

Concussion Management Protocol

Return-to-Play/Return-to-Learn

Diagnosis of Concussion and Baseline Data

A concussion is a trauma-induced alteration in mental status that may or may not coincide with a loss of consciousness. Due to the subjective nature of diagnosing concussions, District 50 has researched and implemented a plan based on the National Athletic Trainers Association (NATA) Concussion Statement.

Prior to participating in athletics in high school, all athletes are required to take a baseline Immediate Post-Concussion Assessment and Cognitive Test (Impact Test) while they are healthy. The Impact Test is used to identify any changes in neurocognitive function should the athlete sustain a concussion. If an athlete does sustain a concussion, the first line of defense in recognizing a change in mental status is an assessment by a certified athletic trainer (ATC) and appropriate cognitive tools. Whenever possible, the Harvard High School ATC utilizes a symptom checklist, cranial nerve testing, motor testing as well as neurocognitive testing to assess the individual's mental status immediately after the injury. Once cause for further evaluation is established, the student will then take the first post-round of the Impact Test to see where their mental status falls in comparison to their baseline mental status. If a patient's numbers are lower than normal range, or if athletic director or ATC suspect an injury was sustained, the patient will be referred for further testing by a licensed physician.

Immediate Steps Taken After Possible Concussion:

1. Remove the athlete from play. When in doubt, sit them out!
2. Contact Emergency Medical Services (EMS) if necessary.
3. Notify parents of potential concussion, and provide concussion information sheet.
4. Explain to parents that a release will be required from a licensed physician to return to school.

A student shall be removed from an interscholastic athletic practice or competition immediately if any of the following individuals believes that the student sustained a concussion during the practice and/or competition: a coach, a physician, a game official, an athletic trainer, the student's parent/guardian, the student, or any other person deemed appropriate under the return-to-play protocol.

Considerations for Return to Play and Return to Learn

A student should not be allowed to resume physical activity or classroom instruction following a concussion until he or she is symptom free and given permission to resume activity by a licensed physician. Prior to beginning the return-to-play and return-to-learn progressions, the school must receive written consent from: 1) the student's licensed physician for the student to begin the return-to-play process; and 2) the student's parent/guardian via the school's *Return to Play and Return to Learn Consent Form*.

Further, as many students experience problems in the classroom which may last from days to months, and often involve difficulties with short- and long-term memory, concentration, and organization, the

health care professional should also offer guidance about appropriate levels of cognitive and physical activity.

Once these prerequisites are met, the student should proceed in a step-by-step fashion to allow the brain to re-adjust to activity. In some cases, the student may be able to work through one step in a single day, while in other cases it may take several days to work through a step. It may take several weeks or months to work through the entire progression, depending on the injury. Keep in mind that the younger the athlete, the more conservative the treatment. It is important for the student's parent/guardian, teachers, and coach(es) to watch for concussion symptoms after each day's return-to-play and return-to-learn progression activity. Students should only progress to the next level of exertion if they are not experiencing symptoms at the current level. If symptoms return at any step, the student should stop these activities, rest, and return to previous level of effort. Symptom-free means no lingering headaches, sensitivity to light/noise, fogginess, drowsiness, etc. Each step is a minimum of 24 hours. If at any time, the student does not appear to be progressing or concerns arise about their recovery, contact parent so they may follow-up with a licensed physician if necessary.

Facilitating a student's recovery from a concussion and return to normal activities is a highly collaborative process between a team of individuals, including but not limited to: the student, parents/guardians, health care providers, and educators (including IEP and/or 504 team members, if applicable). A building case manager will be appointed to ensure adequate communication and coordination within the student's concussion recovery "team."

Return-to-Play Progression

Step 1: Recovery

The Goal: Complete rest until medical clearance from a licensed physician

The Time: Medical release and symptom free for 24 hours. No contact sports permitted until the student is completely symptom-free with full days at school and no accommodations, and has received written clearance from a licensed health care professional.

The Activities: No school attendance until medical clearance.

Step 2: Light aerobic activity

The Goal: Only to increase an athlete's heart rate.

The Time: 5 to 10 minutes.

The Activities: IMPACT testing. Exercise bike, walking, or light jogging.
Absolutely no weight lifting, jumping or hard running.

Step 3: Moderate activity

The Goal: Limited body and head movement.

The Time: Reduced from typical routine.

The Activities: Moderate jogging, brief running, moderate-intensity stationary biking, and moderate-intensity weightlifting.

Step 4: Heavy, non-contact activity

The Goal: More intense but non-contact.

The Time: Close to typical routine.

The Activities: Running, high-intensity stationary biking, the player's regular weightlifting routine, and non-contact sport-specific drills. This stage may add some cognitive component to practice in addition to the aerobic and movement components introduced in Steps 1 and 2.

Step 5: Practice & full contact

The Goal: Reintegrate in full contact practice.

Step 6: Competition

The Goal: Return to competition.

Return-to-Learn Progression

Step 1: Recovery

The Goal: Complete rest until medical clearance from a licensed physician.

The Time: Until medical clearance from a licensed physician.

The Activities: No School. The individual may experience high levels of symptoms that prevent the student from benefitting from school attendance. Cognitive tasks may cause symptoms to increase in intensity. During this stage, physical symptoms tend to be the most prominent and may interfere with even basic tasks. Many students are unable to tolerate being in the school environment due to severe headache, dizziness or sensitivity to light or noise. Strict limits on technology.

Step 2: Begin limited academics

The Goal: Part-Time School Attendance with Accommodations.

The Time: Reduced from typical routine.

The Activities: No tests, quizzes or homework. Provide class notes if needed. Continue limits on technology. Reduce length of time spent on cognitive tasks with frequent breaks. The goal is not to start catching up on the missed work or learn new material. Do not require non-essential tasks. The goal is to ensure the student can tolerate the school environment without worsening symptoms. Band and chorus may be triggers, and an alternate activity may be required. Alternate lunch area if noise triggers symptoms.

Step 3: Increased academic load

The Goal: More intense academics without triggering symptoms. Attend full day if possible.

The Time: Close to typical academic routine.

The Activities: Prioritize assignments, tests and projects. Limit students to one test per day with extra time to complete tests. Allow for breaks as needed based on symptom severity. Gradually increase amount of homework.

Step 4: Full return to academics

The Goal: Full-time School Attendance without Concussion Accommodations

The Time: Student is symptom free and has been successful with prior level of academics for 24 hours.

The Activities: Full resumption of academics with reasonable expectations on make-up work.