Macomb School District #185

Athletic
Concussion Management Program
Concussion Management Table of Contents

Concussion Overview................................................................. 1-3

Return Protocols .................................................................3-13

Emergency Action Plans......................................................14-27

Appendix

  Acknowledgement and Consent Form
  Sports Video Form
  Post-Concussion Evaluation Form
A concussion is a brain injury and all brain injuries are serious. They are caused by a bump, blow, or jolt to the head, or by a blow to another part of the body with the force transmitted to the head. They can range from mild to severe and can disrupt the way the brain normally works. Even though most concussions are mild, all concussions are potentially serious and may result in complications including prolonged brain damage and death if not recognized and managed properly. In other words, even a “ding” or a bump on the head can be serious. You can’t see a concussion and most sports concussions occur without loss of consciousness. Signs and symptoms of concussion may show up right after the injury or can take hours or days to fully appear. If your child reports any symptoms of concussion, or if you notice the symptoms or signs of concussion yourself, seek medical attention right away.

Symptoms may include one or more of the following:
- Headaches
- “Pressure in head”
- Nausea or vomiting
- Neck pain
- Balance problems or dizziness
- Blurred, double, or fuzzy vision
- Sensitivity to light or noise
- Feeling sluggish or slowed down
- Feeling foggy or groggy
- Drowsiness
- Change in sleep patterns
- Amnesia
- “Don’t feel right”
- Fatigue or low energy
- Sadness
- Nervousness or anxiety
- Irritability
- More emotional
- Confusion
- Concentration or memory problems (forgetting game plays)
- Repeating the same question/comment

Signs observed by teammates, parents and coaches include:
- Appears dazed
- Vacant facial expression
- Confused about assignment
- Forgets plays
- Is unsure of game, score, or opponent
- Moves clumsily or displays incoordination
- Answers questions slowly
- Slurred speech
- Shows behavior or personality changes
- Can’t recall events prior to hit
- Can’t recall events after hit
- Seizures or convulsions
- Any change in typical behavior or personality
- Loses consciousness
What can happen if my child keeps on playing with a concussion or returns too soon?

Athletes with the signs and symptoms of concussion should be removed from play immediately. Continuing to play with the signs and symptoms of a concussion leaves the young athlete especially vulnerable to greater injury. There is an increased risk of significant damage from a concussion for a period of time after that concussion occurs, particularly if the athlete suffers another concussion before completely recovering from the first one. This can lead to prolonged recovery, or even to severe brain swelling (second impact syndrome) with devastating and even fatal consequences. It is well known that adolescent or teenage athletes will often fail to report symptoms of injuries. Concussions are no different. As a result, education of administrators, coaches, parents and students is the key to student-athlete’s safety.

If you think your child has suffered a concussion

Any athlete even suspected of suffering a concussion should be removed from the game or practice immediately. No athlete may return to activity after an apparent head injury or concussion, regardless of how mild it seems or how quickly symptoms clear, without medical clearance. Close observation of the athlete should continue for several hours. IHSA Policy requires athletes to provide their school with written clearance from either a physician licensed to practice medicine in all its branches or a certified athletic trainer working in conjunction with a physician licensed to practice medicine in all its branches prior to returning to play or practice following a concussion or after being removed from an interscholastic contest due to a possible head injury or concussion and not cleared to return to that same contest. In accordance with state law, all IHSA member schools are required to follow this policy.

You should also inform your child’s coach if you think that your child may have a concussion. Remember it’s better to miss one game than miss the whole season. And when in doubt, the athlete sits out.

For current and up-to-date information on concussions you can go to: http://www.cdc.gov/ConcussionInYouthSports/

Adapted from the CDC and the 3rd International Conference on Concussion in Sport

2
RETURN PROTOCOLS

Cognitive Rest
A concussion can interfere with school, work, sleep and social interactions. Many athletes who have a concussion will have difficulty in school with short- and long-term memory, concentration and organization. These problems typically last no longer than 2-3 weeks, but for some these difficulties may last for months. It is best to lessen the student’s class load early on after the injury. Most students with concussion recover fully. However, returning to sports and other regular activities too quickly can prolong the recovery.

The first step in recovering from a concussion is rest. Rest is essential to help the brain heal. Students with a concussion need rest from physical and mental activities that require concentration and attention as these activities may worsen symptoms and delay recovery. Exposure to loud noises, bright lights, computers, video games, television and phones (including texting) all may worsen the symptoms of concussion. As the symptoms lessen, increased use of computers, phone, video games, etc., may be allowed, as well as a gradual progression back to full academic work.

Return to Learn
Following a concussion, many athletes will have difficulty in school. These problems may last from days to months and often involve difficulties with short- and long-term memory, concentration, and organization. In many cases, it is best to lessen the student’s class load early on after the injury. This may include staying home from school for a few days, followed by a lightened schedule for a few days, or longer, if necessary. Decreasing the stress on the brain early on after a concussion may lessen symptoms and shorten the recovery time.

Each student athlete must be cleared by his/her physician or athletic trainer in order to return to school.

Return to Play
After suffering a concussion, no athlete should return to play or practice on that same day. In the past, athletes were allowed to return to play if their symptoms resolved within 15 minutes of the injury. Studies have shown us that the young brain does not recover quickly enough for an athlete to return to activity in such a short time.

An athlete should never be allowed to resume physical activity following a concussion until he or she is symptom free and given the approval to resume physical activity by an appropriate health-care professional.

Once an athlete no longer has signs, symptoms, or behaviors of a concussion and is cleared to return to activity by an appropriate health-care professional, he or she should proceed in a step-wise fashion to allow the brain to re-adjust to exercise. In most cases, the athlete will progress one step each day. The return to activity program schedule may proceed as below, following medical clearance.
It is important for school administrators to identify a staff member on the concussion management team who will function as a case manager or concussion management leader, such as a school nurse, athletic trainer, school counselor or other identified school professional. This person’s role is to advocate for the student’s needs, implement appropriate academic accommodations and serve as the primary point of contact for the student, family, and all members of the concussion management team (1,2). The case manager is responsible for ensuring all are informed and understand how to implement the student’s accommodations as outlined by the student’s medical team.

Return-to-Learn Framework:

- To initiate the Return-to-Learn protocol, the student must be evaluated by a licensed healthcare professional and documentation provided to the school outlining cognitive and physical restrictions.
- The protocol should emphasize allowing the student to participate in the school day in a modified fashion so as not to worsen symptoms. Determining “how much is too much” may be a trial and error process.
- The student should be granted adequate time to complete missed academic work following recovery.
- The student should report to their case manager or school liaison daily in order to monitor symptoms and assess how the student is tolerating specific school accommodations (a symptom checklist is recommended), as well as assess how teachers and staff are implementing the modified learning plan.
- **Example of a Symptom Checklist (see page 1)**
- Following a concussion, students may not be ready to complete all required assignments. Educators can utilize a “mastery learning” approach emphasizing key concepts taught in brief units for each subject. Educators should assign work that promotes mastery of these concepts but should still limit non-essential assignments. Prioritizing essential course work helps students learn important subject matter while alleviating anxiety about making up missed assignments.
Phase 1: No School/Complete Cognitive and Physical Rest

- **Symptom Severity:** In this phase, the student may experience high levels of symptoms that prohibit the student benefiting from school attendance and may cause symptoms to increase in intensity. During this stage, physical symptoms tend to be the most prominent and may interfere with even basic daily tasks. Many students are unable to tolerate being in the school environment due to severe headache, dizziness or sensitivity to light or noise.

- **Treatment:** Emphasis on cognitive and physical rest to allow the brain and body to rest as much as possible.

- **Intervention Examples:**
  - No School
  - Avoid activities that exacerbate symptoms. Activities that commonly trigger symptoms include reading, video games, computer use, texting, television, and/or loud music.
  - Other symptom “triggers” that worsen symptoms should be noted and avoided in the effort to promote healing
  - No physical activity- this includes anything that increases the heart rate as this may worsen or trigger additional symptoms
  - No tests, quizzes or homework
  - Provide students with copies of class notes (teacher or student generated)

Phase 2: Part-Time School Attendance with Accommodations:

- **Symptom Severity:** In this phase, the student’s symptoms have decreased to manageable levels. Symptoms may be exacerbated by certain cognitive activities that are complex or of long duration. Often students can do cognitive activities but only for very short periods of time (5-15 minutes) so need frequent breaks to rest and “recharge their batteries”.

- **Treatment:** Re-introduction to school. Avoid environments and tasks that trigger or worsen symptoms. In the first few days of returning to school the goal is not to immediately start catching up on the missed work or learn new material. Rather the initial goal is simply to make sure the student can tolerate the school environment without worsening symptoms. This means the first few days often include just sitting in class and listening (no note-taking or reading). Once the student can tolerate this, he/she can try short intervals (5-15 minutes) of cognitive work per class. Again, determining how much is too much is a trial and error process.

- **Intervention Examples:**
  - Part-time school attendance, with focus on the core/essential subjects and/or those which do not trigger symptoms; prioritize what classes should be attended and how often. Examples: (1) half-days, alternating morning and afternoon classes every other day; or (2) attending every other class with rest in the nurse’s office, library or quiet location in between.
Symptoms reported by the student should be addressed with specific accommodations.
Eliminate busy work or non-essential assignments or classes.
Limit or eliminate “screen time” (computers, phones, tablets, smart boards), reading and other visual stimuli, based on the student’s symptoms.
Provide student with copies of class notes (teacher or student generated)
No tests or quizzes.
Homework load based on symptoms. There should be no due dates on homework Assignments. This allows students to work at a pace that does not exacerbate symptoms and reduces their anxiety about completing missed assignments. Many students have heightened anxiety during concussion recovery and due dates exacerbate this.
Allow the student to leave class a few minutes early to avoid noisy, crowded hallways between class changes.
No physical activity including gym, PE or recess or participation in athletics
If this phase becomes prolonged and/or the student is unable to tolerate the school environment or do any work for even short periods of time, a tutor can be helpful (either in school or at home) to implement oral learning at a pace that does not worsen symptoms. A tutor can also help students organize their work and plan how they will spend their limited time studying (i.e. which assignments should I do first, second, third, etc.), as many students are unable to do this basic “executive function” task during concussion recovery.

Phase 3: Full-Day Attendance with Accommodations:

- **Symptom Severity:** In this phase, the student’s symptoms are decreased on both number and severity. They may have intervals during the day when they are symptom-free. Symptoms may still be exacerbated by certain activities.
- **Treatment:** As the student improves, gradually increase demands on the brain by increasing the amount, length of time, and difficulty of academic requirements, as long as this does not worsen symptoms.
- **Intervention Examples:**
  - Continue to prioritize assignments, tests and projects; limit students to one test per day or every other day with extra time to complete tests for breaks as needed based on symptom severity
  - Continue to prioritize in-class learning; minimize overall workload
  - Gradually increase amount of homework
  - Reported symptoms should be addressed by specific accommodations; Accommodations can be reduced or eliminated as symptoms resolve
  - No physical activity unless specifically prescribed by the student’s medical team. If the student has not resolved their symptoms after 4-6 weeks, health care providers will often prescribe light aerobic activity at a pace and duration below that which triggers symptoms.
This “sub-symptom threshold exercise training” has been shown to facilitate concussion recovery (14). The student can do this at school in place of their regular PE class, by walking, riding a stationary bike, swimming, or jogging. No contact sports are allowed until the student is completely symptom-free completing full days at school and requires no academic accommodations, and has received written clearance from a licensed health care professional.

**Phase 4: Full-Day Attendance without Accommodations:**

- **Symptom Severity:** In this phase, the student may report no symptoms or may experience mild symptoms that are intermittent.
- **Treatment:** Accommodations are removed when student can participate fully in academic work at school and at home without triggering symptoms.
- **Intervention Examples:**
  - Construct a reasonable step-wise plan to complete missed academic work; an extended period of time is recommended in order to minimize stress
  - Physical activities as specified by student’s physician (same as phase 3)

**Phase 5: Full School and Extracurricular Involvement:**

- **Symptom Severity:** No symptoms are present. The student is consistently tolerating full school days and their typical academic load without triggering any concussion related symptoms.
- **Treatment:** No accommodations are needed
- **Interventions:**
  - Before returning to physical education and/or sports, the student should receive written clearance and complete a set-wise return-to-play progression as indicated by the licensed healthcare professional. For more information on “return to play” guidelines, please visit [www.luriechildrens.org/sports](http://www.luriechildrens.org/sports) & [www.cdc.gov/headsup](http://www.cdc.gov/headsup)
Privacy

The return-to-learn team should recognize that communication is essential for the success of the management plan. However, they should be aware that a student’s medical and academic information is considered private and is protected by the Health Insurance Portability and Accountability Act (HIPAA) (1, 8) and the Family Educational Rights and Privacy Act (FERPA) (1, 9). The team should have a clear understanding of who is allowed to receive information regarding a student’s medical and academic status. Team members should only discuss what is absolutely necessary to manage a student’s return-to-learn plan (4).

In compliance with requirements of the Illinois School Records Act that regulates how schools may share a “school student record” with a non-school employee (19), the student’s parent or guardian (or student if s/he is over 18) must complete a Release of Medical Information (ROMI) if they would like the physician to speak with school staff about the student’s medical care and provide guidance about how to implement the recommended accommodations. This release can be signed at the physician’s office.

Formal Education Plans:

For students with prolonged symptoms who will require accommodations for several months, a formalized program may be implemented to ensure that the student’s specific educational needs are being met by the school (1, 7). Parents can work with school leaders to develop a 504 plan or individualized education plan (IEP). The process is time-intensive and requires extensive documentation, but does provide a legal document that describes the specific educational goals for the student and outlines the necessary accommodations to achieve them (4).

- **504 Plan**: Students with persistent symptoms and who require assistance to participate fully in school may be candidates for a 504 plan. A 504 plan will describe modifications and/or accommodations necessary to assist a student return to pre-concussion performance levels. This plan may specify that the student receive classroom and/or environmental adaptations, temporary curriculum modifications and/or behavioral strategies to assist with the learning plan (1, 2).

- **Individualized Education Plan (IEP)**: Some students experience prolonged symptoms that adversely affect school performance and necessitate help in many areas of study. These individuals may benefit from an Individualized Education Plan (IEP). An IEP can be useful to formalize accommodations such as adjusting assignments, reducing the student’s workload, modification of testing procedures and changes to the learning environment. Most students will not require an IEP. An IEP should be considered for students with chronic deficits that lead to impaired school performance (1, 2).
The majority of students with a concussion will not require a 504 or IEP; however, a small percentage of students with chronic cognitive, physical or emotional deficits may require this level of support.

Example of School Accommodation form provided by a Licensed Healthcare Professional:


Additional Resources:

Ann & Robert H. Lurie Children’s Hospital of Chicago  www.luriechildrens.org/sports
Centers for Disease Control (CDC)  www.cdc.gov/concussion
American Academy of Pediatrics (AAP)  www.aap.org
Safe Kids USA  www.safekids.org

A 30 minute online educational module of the content outlined in this Return to Learn Guide is available at www.luriechildrens.org/rtl
References:

   [http://pediatrics.aappublications.org/content/132/5/948.full.pdf+html](http://pediatrics.aappublications.org/content/132/5/948.full.pdf+html)

2. Centers for Disease Control and Prevention: fact Sheet for School Professionals on Returning to School after a Concussion. 


   [www.nationwidechildrens.org/academic-concussion-management](http://www.nationwidechildrens.org/academic-concussion-management)

   [www.nationwidechildrens.org/concussions-in-the-classroom](http://www.nationwidechildrens.org/concussions-in-the-classroom)


8. HIPAA [www.hhs.gov/ocr/privacy/hipaa/understanding/index.html](http://www.hhs.gov/ocr/privacy/hipaa/understanding/index.html)


10. [www.connecticutconcussiontaskforce.org](http://www.connecticutconcussiontaskforce.org)

11. [www.luriechildrens.org/sports](http://www.luriechildrens.org/sports)


14. SUNY Upstate Medical University. Concussion in the Classroom. 


   [http://www.ode.state.or.us/teachlearn/subjects/pe/ocampguide.pdf](http://www.ode.state.or.us/teachlearn/subjects/pe/ocampguide.pdf)

   [http://www.southshorehospital.org/head-smart](http://www.southshorehospital.org/head-smart)

19. Illinois School Student Records Act 
References:


Additional Resources:

Brain 101 – The Concussion Playbook
http://101.orcasinc.com/5000/

Concussion in Sports- What you need to know.

Heads Up: Concussion in High School Sports
http://www.cdc.gov/concussion/headsup/high_school.html


REAP Concussion Management Program.

Sport Concussion Library

Revised and Approved October 2013
January 2011
April 2009
October 2008
October 2005
The NFHS regularly distributes position statements and guidelines to promote public awareness of certain health and safety-related issues. Such information is neither exhaustive nor necessarily applicable to all circumstances or individuals, and is no substitute for consultation with appropriate health-care professionals. Statutes, codes or environmental conditions may be relevant. NFHS position statements or guidelines should be considered in conjunction with other pertinent materials when taking action or planning care. The NFHS reserves the right to rescind or modify any such document at any time.
Sports Concussion Institute
Graduated Return to Play Protocol

1. NO ACTIVITY (RECOVERY)
   Complete Physical and Cognitive Rest until Medical Clearance

   - Symptom Free for 24 Hours?
     - Yes: Begin Step 2
     - No: Continue Resting

2. LIGHT AEROBIC EXERCISE
   (INCREASE HEART RATE)
   Walking, Swimming, Stationary Cycling.
   Heart Rate <70% - 15 min

   - Symptom Free for Next 24 hours?
     - Yes: Move to Step 3
     - No: Rest Further until Symptom Free

3. SPORT SPECIFIC EXERCISE
   (ADD MOVEMENT)
   Skating Drills (Ice Hockey), Running Drills (Soccer, etc)
   NO Head Impact Activities
   Heart Rate <80% - 45 min

   - Symptom Free for Next 24 hours?
     - Yes: Move to Step 4
     - No: Return to Step 2 until Symptom Free

4. NON-CONTACT TRAINING DRILLS
   (INCREASED EXERCISE, COORDINATION & ATTENTION)
   Progress to Complex Training Drills (e.g., Passing Drills, etc)
   May Start Resistance Training
   Heart Rate <90% - 60 min

   - Symptom Free for Next 24 hours?
     - Yes: Move to Step 5
     - No: Return to Step 3 until Symptom Free

5. FULL CONTACT PRACTICE
   (RESTORE CONFIDENCE & ASSESS FUNCTIONAL SKILLS)
   If Symptom Free, Return to Normal Training Activities

Date Attained: Date Attained: Date Attained: Date Attained: Date Attained:

Macomb School District Sports Medicine Acknowledgement & Consent Form

Acknowledgement and Consent

Student/Parent Consent and Acknowledgements
By signing this form, we acknowledge we have been provided information regarding concussions and the IHSA Performance-Enhancing Testing Policy. We also acknowledge that we are providing consent to be tested in accordance with the procedures outlined in the IHSA Performance-Enhancing Testing Policy. I have read and reviewed the online concussion policy.

STUDENT

Student Name (Print): ___________________________________________ Grade (6-12) ______

Student Signature: ___________________________________________ Date: __________

PARENT or LEGAL GUARDIAN

Name (Print):

__________________________________________

Signature: ___________________________________________ Date: __________

Relationship to student:

________________________________________

Each year IHSA member schools are required to keep a signed Acknowledgement and Consent form and a current Pre-participation Physical Examination on file for all student athletes.