Concussion Guidelines and Procedures

Prevention

The Knox School recognizes that protecting students from head injuries is one of the most important ways of preventing a concussion. The risk of a concussion is present with all sporting and athletic activities. The Knox School, following the guidance of the CDC’s Heads Up program and resources, utilizes the following to help minimize the risk of injuries:

- Concussion education for staff, students and parents
- Use of proper athletic equipment
- Employing concussion trained coaches, athletic trainers and registered nurses
- Supervising all athletic activities

Education – Staff

The Concussion Management and Awareness Act, specifically Chapter 496 of the Laws of 2011, requires that school coaches, physical education teachers, nurses and certified athletic trainers complete a New York State Education Department (NYSED) approved course on concussions and concussion management every two years. NYSED has approved the course Heads Up, Concussion in Youth Sports for physical education teachers and coaches. This free online course was developed by the CDC and is available at http://www.cdc.gov/concussion/HeadsUp/online training.html

NYSED has approved the course Heads Up to Clinicians for school nurses and athletic trainers to be completed every two years. This free online course was developed by the CDC and is available at http://preventingconcussions.org/. This is not a NYS specific training video; therefore, the scope of practice of certified athletic trainers and school nurses in NYS may differ from what is described in the training. Registered professional nurses and certified athletic trainers practicing in NYS must follow NYS laws in regards to licensing and scope of practice.

All Knox School coaches, athletic trainers and registered nurses (RNs) will complete the appropriate training as mentioned above and will maintain active certifications.

Education – Parents and Students

The Knox School athletic director, athletic trainer, coaches and school RNs will provide concussion education to all parents and students.
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The Knox School provides to the parents, the written concussion information provided by the CDC Heads Up program. This written information is specific for parents and is attached to The Knox School’s Parent Consent Form for Athletic Activities. Prior to consenting, all parents are required to review the information and are encouraged to ask any questions.

Additionally, parents will learn about concussions during preseason sports meetings. Printed concussion information sheets will be available. Education should include, but not be limited to, the definition of concussion, signs and symptoms, how concussions may occur, why concussions are not detected with CT Scans or MRIs, management of the injury and the protocol for return to school, activity or interscholastic athletics. The protocols will cover all students returning to school after suffering a concussion, regardless if the accident occurred outside of school or while participating in a school activity.

Concussion education will be provided to all students and should be reviewed periodically throughout each season. Emphasis must be placed on the importance for students to report any injuries or any symptoms of a concussion to their coaches and parent/guardian. Additionally, it is important that students understand the need for medical evaluation should such an injury occur to prevent persisting symptoms. Students must follow the guidelines for return to school and activities.

The following educational topics will be given to the students:

- Preventing head injuries
- Knowing the signs and symptoms of concussions
- Reporting signs and symptoms of a concussion to a coach, certified athletic trainer, school RNs, parent/guardian, or other staff
- Risk of concussion
- Informing the coach, parent/guardian, certified athletic trainer, school RNs or other staff members about injuries and the symptoms
- Risk of severe injury, permanent disability, and even death that can occur with re-injury by resuming normal activities before recovering from a concussion
- Following the instructions from their private medical provider
- Asking for help and informing teachers of difficulties they experience in class and when completing assignments
- Encouraging classmates and teammates to report injuries
- Promoting an environment where reporting signs and symptoms of a concussion is considered acceptable
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- Post-concussion and second impact syndromes
- Return to play and school protocols
- Available local resources for concussion management and treatment

Particular emphasis should be placed on the fact that no athlete will be allowed to return to play the day of injury and also that all athletes should obtain appropriate medical clearance prior to returning to play or school.

Concussion Management Team

The Knox School has established a concussion management team (CMT). The CMT includes the athletic director, athletic trainer, school RNs and school physician. Additional school staff such as administrators, guidance counselors, teachers, physical education teachers and coaches may participate with the CMT on an as needed basis. The CMT will collaborate with the private medical provider, the student and the student’s family to assist with the student’s recovery.

The CMT will coordinate training for all administrators, coaches, teachers, student athletes and parents. Training is mandatory for all physical education teachers, coaches, assistant coaches and volunteer coaches who work with student athletes. Training is also mandatory for all school RNs and athletic trainers. Parents need to be aware of The Knox School’s policy and procedures and how these injuries will ultimately be managed by school officials and what information is necessary for the school to receive from a medical provider.

The CMT will act as a liaison for any student returning to school and/or play following a concussion. The CMT will review and/or design an appropriate plan for the student while the student is recovering.

Concussion Management Protocol

- Prior to the beginning of each school year, all student athletes will have a baseline SCAT (Sport Concussion Assessment Tool) or Impact Assessment Tool evaluation. This information will be used to assess any changes in the event a student experiences a concussion. Parents will be notified about the testing and can notify the athletic trainer if they wish to exclude their student athlete from the testing. Results of the initial testing and any subsequent testing will be made available to the parents.

- If a student sustains a possible head injury during school hours or school activities, the student is to be seen by the school RN and/or the athletic trainer.

- The school RN and/or athletic trainer will follow the first aid protocols for a suspected head injury. The school RN and/or athletic trainer will evaluate for a concussion using the SCAT5
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concussion assessment tool and will complete The Knox School’s Injury Report. The student will be monitored over a period of 30 minutes, evaluating for any changes. Notification will be made to the athletic director, administrators and parents/guardians with oral and/or written instructions on observing the student for concussive complications that warrant immediate emergency care.

• If a concussion is suspected, the student athlete will be referred to a concussion specialist/clinician (licensed physician, nurse practitioner or physician assistant). The student athlete must be removed from all athletic activity and/or physical activities and may not be returned to athletic activities until he/she has been symptom-free for a minimum of 24 hours and has been evaluated by and receives written and signed authorization to return to activities by the concussion specialist/clinician.

• If the student sustains a possible head injury off-campus or when the school RN or athletic trainer is not available to assess, the coach or supervising adult will remove the student from the activity, follow the first aid protocols, will utilize the Sport Concussion Recognition Tool (CRT5), and follow the notification protocol.

• The school RN will be responsible for follow-up and coordination between the student, parents, physical education teachers, coaches, athletic director, athletic trainer, school physician and student’s health care provider.

• When the student athlete receives clearance or authorization to return to activities from the concussion specialist, the school RN will review the medical provider’s written clearance for the student to begin graduated physical activity. If the student is still experiencing symptoms, or if the medical history, concussion severity etc., concern the school RN, he/she will contact the parent and the physician for a re-evaluation.

• When it is determined to be safe for the student athlete to return to play, the athletic director and athletic trainer will be notified that the student athlete can begin the return to play protocol.

Return to play – Student Athletes

Return to play following a concussion involves a stepwise progression once the individual is symptom free for at least 24 hours. There are many risks to premature return to play including: a greater risk for a second concussion because of a lower concussion threshold, second impact syndrome (abnormal brain blood flow that can result in death), exacerbation of any current symptoms, and possibly increased risk for additional injury due to alteration in balance. No student athlete should return to play while symptomatic. Students are prohibited from returning to play the day the concussion is sustained. If there is any doubt as to whether a student has sustained a concussion, it should be treated as a concussion. Once the student
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athlete is symptom free at rest for 24 hours without pain medication and has a signed release by the treating clinician, and has been cleared by the school RN/school physician, he/she may begin the return to play progression below (provided there are no other mitigating circumstances). The return to play will be supervised by the athletic director and athletic trainer for student athletics.

The following is the recommended return to physical activity protocol based on the Zurich Progressive Exertion Protocol:

**Phase 1** – Low impact, non-strenuous, light aerobic activity such as walking or riding a stationary bike. If tolerated without return of symptoms over a 24 hour period proceed to;

**Phase 2** – Higher impact, higher exertion, and moderate aerobic activity such as running or jumping rope. No resistance training. If tolerated without return of symptoms over a 24 hour period proceed to;

**Phase 3** – Sport specific non-contact activity such as low resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

**Phase 4** – Sport specific activity, non-contact drills such as higher resistance weight training with a spotter. If tolerated without return of symptoms over a 24 hour period proceed to;

**Phase 5** – Full contact training drills and intense aerobic activity. If tolerated without return of symptoms over a 24 hour period proceed to

**Phase 6** – Return to full activities without restrictions.

Each step should take at least 24 hours so that an athlete would take approximately one week to one-and-a-half weeks to proceed through the full rehabilitation protocol once they are asymptomatic at rest and with provocative exercise. If any post-concussion symptoms occur while in the stepwise program, the student should drop back to the previous asymptomatic level and try to progress again after an additional 24-hour period of rest has passed. If a student is not progressing or there is an indication of a more serious head injury, the athletic director, athletic trainer or coach will notify the school RN. The school RN will consult with the school physician and the student may be required to be re-evaluated by the concussion specialist prior to continuing the Return to Play Protocol.

**Return to play – Non-Athletes**
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The school RN will be responsible for the return to play for non-athletes. The same clearance documentation will be required from the student’s concussion specialist/clinician. When the student is cleared, the school RN will notify the athletic trainer and physical education teacher and the return to play will be initiated. The first week will involve rest, no physical activities and then the student will be slowly returned to play with the school RN and athletic trainer monitoring the progress.

Classroom Teacher

The school RN will notify administration and the student’s teachers that the student has sustained a concussion. Teachers should make accommodations that minimize aggravating symptoms so that the student has sufficient cognitive rest. The school RN will provide information from the private medical provider regarding limitations on the student during the recovery phase.

Students transitioning into school after a concussion might need academic accommodations to allow for sufficient cognitive rest. These include, but are not necessarily limited to:

- Shorter school day
- Rest periods
- Extended time for tests and assignments
- Copies of notes
- Alternative assignments
- Minimizing distractions
- Permitting student to audiotape classes
- Peer note takers
- Provide assignments in writing
- Refocus student with verbal and nonverbal clues

Concussion Signs and Symptoms for Classroom Teacher

Physical Symptoms

- Headache
- Neck pain
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- Nausea
- Lack of energy and constantly feeling physically and mentally tired
- Dizziness, light-headedness, and a loss of balance
- Blurred or double vision and sensitivity to light
- Increased sensitivity to sounds
- Ringing in the ears
- Loss of sense of taste and smell
- Change in sleep patterns especially waking up a lot at night

*Cognitive Symptoms*

- Difficulty concentrating and paying attention
- Trouble with learning and memory
- Problems with word-finding and putting thoughts into words
- Easily confused and losing track of time and place
- Slower in thinking, acting, reading, and speaking
- Easily distracted
- Trouble doing more than one thing at a time
- Lack of organization in everyday tasks

*Social and Emotional Symptoms*

- Mood changes including irritability, anxiousness, and tearfulness
- Decreased motivation
- Easily overwhelmed
- More impulsive
- Withdrawn and wanting to avoid social situations especially in large crowds