Uxbridge Public Schools Department of Nursing Services in conjunction with Department of Athletics

Protocol: Head Injury and Concussion Management

Introduction:

A concussion is an injury to the brain that results in temporary loss of normal brain function. It is usually caused by a blow to the head. In many cases, there are no signs of trauma. A concussion can affect memory, judgment, reflexes, speech, balance, mood, and muscle coordination. Children and adolescents are at great risk for head injuries and concussions. The potential for this type of injury is greatest in activities where collisions may occur such as sports, physical education class, and on the playground. Uxbridge Public schools (UPS) seeks to prevent concussions and provide a safe return to academics and activity following a head injury or concussion.

In order to effectively and consistently manage sports related and non-sport related head injuries, UPS has established the following protocols in order to prevent, manage, and make appropriate return to activity decisions for all students in regards to concussions and head injuries. This protocol is in accordance with Massachusetts state law (Chapter 111 of the General Laws, Section 222), the Department of Public Health regulation 105 CMR 201.000 Head Injury and Concussions in Extracurricular Athletic Activities, the Massachusetts Department of Public Health regulation 105 CMR 201.000 Head Injury and Concussions in Extracurricular Athletic Activities, the Massachusetts Department of Public Health regulation 105 CMR 200.000, Physical Examination of School Children, and follows the Consensus Statement from the 3rd International Conference on Concussion in Sport, November 2008. The Athletic Director (AD), the School Nurse (RN), and the Certified Athletic Trainer (ATC) will oversee the procedures and protocols governing the prevention and management of sports related head injuries, including required documentation, training, and reporting.

Training Program

• Annual training is required in the prevention and recognition of a sports-related head injury, and associated health risks including second impact syndrome. The following individuals are required to complete the annual education:

Coaches Certified Athletic Trainer School Nurses Athletic Director Volunteers in the athletic program Club sponsors Marching Band Directors Parents of a student who participates in an extracurricular athletic activity

• Students who participate in an extracurricular athletic activity

- This training will utilize approved programs through the Massachusetts Department of Public Health, such as the *NFHS Concussion in Sports-What you need to know*. MDPH approved clinical training can be found at www.mass.gov/dph/sportsconcussion
- Documentation of the annual training of the coaches, trainer (ATC), and Athletic Director will be submitted to the AD and remain on file for at least three years.
- Documentation of annual training of school nurses will be kept on file in the nurse's office.
- The training program applies to one school year and must be repeated for every subsequent year

Annual Physical Exam and Pre-Participation History of Health, Injury, and Concussion

- Annually, a copy of current physical examination dated within 13 months, which medically clears the student to participate in athletics, must be submitted to the School Nurse
- The parent/guardian will also provide updated information about the athletes health including history of head injuries or concussions on the interscholastic athletics online registration form (Family ID) for each sport season,
- Students may not participate in athletic activities until the required medical and health information is submitted to the AD and health concerns are reviewed by the athletic trainer (ATC).
- The ATC may consult with the students primary care provider or concussion medical specialist, regarding recommendations for participation in athletics for students with multiple concussions.
- Instead of using the Massachusetts Department of Public Health pre participation form, UPS will have parents/guardians complete the Family ID section on head injuries each sport season to ensure up-to-date head injury history information.
- Given the risk of second impact injuries, the school may use a student history of concussions as a factor to determine whether to allow the student to participate in an extracurricular athletic activity, or whether to allow such participation with specific conditions or modifications.
- Documentation of the physical exam is kept in student's health record in the nurse's office.
- The AD and the ATC ensure receipt of the required documentation and communicate to the coach the status of a student medical clearance to participate in athletics.

Baseline testing:

All students playing football, basketball, field hockey, and soccer at the high school level are offered an ImPact computer-based neurocognitive test that is administered by the ATC.

Suspected Head Injury - Athletic Event - GRADE 6-7

- All students need to be evaluated by a licensed physician if they have suffered a head injury or suspected concussion or experienced any of the following
 - A change in level of consciousness, even if fully alert

- a velocity of injury
- a known history of a previous head injury was in six months
- IF A STUDENT IS NOT FULLY ALERT CALL 911
- If Student is fully alert:
 - Student can be sent home in care of parent/guardian and directed to see their health care provider as soon as possible the same day, should not return to school before health care provider evaluation (RED)
 - Coach completes district accident report or head injury report
 - Coach provides a parent/guardian with concussion information
 - Coach notifies athletic director
 - AD notifies school administrators
 - AD/coach notify school nurse prior to next school day. All Forms are forwarded to the school nurse within 24 hours of injury.
 - School Nurse will initiate post concussion gradual return to academic and athletic participation plan, upon the students medical clearance to return to school
- Athletes who have a history of a head injury within the past six months and who present with a second head injury:
 - Student needs to be evaluated by a licensed physician the same day, regardless of their medical status, should not return to school until after medical evaluation (RED)
 - Coach completes head injury report and district accident report
 - Coach provides parent/guardian with concussion information
 - Coach completes district accident report or head injury report
 - Coach notifies AD
 - AD notify school administrators
 - AD/coach notifies school nurse by the next school day. All Forms are forwarded to the school nurse within 24 hours of injury.
 - School Nurse will initiate post concussion gradual return to academic and athletic participation plan, upon the students medical clearance to return to school

Suspected Head Injury - Athletic Event - Grade 8-12

- All students need to be evaluated by a licensed physician if they have suffered a concussion or suspected concussion or experienced any of the following
 - A change in level of consciousness, even if fully alert
 - \circ a velocity of injury
 - a known history of a previous head injury was in six months
 - IF STUDENT IS NOT FULLY ALERT CALL 911
- Coach : calls ATC to respond to location of student (grades 8-12), if available, to evaluate athlete ascertain history, nature of injury
- ATC assesses immediate symptoms and behavior of student

- Nausea/vomiting, headaches, light/noise sensitivity, dizziness/balance problems, double/blurry vision, fatigue, feeling of sluggish/in a fog, memory problems, difficulty concentrating, irritability, crying, other
- Checks vital signs: pulse, blood pressure and respirations
- Assesses mental status
- Inspect for sites of bleeding, and apply gentle pressure if needed. If bleeding does not stop, call 911. If bleeding stops, inspect the wound and evaluate whether or not sutures are required, and continue to apply pressure
- ATC, if available obtains further information about changes in mental status.
 - Asks witness changes in mental status, of number of episodes of vomiting, visual disturbances
 - Documents briefly this student's mental status:
 - Ask the student if he/she remembers what happened, asks about any unusual symptoms or changes in functioning such as blurred vision or double vision
 - Assesses that student is oriented to person/time/place
 - Assesses pupillary responses, extraocular movements, arm and leg straight
- ATC, if available and after completing the assessment above, will determine how soon the athlete needs medical evaluation
 - If an athlete had only a mild change in level of consciousness (e.g. subjective more than objective; did not lose consciousness; mental status changes that were less than five minutes) and is now fully alert:
 - Student can be sent home in care of parent/guardian and directed to see their health care provider as soon as possible the same day, should not return to school until after health care provider evaluation (RED)
 - Coach/ATC completes district accident report or head injury report
 - Coach/ATC Provides a parent/guardian with concussion information
 - Coach/ATC notifies athletic director
 - AD notifies school administrators
 - Coach/ATC/AD notify school nurse prior to next school day. All Forms are forwarded to the school nurse within 24 hours of injury.
 - School Nurse will initiate post concussion gradual return to academic and athletic participation plan, upon the students medical clearance to return to school
 - If an athlete had a period of unconsciousness; had changes of mental status that lasted longer than five minutes; have persistent amnesia or recurring vomiting, or who sustained a high velocity head injury:
 - Student should be medically evaluated in the emergency room setting within the hour
 - Call 911 and have parent/guardian meet the student at the ER
 - Provide EMS a copy of head injury report or details about an incident, injury, and assessment findings
 - School affiliated adult will company student to ER in absence of parent/guardian

- Coach/ATC notifies athletic director
- Coach/ATC completes district accident report or head injury report
- AD notify school administrators
- Coach/ATC/AD notify school nurse prior to next school day.All Forms are forwarded to the school nurse within 24 hours of injury.
- School Nurse will initiate post concussion gradual return to academic and athletic participation plan, upon the students medical clearance to return to school
- Athletes who have a history of a head injury within the past six months and who present with a second head injury:
 - Student needs to be evaluated by a licensed physician the same day, regardless of their medical status, should not return to school until after being evaluated (RED)
 - Coach/ATC completes district accident report or head injury report
 - Coach/ATC provides parent/guardian with the head injury report and concussion information
 - Coach/ATC completes district accident report or head injury report
 - Coach/ATC notifies athletic director
 - AD notify school administrators
 - Coach/ATC/AD notify school nurse by next school day. All Forms are forwarded to the school nurse within 24 hours of injury.
 - School Nurse will initiate post concussion gradual return to academic and athletic participation plan, upon the students medical clearance to return to school
- Collaboration and sharing of information is crucial to the management of student's care after a head injury. UPS requires that a completed "*District Accident Report*" or "*Report of head Injury Form*" should be submitted to the school nurse for student athletes. The school nurse will maintain documentation of the head injury and related assessments in the student's health record. The "*District Accident Report*" or "*Report of head Injury Form*" will be filed in student's health record at the end of the school year

Suspected Head Injury - Athletics/Non School Related Grades 6-12

If the student has not seen their medical provider and is presenting with concussion symptoms from a student reported head injury, the student will be assessed at school by the athletic trainer or school nurse and parents will be called, the student will be referred to primary care provider or any health care provider for initial diagnosis, the student should not return to school until after being evaluated (RED)

A District Accident Report should be filled out in this case by the AT or nurse or coach.

If medical evaluation was accessed, the parent will be contacted and asked to submit medical documentation to the school nurse including diagnosis of concussion and recommendations for mental and physical rest and plans for the return to academics and athletics.

Post Concussion Gradual Return to Academics / Academic Accommodations per protocol:

Rest is necessary for the brain to heal. The goal for academic accommodations is to create an environment where the student's academics, homework, and extracurricular activities do not cause an increase in concussive symptoms yet will promote improvement of their concussive symptoms.

- Academic accommodations will be put into place based upon physician recommendation and/or if the student is showing signs of a concussion as per the graded symptom checklist.
- The nurse will notify the guidance department and teachers of student's concussion. A plan for academic re-entry will be initiated if the student has been out of school for >3days. The Graduated Re-entry Protocol is put into place.
 - A student who is recovering from a concussion will be assessed and monitored daily and as needed by the school nurse until asymptomatic and progressing to full academics without accommodations
 - A student who becomes symptomatic during the day will be directed to the school nurse for re-assessment and intervention as needed.
 - All participating athletes in Grade 8-12, will also be monitored by the ATC with communication and collaboration with the school nurse/parent/guardian, and student's medical provider as needed.
 - All participating UPS athletes in grades 6-7 will be monitored by the school nurse with communication and collaboration with the parent/guardian, Athletic Director, and medical provider as needed
 - All other students, grades 6-12 who have sustained a concussion will be monitored by the school nurse in communication and consultation with the parent /guardian and student's medical provider as needed
- If a student's symptoms are worsening, are exceeding the indicated time frame by the physician's initial assessment, or the student is having a prolonged recovery > 21 days, a 504 plan will be developed by the Guidance Counselor in conjunction with the Nurse.

A student must have a physician clearance note to return to full academics and start gradual return to play.

Gradual Return to Play Guidelines

The ATC will provide all assessment, progression, and authorizations for return to activity for the student athlete for which he/she is comfortable.

• ATC may recommend concussion specialists for cases in which the student athlete:

- Has had two concussions in the last calendar year, or
- Has had three or more concussions in his/her lifetime, or
- Has a prior neurological illness or condition (i.e. seizure disorder, moderate to severe brain injury, etc)
- $\circ~$ Is still having substantial symptoms at two weeks post-injury that interfere with functional abilities, or
- Is having problems maintaining his/her usual level of academic performance
- If the athlete sees a medical provider outside the school for evaluation, diagnosis, and/or treatment of a concussion, written authorization from that provider must be provided to the school ATC. Once the authorization is received the ATC will progress the athlete through the return to play protocol, monitoring the athlete daily.

Gradual return to athletic protocol will begin only after a student has returned to full participation in academics and is completely symptom free at rest.

- The ATC will offer impact testing post head injury during the recovery phase of the gradual academic re-entry plan and return to academic plan
- When the athlete reaches the green stage of the return to academic plan they will begin the gradual return to athletic protocol as directed but the ATC/Coach
- Student athletes in Grade 6-12 who have completed the green stage will follow up with their health care provider for medical clearance for return to play guidelines.

Medical Clearance for Return to Play

The ultimate return to play decision is a medical decision that may involve a multidisciplinary approach including consultation with parents, the athletic trainer, the school nurse and the guidance department as appropriate. A healthcare provider or the athletic trainer (in consultation with the school physician) completes the *Post Sports-Related Head Injury Medical Clearance and Authorization Form* for each student. These forms are forwarded to the school nurse when complete and stored in the students' health file.

Only the following individuals may authorize a student to return to full athletic participation:

- A duly licensed physician
- A duly licensed certified athletic trainer in consultation with a licensed physician
- A duly licensed nurse practitioner in consultation with a licensed physician
- A duly licensed physician assistant under the supervision of a licensed physician
- A duly licensed neuropsychologist with the physician managing the student's Recovery

Record Maintenance

The district will maintain the following records for three years or until the student graduates:

- (1) Verification of completion of annual training and receipt of materials
- (2) Department of Public Health Pre-Participation Forms or a copy of the Family ID registration record showing a student's history of concussion
- (3) Department of Public Health Report of Head Injury or District Accident Report Form
- (4) Department of Public Health Medical Clearance and Authorization Forms or Physician Clearance Note
- (5) Graduated reentry plans for return to full academic and extracurricular activities

These records are available to the Massachusetts Department of Public Health and the Department of Elementary and Secondary Education upon request.

Reporting

The Uxbridge Public School District will submit annual statistics that report:

- The number Report of Head Injury Forms received by the school; and
- The total number of students who incur head injuries and suspected concussions when engaged in any school sponsored extracurricular athletic activity
- The total number of Medical Clearance Authorization Forms

Related Forms

UPS Gradual return to academic re-entry plan UPS Gradual return to play protocol DPH Report of head Injury Form District Accident Report Form DPH Post Sports r/t Injury Medical Clearance Form UPS Concussion Protocol RTP form

Superintendent:	Date:
Athletic Director:	Date:
UHS Principal:	Date:
WIS Principal:	Date:
UPS Lead Nurse:	Date:
School Physician:	Date: