Concussion Management Protocol

Overview

The Board of Education of the Lindenhurst Union Free School District recognizes that mild traumatic brain injuries (commonly referred to as "concussions") and head injuries are commonly reported injuries in children and adolescents who participate in sports and recreational activities. Therefore, the district adopts the following policy to assist in the proper evaluation and management of head injuries, including concussions.

A concussion is a mild traumatic brain injury. Concussions occur when normal brain functioning is disrupted by a blow or jolt to the head. Recovery from concussion will vary. Avoiding re-injury and over-exertion until fully recovered are the cornerstones of proper concussion management.

Any student demonstrating signs, symptoms or behaviors consistent with a concussion while participating in a school sponsored class, extracurricular activity or interscholastic athletic activity will be removed immediately from the game or activity and be evaluated as soon as possible by an appropriate health care professional e.g. district physician, registered nurse, etc. The District will notify the student's parents or guardians of the concussion. The student shall not resume athletic activities until the student has been symptom free for at least twenty four (24) hours and has been evaluated by and received written authorization from a licensed physician and, in the case of extra-curricular athletic activities, has received clearance from Brian Cruickshank, MD to participate in such activity. Any student who continues to have signs or symptoms upon return to activity must be removed from play and reevaluated by their health care provider, as well as reevaluated and cleared by the District's School Physician(s).

Concussion Management Team

The District will assemble a concussion management team (CMT) that will consist of the athletic director, athletic trainer, school nurse, school physician, and/or outside consultants as deemed necessary. The District's CMT will coordinate the training for all administrators, physical education teachers, coaches and parents. Training will be mandatory for all of the district coaches prior to each season. In addition, information related to concussions should also be included at parent meetings and/or in information provided at the beginning of sports seasons. Parents need to be aware of the District's policy and how these injuries will be managed by school officials.

Training should include: signs and symptoms of concussions, post concussions and second impact syndromes, return to play school protocol and available area 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 an injury and also that all athletes will obtain medical clearance prior to returning to play or school. The CMT will act as a liaison for any student returning to school/or play following a concussion. The CMT will review and/or design an appropriate plan for the student while the student is recovering.

CMT can utilize the NYSPHSAA website as well as www.keepyourheadinthegame.org for information related to signs and symptoms of concussions and the appropriate return to play protocols. Support material, including an approved Concussion Management Checklist, is available on the NYSPHSAA website at www.nysphsaa.org.

Education

Concussion education must be provided for all school coaches, physical education teachers, school nurses, and athletic trainers, on a biennial basis, relating to recognizing the symptoms of mild traumatic brain injuries and monitoring and seeking proper medical treatment for pupils who suffer mild traumatic brain injuries. The course of instruction shall include, but not be limited to: the definition of a mild traumatic brain injury ("concussion"): signs and symptoms of mild traumatic brain injuries: how such injuries may occur: practices regarding prevention: and the guidelines for the return to school activities after a pupil has suffered a mild traumatic brain injury, regardless of whether such injury occurred outside of school.

Education of parents should be accomplished through preseason meetings for each sport season and from information posted on the Lindenhurst Athletics web-page. This education program will include, but not be limited to: the definition of a concussion, signs/symptoms, guidelines for removal from play, guidelines for return to play, and possible consequences of mistreatment of concussions.

This education program can also be provided by representatives of Stony Brook University Hospital, Good Samaritan Pediatric Neurology, St. Charles Hospital, trained school district representatives, or Lindenhurst's chief medical officer.

Concussion Management Protocol

1. Baseline Neurological Testing (ANAM / ImPACT)

Baseline Neurocognitive Testing (ANAM / ImPACT)

Neurocognitive testing is a specialized evaluation that is primarily concerned with learning in relationship to brain function. Neurocognitive testing consists of assessing verbal skills, visual abilities, processing speed, attention, executive functions, verbal and visual memory and reaction time. Neurocognitive testing is one of the initial steps in the assessment of concussion and in assessing cognitive strengths and weaknesses. In the majority of cases, neurocognitive testing is used to assist RTP (return to play) decisions and is not done until the athlete is symptom free. However, there may be persons (e.g. child and adolescent athletes) in whom testing is performed early on after the concussion while the athlete is still symptomatic to assist in determining the proper course of management. However, neurocognitive testing should not be the sole basis of management decisions for the concussed athlete. Although, in most cases, cognitive recovery largely overlaps with the time course of symptom recovery, it has been demonstrated that cognitive recovery may occasionally precede or more commonly follow clinical symptom resolution suggesting that the assessment of cognitive function should be an important component in any RTP protocol. Consequently, once cognitive functions have been assessed, appropriate rehabilitation methods to restore or compensate for any impaired functions can be implemented and informed decisions can be made and RTP protocols can be initiated. Neurocognitive testing is not a replacement for a medical evaluation to diagnose a concussion.

For the purpose of baseline comparisons, the District will coordinate neurocognitive testing for all high school athletes who participate in contact/collision sports (Football, Soccer, Wrestling, Basketball, Field Hockey, Baseball, Softball and Lacrosse and Competitive Cheerleading) before their athletic season starts, utilizing ANAM/ImPACT software. District based personnel must have proper credentials and will be trained on how to administer the baseline testing.

Return to Play

Return to play following a concussion involves a stepwise progression once the individual is symptom free. 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 suspected. If there is any doubt as to whether a student

has sustained a concussion, it should be treated as a concussion! Students should be monitored by a district staff member for any return of signs and symptoms of concussion during the progress. Once a student diagnosed with a concussion has been symptom free at rest for at least 24 hours, a private medical provider may choose to clear the student to begin a graduated return to activities. The District's medical director has the final authority to clear students to participate in or return to extra-class physical activities. Neurocognitive testing may be used in making this final determination.
Once the student athlete is symptom free at rest for twenty-four (24) hours, has a signed release by the student's private treating physician, and has been cleared by the District's medical director, she/he may begin the return to play progression below (provided there are no other mitigating circumstances).

Phase 1: Low impact, non-strenuous, light aerobic activity.

Phase 2: Higher impact, higher exertion, and moderate aerobic activity.

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

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

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

Phase 6: Return to full activities without restrictions.

Students should be monitored by District staff daily following each progressive challenge, physical or cognitive, for any return signs and symptoms of concussion.

Staff members should report any observed return of signs and symptoms to the school nurse or certified athletic trainer or administration. A student should only move to the next level of activity if they remain symptom free at the current level. Return to activity should occur with the introduction of one new activity each twenty-four (24) hours. If any post-concussion symptoms return, the student should drop back to the previous level of activity, then re-attempt the new activity after another twenty-four (24) hours have passed. A more gradual progression should be considered based on the individual's circumstances and a private medial provider's or other specialist's orders and recommendations.

The athletic trainer and nurse will oversee return to play protocol with the concussion certified physician. Final return to play decisions will be made by a Concussion Certified Physician.

Ref:
The Concussion Management and Awareness Act, Chapter 496 of the Laws of 2011
N.Y. Educ. Law - 305(42), 1709 (8-a)
8 NYCRR - 135.4, 136.5

Adopted: November 18, 2015