

**STATEMENT OF THE
MICHIGAN HIGH SCHOOL ATHLETIC ASSOCIATION, INC.
TO THE
HEALTH POLICY COMMITTEE**

May 17, 2012

We wish to thank the sponsors of SB 1122 and this committee for the concern for the health and welfare of youth athletes. This is the lifelong work of MHSAA staff, and the MHSAA has strived for many years to educate coaches, parents and student-athletes about concussion awareness.

Before addressing the MHSAA efforts in this area, here's a little background on our organization. The MHSAA is a private nonprofit organization consisting of 1,535 member junior high/middle schools and high schools, both public and nonpublic. Our member schools do not pay dues to belong to the MHSAA and they pay no entry fees to participate in MHSAA tournaments. The MHSAA is completely funded through gate receipts from our tournaments and some modest broadcast, royalty and sponsorship arrangements. No taxpayer dollars are used to fund any of our activities.

The MHSAA has been concerned for many years with the need for heightened awareness of concussions. For example:

- In 2000 the laminated card "Head Injury Guide for Trainers and Coaches," provided by St. Johns Health Systems, was distributed in quantities to every MHSAA member school.
- The following fall, 20,000 laminated "Management of Concussions in Sports" cards, a joint project of the American Academy of Neurology and the Brain Injury Association of Michigan, were distributed to schools.
- In the summer of 2005 the video "Concussions and Second Impact Syndrome" was provided at no cost to every MHSAA member high school.
- In the fall of 2007 the DVD "Sports Head Injury," a project of Henry Ford Health Systems, was provided to every MHSAA member junior high/middle school and high school.

All of this and many other efforts have been provided at no cost to our member schools, and continue to be provided at no cost to these cash-strapped schools.

In 2010, the MHSAA adopted strong return-to-play protocols for students with concussions and suspected of being concussed. Under our rule, any athlete who exhibits signs, symptoms or behaviors consistent with a concussion must be removed from competition. Furthermore, our rule clearly states that if a student is removed from play due to a suspected concussion, that student cannot return to play that day and must be cleared in writing by an MD or DO prior to returning on any later day. Additionally, our rule has strong enforcement mechanism: if a school allows a concussed student to return to play without the written authorization of an MD or DO, that is the same as playing an ineligible athlete and results in forfeiture of the contest. The rule applies to all 28 sports served by the MHSAA for its member schools, both public and nonpublic.

The MHSAA's website, which is MHSAA.com, posts training tools for athletes, parents and coaches, including those of the Centers for Disease Control, and three free online courses – one from CDC, one from the National Federation of State High School Associations and the third from Michigan NeuroSport at the University of Michigan. We are constantly evolving on this issue to provide coaches, parents and students the best information available.

(OVER)

During this school year alone, nearly 20,000 high school coaches and officials will complete a rules meeting requirement that, beyond basic playing rules, is dominated by information regarding head trauma prevention, recognition and after care. The "Parent's Guide to Concussion in Sports" has been widely distributed to school administrators, coaches, students and parents.

The MHSAA has been both connected to and twice honored by the outstanding Brain Injury Association of Michigan for activities related to concussion awareness and prevention.

We welcome help in this effort from professional sports organizations. However, if professional sport leagues want to make a meaningful contribution to this topic in this state and other states, they need to change the culture of their programs. All of our collective efforts on this topic are undermined when a professional player gets his "bell rung" in a nationally-televised game and returns later to that game, or is carried off the field or court one week and returns to play the next. These nationally-televised tragedies-in-waiting may send the message to our youngest athletes and their parents and coaches that concussions are not serious.

Finally, we wish to remind everyone that this is not merely a football issue. For us, it's also an issue for soccer, ice hockey, wrestling, lacrosse and almost every sport we serve. Furthermore, this issue is but one of several compelling health and safety issues in school sports that deserve our attention and must receive it every year to help local schools whose resources have been so severely reduced in recent years. Please do not ask them to do too much more when their financial support is so much less. Thank you for the invitation to contribute to today's hearing.



MHSAA PROTOCOL FOR IMPLEMENTATION OF NATIONAL FEDERATION SPORTS PLAYING RULES FOR CONCUSSIONS

“Any athlete who exhibits signs, symptoms, or behaviors consistent with a concussion (such as loss of consciousness, headache, dizziness, confusion, or balance problems) shall be immediately removed from the contest and shall not return to play until cleared by an appropriate health care professional.”

The language above, which will appear in all National Federation sports rule books for the 2011-12 school year, reflects a strengthening of rules regarding the safety of athletes suspected of having a concussion. For 2009-10, some sports rules required officials to remove from play any athlete who was “unconscious or apparently unconscious.” This new language reflects an increasing focus on safety, given that the vast majority of concussions do not involve a loss of consciousness.

This protocol is intended to provide the mechanics to follow during the course of contests when an athlete sustains an apparent concussion.

1. The officials will have no role in determining concussion other than the obvious one where a player is either unconscious or apparently unconscious as is provided for under the current rule. Officials will merely point out to a coach that a player is apparently injured and advise that the player should be examined by a health care provider for an exact determination of the extent of injury.
2. If it is confirmed by the school’s designated health care professional that the student did not sustain a concussion, the head coach may so advise the officials during an appropriate stoppage of play and the athlete may reenter competition pursuant to the contest rules.
3. Otherwise, if competition continues while the athlete is withheld for an apparent concussion, that athlete may not be returned to competition that day but is subject to the return to play protocol.
 - a. Only an MD or DO may clear the individual to return to competition.
 - b. The clearance must be in writing.
 - c. The clearance may not be on the same date on which the athlete was removed from play.
4. Following the contest, an Officials Report shall be filed with a removed player’s school and the MHSAA.
5. In cases where an assigned MHSAA tournament physician (MD/DO) is present, his or her decision to not allow an athlete to return to competition may not be overruled.

SANCTIONS FOR NON-COMPLIANCE WITH CONCUSSION MANAGEMENT POLICY

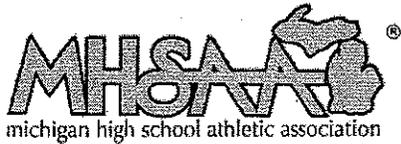
Following are the consequences for not complying with National Federation and MHSAA rules when players are removed from play because of a concussion:

- A concussed student is ineligible to return to any athletic meet or contest on the **same day** the concussion is sustained.
- A concussed student is ineligible to return to competition in a meet or contest on a **subsequent day** without the written authorization of an MD or DO.

These students are considered ineligible players and any meet or contest in which they have participated is forfeited.

In addition, that program is placed on probation through that sport season of the following school year.

For a second offense in that sport during the probationary period – that program is continued on probation through that sport season of the following school year and not permitted to participate in the MHSAA tournament in that sport during the original and extended probationary period.



RETURN TO COMPETITION

This form is to be used after an athlete is removed from and not returned to competition after exhibiting concussion symptoms. MHSAA rules require written authorization from a physician (MD/DO) before an athlete may return to play after exhibiting concussion symptoms that caused that athlete to be removed for the duration of a contest.

In cases where an assigned MHSAA Tournament physician (MD/DO) is present, his or her decision to not allow a student to return to competition may not be overruled.

Athlete: _____ School: _____

Event/Sport: _____ Date of Injury: _____

REASON FOR ATHLETE'S INCAPACITY

PHYSICIAN'S ACTION

I have examined the named student-athlete following this episode and determined the following:

Permission is granted for the athlete to return to competition (may **not** return to practice or competition on the same day as the injury).

COMMENT: _____

DATE _____
PHYSICIAN'S SIGNATURE (MUST BE MD OR DO)

PHYSICIAN'S NAME (Printed): _____

**Copies to: Team Coach and Athletic Director
Duplicate as Needed**



A Parent's Guide to Concussion in Sports

What is a concussion?

A concussion is a brain injury which results in a temporary disruption of normal brain function. A concussion occurs when the brain is violently rocked back and forth or twisted inside the skull as a result of a blow to the head or body. An athlete does not have to lose consciousness ("knocked-out") to suffer a concussion.

Concussion Facts

- It is estimated that over 140,000 high school athletes across the United States suffer a concussion each year. (Data from NFHS Injury Surveillance System)
- Concussions occur most frequently in football, but girl's lacrosse, girl's soccer, boy's lacrosse, wrestling and girl's basketball follow closely behind. All athletes are at risk.
- A concussion is a traumatic injury to the brain.
- Concussion symptoms may last from a few days to several months.
- Concussions can cause symptoms which interfere with school, work, and social life.
- An athlete should not return to sports while still having symptoms from a concussion as they are at risk for prolonging symptoms and further injury.
- A concussion may cause multiple symptoms. Many symptoms appear immediately after the injury, while others may develop over the next several days or weeks. The symptoms may be subtle and are often difficult to fully recognize.

What are the signs and symptoms of a concussion?

SIGNS OBSERVED BY PARENTS, FRIENDS, TEACHERS OR COACHES
Appears dazed or stunned
Is confused about what to do
Forgets plays
Is unsure of game, score, or opponent
Moves clumsily
Answers questions slowly
Loses consciousness
Shows behavior or personality changes
Can't recall events prior to hit

SYMPTOMS REPORTED BY ATHLETE
Headache
Nausea
Balance problems or dizziness
Double or fuzzy vision
Sensitivity to light or noise
Feeling sluggish
Feeling foggy or groggy
Concentration or memory problems
Confusion
Can't recall events after hit

What should I do if I think my child has had a concussion?

If an athlete is suspected of having a concussion, he or she must be immediately removed from play, be it a game or practice. Continuing to participate in physical activity after a concussion can lead to worsening concussion symptoms, increased risk for further injury, and even death. Parents and coaches are not expected to be able to "diagnose" a concussion, as that is the job of a medical professional. However, you must be aware of the signs and symptoms of a concussion and if you are suspicious, then your child must stop playing:

When in doubt, sit them out!

All athletes who sustain a concussion need to be evaluated by a health care professional who is familiar with sports concussions. You should call your child's physician and explain what has happened and follow your physician's instructions. If your child is vomiting, has a severe headache, is having difficulty staying awake or answering simple questions he or she should be taken to the emergency department immediately.

When can an athlete return to play following a concussion?

After suffering a concussion, **no athlete should return to play or practice on that same day.** Previously, 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.

Concerns over athletes returning to play too quickly have led state lawmakers in both Oregon and Washington to pass laws stating that **no player shall return to play following a concussion on that same day and the athlete must be cleared by an appropriate health-care professional before he or she are allowed to return to play in games or practices.** The laws also mandate that coaches receive education on recognizing the signs and symptoms of concussion.

Once an athlete no longer has symptoms of a concussion and is cleared to return to play by health care professional knowledgeable in the care of sports concussions he or she should proceed with activity in a step-wise fashion to allow the brain to re-adjust to exertion. On average the athlete will complete a new step each day. The return to play schedule should proceed as below following medical clearance:

- Step 1:* Light exercise, including walking or riding an exercise bike. No weight-lifting.
- Step 2:* Running in the gym or on the field. No helmet or other equipment.
- Step 3:* Non-contact training drills in full equipment. Weight-training can begin.
- Step 4:* Full contact practice or training.
- Step 5:* Game play.

If symptoms occur at any step, the athlete should cease activity and be re-evaluated by their health care provider.

How can a concussion affect schoolwork?

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 athlete'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 perhaps a longer period of time, if needed. Decreasing the stress on the brain early on after a concussion may lessen symptoms and shorten the recovery time.

What can I do?

- Both you and your child should learn to recognize the "Signs and Symptoms" of concussion as listed above.
- Teach your child to tell the coaching staff if he or she experiences such symptoms.
- Emphasize to administrators, coaches, teachers, and other parents your concerns and expectations about concussion and safe play.
- Teach your child to tell the coaching staff if he or she suspects that a teammate has a concussion.
- Monitor sports equipment for safety, fit, and maintenance.
- Ask teachers to monitor any decrease in grades or changes in behavior that could indicate concussion.
- Report concussions that occurred during the school year to appropriate school staff. This will help in monitoring injured athletes as they move to the next season's sports.

Other Frequently Asked Questions

Why is it so important that an athlete not return to play until they have completely recovered from a concussion? Athletes who are not fully recovered from an initial concussion are significantly vulnerable for recurrent, cumulative, and even catastrophic consequences of a second concussive injury. Such difficulties are prevented if the athlete is allowed time to recover from the concussion and return to play decisions are carefully made. No athlete should return-to-sport or other at-risk participation when symptoms of concussion are present and recovery is ongoing.

Is a "CAT scan" or MRI needed to diagnose a concussion? Diagnostic testing, which includes CT ("CAT") and MRI scans, are rarely needed following a concussion. While these are helpful in identifying life-threatening brain injuries (e.g. skull fracture, bleeding, swelling), they are not normally utilized, even by athletes who have sustained severe concussions. A concussion is diagnosed based upon the athlete's story of the injury and the health care provider's physical examination.

What is the best treatment to help my child recover more quickly from a concussion?

The best treatment for a concussion is rest. There are no medications that can speed the recovery from a concussion. Exposure to loud noises, bright lights, computers, video games, television and phones (including text messaging) all may worsen the symptoms of a concussion. You should allow your child to rest as much as possible in the days following a concussion. As the symptoms lessen, you can allow increased use of computers, phone, video games, etc., but the access must be lessened if symptoms worsen.

How long do the symptoms of a concussion usually last?

The symptoms of a concussion will usually go away within one week of the initial injury. You should anticipate that your child will likely be out of sports for about two weeks following a concussion. However, in some cases symptoms may last for several weeks, or even months. Symptoms such as headache, memory problems, poor concentration, and mood changes can interfere with school, work, and social interactions. The potential for such long-term symptoms indicates the need for careful management of all concussions.

How many concussions can an athlete have before he or she should stop playing sports?

There is no "magic number" of concussions that determine when an athlete should give up playing contact or collision sports. The circumstances surrounding each individual injury, such as how the injury happened and length of symptoms following the concussion, are very important and must be considered when assessing an athlete's risk for further and potentially more serious concussions. The decision to "retire" from sports is a decision best reached following a complete evaluation by your child's primary care provider and consultation with a physician or neuropsychologist who specializes in treating sports concussion.

I've read recently that concussions may cause long-term brain damage in professional football players. Is this a risk for high school athletes who have had a concussion?

The issue of "chronic encephalopathy" in several former NFL players has received a great deal of media attention lately. Very little is known about what may be causing dramatic abnormalities in the brains of these unfortunate retired football players. At this time we have very little knowledge of the long-term effects of concussions which happen during high school athletics.

In the cases of the retired NFL players, it appears that most had long careers in the NFL after playing in high school and college. In most cases, they played football for over 20 years and suffered multiple concussions in addition to hundreds of other blows to their heads. Alcohol and steroid use may also be contributing factors in some cases. Obviously, the average high school athlete does not come close to suffering the total number or shear force of head trauma seen by professional football players. However, the fact that we know very little about the long-term effects of concussions in young athletes is further reason to very carefully manage each concussion.

Some of this information has been adapted from the CDC's "Heads Up: Concussion in High School Sports" materials by the NFHS's Sports Medicine Advisory Committee. Please go to www.cdc.gov/ncipc/tbi/Coaches_Tool_Kit.htm for more information.

If you have any further questions regarding concussions in high school athletes or want to know how to find a concussion specialist in your area please contact Michael C. Koester, MD, ATC and Chair of the NFHS Sports Medicine Advisory Committee at michael.koester@slocumcenter.com.