Concussion Management Regulation

Diagnosis

In New York State, the diagnosis of a concussion remains within the scope of practice of the following medical providers: physicians, nurse practitioners, and physician assistants. As part of their licensure, these medical providers are encouraged to remain current on best practices in their fields. Medical providers who are not familiar with current best practice on concussion management are encouraged to seek out professional development updates. This section provides a general overview of current best practice to familiarize district health professionals, and should not be utilized as a replacement for professional development.

It must be emphasized that any student suspected of having a concussion – either based on the disclosure of a head injury, observed or reported symptoms, or by sustaining a significant blow to the head or body – must be removed from athletic activity and/or physical activities (e.g. PE class, recess), and observed until an evaluation can be completed by a medical provider. In accordance with the Concussion Management and Awareness Act, a student diagnosed with a concussion may not be returned to athletic activities until at least 24 hours have passed without symptoms and the student has been assessed and cleared by a medical provider to begin a graduated return to activities. Students removed from athletic or other activities at school for a suspected concussion must be evaluated by, and receive written and signed authorization from, a physician in order to return to athletic activities in school.

Evaluation by a medical provider of a student suspected of having a concussion should include a thorough health history and a detailed account of the injury. The Centers for Disease Control and Prevention (CDC) recommends that physicians, nurse practitioners, and physician assistants use the Acute Concussion Evaluation Form (ACE) to conduct an initial evaluation. http://www.cdc.gov/concussion/headsup/pdf/ACE-a.pdf. The CDC recommends evaluation of three areas:

- Characteristics of the injury;
- Type and severity of cognitive and physical symptoms; and
- Risk factors that may prolong recovery.

Injury Characteristics

The student, and/or the parent/guardian or district staff member who observed the injury, should be asked about the following as part of an initial evaluation:

- Description of the injury;
- Cause of the injury;
- Student's memory before and after the injury;
- If any loss of consciousness occurred; and
- Physical pain and/or soreness directly after injury.

Post-Concussion Management

Students who have been diagnosed with a concussion require both physical and cognitive rest. Delay in instituting medical provider orders for such rest may prolong recovery from a concussion. A private medical provider's orders for avoidance of cognitive and physical activity and graduated return to activity should be followed and monitored both at home and at school. The District should consult their

Concussion Management Regulation

School Physician if further discussion and/or clarification is needed regarding a private medical provider's orders or, in the absence of a private medical provider's orders. Additionally, children and adolescents are at increased risk of protracted recovery and severe, potential permanent disability (e.g. early dementia also known as chronic traumatic encephalopathy), or even death if they sustain another concussion before fully recovering from the first concussion. Therefore, it is imperative that a student is fully recovered before resuming activities that may result in another concussion. Best practice warrants that, whenever there is a question of safety, a medical professional err on the side of caution and hold the athlete out for a game, the remainder of the season, or even a full year.

Cognitive Rest

Cognitive rest requires that the student avoid participation in, or exposure to, activities that require concentration or mental stimulation including, but not limited to:

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

Parents/guardians, teachers, and other district staff should watch for signs of concussion symptoms such as fatigue, irritability, headaches, blurred vision, or dizziness; reappearing with any type of mental activity or stimulation. If any these signs and symptoms occur, the student should cease the activity. Return of symptoms should guide whether the student should participate in an activity. Initially a student with a concussion may only be able to attend school for a few hours per day and/or need rest periods during the day. Students may exhibit increased difficulties with focusing, memory, learning new information, and/or an increase in irritability or impulsivity. Districts should have policies and procedures in place related to transitioning students back to school and for making accommodations for missed tests and assignments. If the student's symptoms last longer than 7-14 days, a medical provider should consider referring the student for an evaluation by a neuropsychologist, neurologist, physiatrist, or other medical specialist in traumatic brain injury.

Testing accommodations may be available for students who incur a head injury within 30 days prior to the test administration in accordance with state law and procedures. In an appropriate case and in accordance with state law and procedures, a student may be excused from taking a State test for medical reasons and given the opportunity to take a make-up examination. (See test manuals available at http://www.p12.nysed.gov/apda/manuals/ for information on testing procedures.)

In some situations, a Section 504 plan may be appropriate for a student whose concussion symptoms are significant or last 6 months or longer. More information is available on Section 504 at http://www2.ed.gov/about/offices/list/ocr/index.html. A Q&A on Section 504 including information on addressing temporary impairments, such as concussions, is available at http://www2.ed.gov/about/offices/list/ocr/504faq.html

Return to School and Activities

Concussion Management Regulation

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 protocol. If the District has concerns or questions about the private medical provider's orders, the District's Chief Medical Officer should contact that provider to discuss any questions and receive clarification. The District's Chief Medical Officer has the final authority to clear students to participate in or return to extra-class physical activities.

Students should be monitored by District staff daily following each progressive challenge, physical or cognitive, for any return of signs and symptoms of concussion. Staff members should report any observed signs and symptoms to the school nurse, certified athletic trainer, or administration in accordance with District policy. A student shall 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 24 hours. If any post-concussion symptoms return, the student shall drop back to the previous level of activity, then re-attempt the new activity after another 24 hours have passed. A more gradual progression should be considered based on individual circumstances and a private medical provider's or other specialist's orders and recommendations.

The following is a recommended sample return to physical activity protocol based on the Zurich Progressive Exertion Protocol: http://sportconcussions.com/html/Zurich%20Statement.pdf

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. 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. 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.

Other Resources:

http://bjsm.bmj.com/content/47/5/259.full.pdf
http://www.nysphsaa.org/SafetyResearch