



**HEAD INJURY
PREVENTION
AND
MANAGEMENT
IN
SCHOOLS**

Quick Reference Guide



Overview

In 2011, the Massachusetts Department of Public Health (MDPH) issued a regulation* requiring the creation of policies and procedures for the prevention and management of sports-related head injuries for grades 6-12 with extracurricular sports in:

- all public schools
- private schools that are members of the Massachusetts Interscholastic Athletic Association (MIAA)

The regulations seek to prevent concussions and minimize the health impacts if a concussion occurs. This quick reference guide can help staff and schools:

- meet requirements for student participation
- recognize symptoms of a concussion and take appropriate action
- understand steps that must be taken before students can return to play
- comply with requirements around training and policy development
- access available resources

*105 CMR 201.000 Head Injuries and Concussions In Extracurricular Athletic Activities mandated by Chapter 166 of the Acts of 2010, An Act Relative to Safety Regulations for School Athletic Programs

This booklet can be downloaded at: [mass.gov/sportsconcussion](https://www.mass.gov/sportsconcussion)

Pre-participation Requirements

Before the start of every sports season, students and parents must submit the **MDPH Pre-participation Form** (or school-based equivalent) providing up-to-date information about the student's concussion history; any head, face or cervical spine injury history; and any history of co-existent head injuries.

This form should be reviewed by a **coach, school nurse, athletic trainer** (if any) and **school physician** (if any) to identify students who are at greater risk of repeated head injuries. The school may use a student's history of head injury as a factor to determine whether to allow the student to participate in an extracurricular athletic activity.



The **MDPH Pre-participation Form** can be found at:
[mass.gov/sportsconcussion](https://www.mass.gov/sportsconcussion)



Symptoms of Concussion

According to the CDC, a concussion is a type of traumatic brain injury caused by a bump, blow, or jolt to the head that causes the brain to move back and forth rapidly. This sudden movement can cause the brain to bounce around or twist in the skull, damaging the brain cells. This injury does not always come from a direct hit to the head. It can be caused by a hit to the body as well.

Concussion Signs and Symptoms:

- Can't recall events before or after a hit or fall
- Appears dazed or stunned
- Forgets an instruction, is confused about an assignment
- Moves clumsily or answers questions slowly
- Loses consciousness (even briefly)*
- Concentration or memory problems
- Just not "feeling right," or "feeling down"
- Shows mood, behavior, or personality changes
- Feels sluggish or foggy
- Headache or feels "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Bothered by light or noise



If a student experiences one or more of the above symptoms, they might have a concussion and should be removed from play immediately. As CDC says, “When in doubt, sit them out.” Some symptoms may show up soon after the injury but other symptoms may not show up for hours or days. See “Removal from Play” on page 6.

***Important Note:** You don't have to lose consciousness to have a concussion.

Dangerous Signs & Symptoms

Call 911 or get the patient to the Hospital Emergency Department immediately if any of these symptoms appear:

- One pupil larger than the other
- Drowsiness or inability to wake up
- A headache that gets worse and does not go away
- Slurred speech, weakness, numbness, or decreased coordination
- Repeated vomiting or nausea, convulsions or seizures (shaking or twitching)
- Unusual behavior, increased confusion, restlessness, or agitation
- Loss of consciousness (passed out/knocked out)**
- Repeated vomiting

** Even a brief loss of consciousness should be taken seriously.

Removal from Play

Any student who sustains a head injury or suspected concussion, or loses consciousness (even briefly), should be removed from play immediately and **may not return to play that day**. The student should not return to play **until being medically cleared by a medical provider** (see page 9 on Medical Clearance).

The **coach** or **athletic trainer** shall:

1. explain the injury directly to the **parent** (in person or by phone) immediately after the practice or competition.
2. provide this information to the **parent** in writing (paper or electronic) by the end of the next business day.
3. communicate the injury with the **Athletic Director** and **School Nurse** by the end of the next business day.

If a student sustains a head injury or concussion during the season, outside of extracurricular sports, the parent should complete the **Report of Head Injury Form** (or a school-based equivalent) and submit it to the coach, school nurse or person specified in the school's policies and procedures.



The **MDPH Report of Head Injury Form** can be found at:
mass.gov/sportsconcussion



Supporting Students with Concussion Symptoms in School

- Establish a cooperative relationship with the student, engaging him/her in any decisions regarding schedule changes or task priority setting.
- Concentrate first on general cognitive skills and organization of tasks.
- Focus on what the student does well and expand the curriculum to more challenging content as concussion symptoms subside.
- Adjust the student's schedule as needed to avoid fatigue: shorten the day, allow for rest breaks, reduced the course load.
- Adjust the learning environment to protect the student from irritations such as too-bright light or loud noises.
- Use self-paced, computer-assisted or audio learning for a student having reading comprehension problems.
- Provide structure and consistency; make sure all teachers are using the same strategies.
- Allow extra time for test/in-class assignment completion.
- Help the student create a list of tasks. Assign a peer to take notes for the student.
- Allow the student to record classes. Increase repetition in assignments to reinforce learning.
- Break assignments into smaller chunks.
- Set reasonable expectations.

Source: CDC, Returning to School After a Concussion: A Fact Sheet for School Professionals

Graduated Return to Play

Each student who is diagnosed with a concussion shall have a written, graduated reentry plan for returning to full academic and extracurricular athletic activities.

- The plan shall be developed by the student's **teachers, guidance counselor, school nurse, athletic trainer, neuropsychologist** if available, **parent(s), members of the building-based student support team** and in consultation with the student's **medical provider**.
- The written plan should include step-by-step instructions for students, parents and school personnel, addressing:
 - Physical and cognitive rest.
 - Graduated return to extracurricular athletic activities and classroom studies, including accommodations or modifications.
 - Estimated time intervals for resumption of activities.
 - Frequency of assessments by the **school nurse, school physician, neuropsychologist** or **athletic trainer** until full return to the classroom and extracurricular athletic activities are authorized.
 - A plan for communication and coordination among **school personnel** and between the school, the **parent** and the student's **medical provider**.
- The student must be completely symptom-free at rest in order to begin graduated reentry to extracurricular athletic activities. The student must be symptom-free at rest, during exertion, and with cognitive activity in order to complete the graduated reentry plan and be medically cleared to play.



Medical Clearance

Each student who is removed from athletics for a head injury or suspected concussion shall provide to the **Athletic Director** (unless another person is specified in the school policy) the **MDPH Medical Clearance and Authorization Form**, or school-based equivalent, prior to resuming the extracurricular sport. Medical clearance should only be provided once the student has completed the graduated return to play.

The following individuals may authorize a student to return to play and must complete the Medical Clearance Form (or school-based equivalent):

- A **physician**
- An **athletic trainer** in consultation with a physician
- A **nurse practitioner** in consultation with a physician
- A **physician assistant** under the supervision of a physician
- A **neuropsychologist** in coordination with the physician managing the student's recovery

All clinicians providing medical clearance for return to play shall verify that they have received MDPH-approved training in post-traumatic head injury assessment and management, or have received equivalent training as part of their licensure or continuing education.



The **MDPH Medical Clearance and Authorization Form** and all MDPH-approved online and in-person **concussion trainings (for clinicians)** can be found at:
mass.gov/sportsconcussion

Annual Training Requirement

The following must complete a DPH-approved head injury safety training program every year:

- **Coaches**
- **Licensed athletic trainers**
- **Trainers**
- **Volunteers***
- **School and team physicians**
- **School nurses**
- **Athletic Directors**
- **Directors responsible for a school marching band**
- **Parents of students who participate in an extracurricular athletic activity**
- **Students who participate in an extracurricular athletic activity**

Each school must maintain a record of completion of the annual training for all persons above. Approved trainings can be found on the MDPH sports concussion website at: [mass.gov/sportsconcussion](https://www.mass.gov/sportsconcussion)

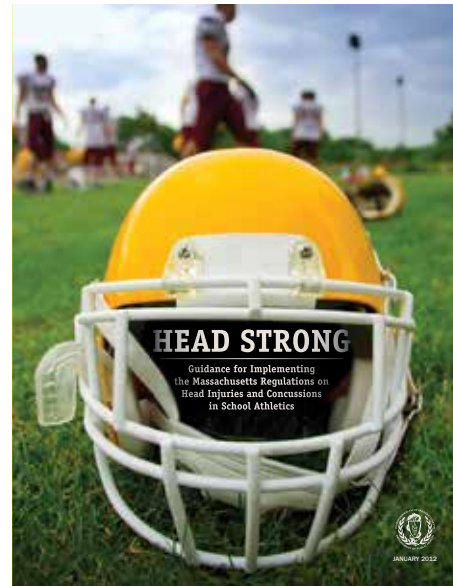


*An adult who volunteers as a game official, coach, assistant coach, team parent, physician, nurse or in an authoritative role to assist students who are engaged in an extracurricular athletic activity

Other Requirements

- Schools and school districts must have their own policies and procedures governing the prevention and management of sports-related head injuries.
- Schools or school districts must provide MDPH with an affirmation on letterhead stating they have reviewed and updated their sports-related head injury policies by September 30, 2013 and every 2 years thereafter.
- Schools are responsible for maintaining and reporting annual statistics to MDPH by August 30 every year.
- Schools have to keep the following records for 3 years or at a minimum until student graduates:
 - a. Verification of annual training,
 - b. Pre-participation Forms,
 - c. Report of Head Injury Forms,
 - d. Medical Clearance and Authorization Forms and graduated reentry plans.

For more information on how to develop school sports concussion policies see the MDPH guide book *Head Strong* at: mass.gov/sportsconcussion



Information on Concussion Prevention and Policies

Massachusetts Department of Public Health
Division of Violence and Injury Prevention

www.mass.gov/sportsconcussion

Centers for Disease Control and Prevention
800-CDC-INFO (800-232-4636)

www.cdc.gov/headsup

Brain Injury Association of Massachusetts
Brain Injury Helpline: 800-242-0030

www.biama.org

Massachusetts Interscholastic Athletic Association (MIAA)

www.miaa.net

Concussion Legacy Foundation

Phone: 781-790-1921

<http://concussionfoundation.org>

Massachusetts Concussion Management Coalition

info@massconcussion.org

<https://mcmc.wildapricot.org>

The South Shore Hospital has a recovery protocol called HeadSmart™, A Healthy Transition After Concussion. It can be found at:

www.southshorehospital.org/head-smart



Concussion Treatment Centers

Boston

Beth Israel Concussion and Traumatic Brain Injury Clinic

Boston Children's Hospital Concussion Clinic

Boston Medical Center-Ryan Center

Boston University – Sports Medicine and Related Services

Brigham and Women's Sports Neurology and Concussion Clinic

Mass General Hospital Sports Concussion Clinic

Statewide Program

Brain Injury and Statewide Specialized Community Services



For an up-to-date list of concussion treatment centers, please visit:

mass.gov/sportsconcussion

Outside of Boston

Baystate Medical Center – Sports Concussion Clinic, Springfield, MA

Berkshire Health Systems Concussion Clinic, Pittsfield, MA

Beth Israel Hospital, Plymouth, MA

Concussion Rehab Specialists, Salem MA

Dr. Robert C. Cantu Concussion Center, Concord MA

Southcoast Comprehensive Concussion Management Program, Dartmouth, MA

South Shore Hospital Concussion Management Clinic, Hingham MA

Spaulding Rehab Hospital, East Sandwich, MA

Sports Concussion New England, Brookline MA

SportSmart Signature Healthcare – Concussion Specialty, Brockton MA

UMass Memorial Medical Center Sports Medicine Clinic, Worcester, MA

Concussion Action Plan for Coaches

IF YOU SUSPECT THAT AN ATHLETE HAS A CONCUSSION, YOU SHOULD TAKE THE FOLLOWING STEPS:

- 1. Remove the athlete from play.**
- 2. Keep the athlete out of play the day of the injury until cleared by a health care provider.**
- 3. Record and share information about the injury,** such as how it happened and the symptoms, to help a health care provider assess the athlete.
- 4. Inform the athlete's parent(s) or guardian(s)** about the possible concussion. Refer them to the CDC* or MDPH** sports concussion websites for concussion information.
- 5. Ask for written instructions from the athlete's health care provider** about the steps you should take to help the athlete safely return to play. Before return to play an athlete should:
 - Be back to doing their regular school activities.
 - Not be having any symptoms from the injury when doing normal activities.
 - Have the green-light from their health care provider to begin the graduated return to play process.

* cdc.gov/HEADSUP

** mass.gov/sportsconcussion