



Concussions: The Invisible Injury

Student and Parent Information Sheet

Concussion definition

A concussion is a reaction by the brain to a jolt or force that can be transmitted to the head by an impact or blow occurring anywhere on the body. Essentially a concussion results from the brain moving back and forth or twisting rapidly inside the skull.

Facts about Concussions according to the Center for Disease Center (CDC)

- An estimated 4 million people under age 19 sustain a head injury annually. Of these approximately 52,000 die and 275,000 are hospitalized.
- An estimated 300,000 sports and recreation related concussions occur each year.
- Students who have had at least one concussion are at increased risk for another concussion.

In New York State in 2009, approximately 50,500 children under the age of 19 visited the emergency room for a traumatic brain injury and of those approximately 3,000 were hospitalized.

Requirements of School Districts

Education

- Each school coach, physical education teacher, nurse, and athletic trainer will have to complete an approved course concussion management on a biennial basis, starting with the 2012-2013 school year.
- School coaches and physical education teachers must complete the CDC course (Heads Up).
- School Nurses and athletic trainers must complete the concussion course, preventing concussions.

Information

- Provide concussion management information and sign off with a parental permission form.
- The concussion management and awareness information on the State Education Department web site must be made available on the school web site, if one exists.

Removal from Athletics

- Requires the immediate removal from athletic activities of a pupil that has or is believed to have sustained a mild traumatic brain injury.
- No pupils will be allowed to resume athletic activity until they have been symptom free for 24 hours and have been evaluated by and received written and signed authorization from a licensed physician. For Interscholastic Athletics, clearance must come from the school physician.
- Such authorization must be kept in the pupil's permanent health record.
- Schools shall follow directives issued by the pupil's treating physician

Symptoms

Symptoms of a concussion are the result of a temporary change in the brain's function. In most cases, the symptoms of a concussion generally resolve over a short period of time; however, in some cases, symptoms will last for weeks or longer. Children and adolescents are more susceptible to concussions and take longer than adults to recover.

It is imperative that any student who is suspected of having a concussion is removed from athletic activity (e.g. recess, PE class, sports) and remains out of such activities until evaluated and cleared to return to activity by a physician.

- Symptoms include, but are not limited to:
- Decreased or absent memory of events prior to or immediately after the injury, or difficulty retaining new information
- Confusion or appears dazed
- Headache or head pressure
- Loss of consciousness
- Balance difficulties, dizziness, or clumsy movements
- Double or blurry vision Sensitivity to light and/or sound
- Nausea, vomiting and/or loss of appetite Irritability, sadness or other changes in personality Feeling sluggish, foggy or light-headed Concentration or focusing problems
- Drowsiness
- Fatigue and/or sleep issues – sleeping more or less than usual
- Students who develop any of the following signs, or if signs and symptoms worsen, should be seen and evaluated immediately at the nearest hospital emergency room.
- Headaches that worsen
- Seizures
- Looks drowsy and/or cannot be awakened
- Repeated vomiting
- Slurred speech
- Unable to recognize people or places
- Weakness or numbing in arms or legs, facial drooping
- Unsteady gait
- Change in pupil size in one eye
- Significant irritability
- Any loss of consciousness
- Suspicion for skull fracture: blood draining from ear or clear fluid from the nose

Return to Learn and Return to Play Protocols

ImPACT Testing

ImPACT provides computerized neurocognitive assessment tools and services that will be used by Mattituck-Cutchogue UFSD to assist us in determining an athlete's ability to return to play after suffering a concussion.

Prior to participating in any interscholastic sport a student athlete must have a completed ImPACT baseline concussion test on file. The baseline tests have to be retaken every 2 years to remain current.

Once a student athlete has been diagnosis with a concussion, a post-concussion ImPACT test must be administered as part of the return to play protocol.

Post Concussion Management Procedures - Return to play/practice

Once the student is symptom free at rest for 24 hours and has a signed release by the treating clinician, she/he may begin the return to play/practice progression below (provided there are no other mitigating circumstances). For interscholastic athletics, clearance must come from the school medical director. Such authorization must be kept in the pupil's permanent health record. Schools shall follow directives issued by the pupil's treating physician.

Cognitive Rest: Activities students should avoid include, but are not limited to, the following:

- Computers and video games
- Television viewing
- Texting
- Reading or writing
- Studying or homework
- Taking a test or completing significant projects
- Loud music
- Bright lights

Students may only be able to attend school for short periods of time. Accommodations may have to be made for missed tests and assignments.

Physical Rest: Activities students should avoid include, but are not limited to, the following:

- Contact and collision
- High speed, intense exercise and/or sports
- High risk for re-injury or impacts
- Any activity that results in an increased heart rate or increased head pressure

Return to Play Protocol: once symptom free for 24 hours and cleared by School Medical Director:

Day 1: Low impact, non strenuous, light aerobic activity.

Day 2: Higher impact, higher exertion, moderate aerobic activity. No resistance training.

Day 3: Sport specific non-contact activity. Low resistance weight training with a spotter.

Day 4: Sport specific activity, non-contact drills. Higher resistance weight training with a spotter.

Day 5: Full contact training drills and intense aerobic activity.

Day 6: Return to full activities with clearance from School Medical Director and a completed ImPACT post-concussion test.

Each step should take 24 hours so that an athlete would take approximately one week 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, then the student should drop back to the previous asymptomatic level and try to progress again after a further 24-hour period of rest has passed.

Resources

Websites

Mattituck-Cutchogue School District - <http://www.mufsd.com>

New York State Education Department

New York State Department of Health - http://www.health.ny.gov/prevention/injury_prevention/concussion/htm

New York State Public High School Athletic Association - www.nysphsaa.org/safety/

ESPN Video – Life Changed by Concussion - <http://espn.go.com/video/clip?id=7525526&categoryId=5595394>

SportsConcussions.org

Consensus Statement on Concussion in Sport – Zurich - <http://sportconcussions.com/html/Zurich%20Statement.pdf>