent/Athlete Concussion Information Sheet.” In addition, parents and student athletes should receive information on concussion prevention. The information sheet “Heads Up Concussion in High School Sports: A Fact Sheet for Athletes,” and “Heads Up Concussion in High School Sports: A Fact Sheet for Parents” contain this information in English and Spanish and can be accessed at:

http://www.cdc.gov/concussion/pdf/Athletes_Fact_Sheet-a.pdf (English)
http://www.cdc.gov/concussion/pdf/Parents_Fact_Sheet-a.pdf (English) (Appendix I)
http://www.cdc.gov/concussion/pdf/Athletes_Fact_Sheet_Spanish-a.pdf (Spanish)
http://www.cdc.gov/concussion/pdf/Parents_Fact_Sheet_Spanish-a.pdf (Spanish) (Appendix J)

Best Practices

Suggested opportunities to provide concussion prevention information include, but are not limited to:

- Providing CDC Information Sheet “Heads Up: Concussion Prevention” with sport physical forms, or physicals.
- Coaching players on safe play specific to sport including the use of protective equipment, and playing by the rules.

Suggested opportunities to provide concussion information include but are not limited to:

- Inservice Training for school personnel and/or coaching staff
- Team meetings or practices
- Team pre-participation documents for sport physical
- Student Athlete/Parent orientation
- Coach/Parent preseason meeting
- Athletic trainer tips for coaches and athletes
• Formal/informal seminars
• School Nurse and/or Health Center

Required Acknowledgement

Every athlete and at least one parent or guardian must verify in writing that they have received information on concussion and sign a statement acknowledging receipt of the information. (Appendix K)

Head Injury/Concussion Management
Management of Sports-Related Head Injury/Concussion

Baseline Testing

All athletes are recommended to take baseline SCAT-2 or ImPACT neurocognitive testing prior to sport participation. All athletes in a contact sport (as defined by MHSAA), are recommended to take a “new” baseline test prior to sport participation in their Junior year. SCAT-2 testing evaluates some aspects of brain function including memory, attention, balance, and post-concussion symptoms. ImPACT testing evaluates multiple aspects of brain function including memory, attention, brain-processing speed, reaction time, and post-concussion symptoms.

Acute Head Injury/Concussion: RECOGNIZE, REMOVE and REFER

After an appropriate assessment at the time of injury by emergency personnel, the athletic trainer, and/or coach, any student athlete suspected of sustaining a concussion shall IMMEDIATELY be removed from play. The student athlete should not return to play until cleared by a licensed primary health care provider authorized to provide sports physical examinations and trained in the evaluation and management of concussions.

Any athlete with a reported or witnessed loss of consciousness of any duration should be spine boarded and transported immediately to the nearest emergency department via emergency vehicle, regardless of SCAT-2 score.

Any athlete that exhibits any of the following symptoms should be transported immediately to the nearest emergency department via emergency vehicle:
• Worsening headaches
• Very drowsy or unable to awaken
• Seizures
• Cannot recognize people or places
• Repeated vomiting
• Increased agitation
• Neck pain
• Slurred speech
• Weakness or numbness in the arms or legs
• Unusual behavior change
• Significantly irritable or crabby
• Less responsive than usual
• Irregular breathing
• Irregular pulse
• Unreactive, dilated or unequal pupils

Any athlete that is symptomatic but stable, may be transported by his/her own parent or guardian. The parent/guardian should be advised of the details of the injury using the “BPS Notification of Probable Head Injury” Form. Copies of the form should be distributed to the Athletic Director and the health care provider (School Nurse, Health Center, or Primary Care Provider).

Return to Play

It is important to note that there are no formally approved or licensed certifications of concussion management. As a result, each medical professional authorizing return to play must determine whether they are aware of current medical guidelines on concussion evaluation, and whether or not concussion evaluation and management fall within their own scope of practice. In Michigan, the MHSAA Concussion Clearance form requires the signature of a physician (MD, or DO). According to a personal communication with MHSAA, a physician may delegate the responsibility to a Nurse Practitioner with whom they have a Collaborative Practice Agreement. Due to the limited access to primary care services in our area, the Bangor Health Center has developed a Concussion Protocol that has been approved by Robert Dempsey, DO, the
collaborating physician for our health center. This protocol will enable the Nurse Practitioner to clear student athletes for return to play.

Once the student athlete has been medically cleared by the Health Center or their primary care provider, the student athlete must submit the "BPS Medical Clearance for Gradual Return to Sports Participation Following Concussion" Form to the Athletic Director.

It is recommended that the Athletic Director enlist the support of the school nurse, Athletic Trainer, and/or coach in a coordinated effort to monitor the student athlete’s progression through the Graduated Return to Play Protocol. A minimum of 24 hours is required between each step. If ANY symptoms return at any point during the stage progression, the activity must be stopped. The student athlete should be advised to rest until symptom free for 24 hours. After that time, the student athlete should repeat the stage PRIOR to the stage that triggered symptoms. If symptoms return or worse, the student athlete should be removed from play and should be advised to see a primary health care provider.

To assist student athletes, parents and school personnel, the following forms are provided as part of this policy:

- Notification of Probable Head Injury (Appendix G)
- Medical Clearance for Gradual Return to Sports Participation Following Concussion (Appendix L)
- Graduated Return to Play Protocols (Appendices M,N,O)
Appendices

A. Concussion Action Plan
B. Certification of Completion of Concussion Training Form for Coaches
C. BPS Concussion Awareness Form for Coaches
D. Heads Up Concussion in High School Sports Pocket Card
E. SCAT-3 Paper Form
F. CDC Clipboard Sticker
G. BPS Notification of Probable Head Injury Form
H. Heads Up Concussion in High School Sports: A Fact Sheet for Parents
I. Heads Up Concussion in High School Sports: A Fact Sheet for Athletes
J. Heads Up Concussion in High School Sports: A Fact Sheet for Parents
K. BPS Concussion Awareness Form for the Parent/Student Athlete
L. BPS Medical Clearance for Gradual Return to Sports Participation Following Concussion Form
M. Graduated Return to Play Protocol-General
N. Graduated Return to Play Protocol- Soccer
O. Graduated Return to Play Protocol- Football