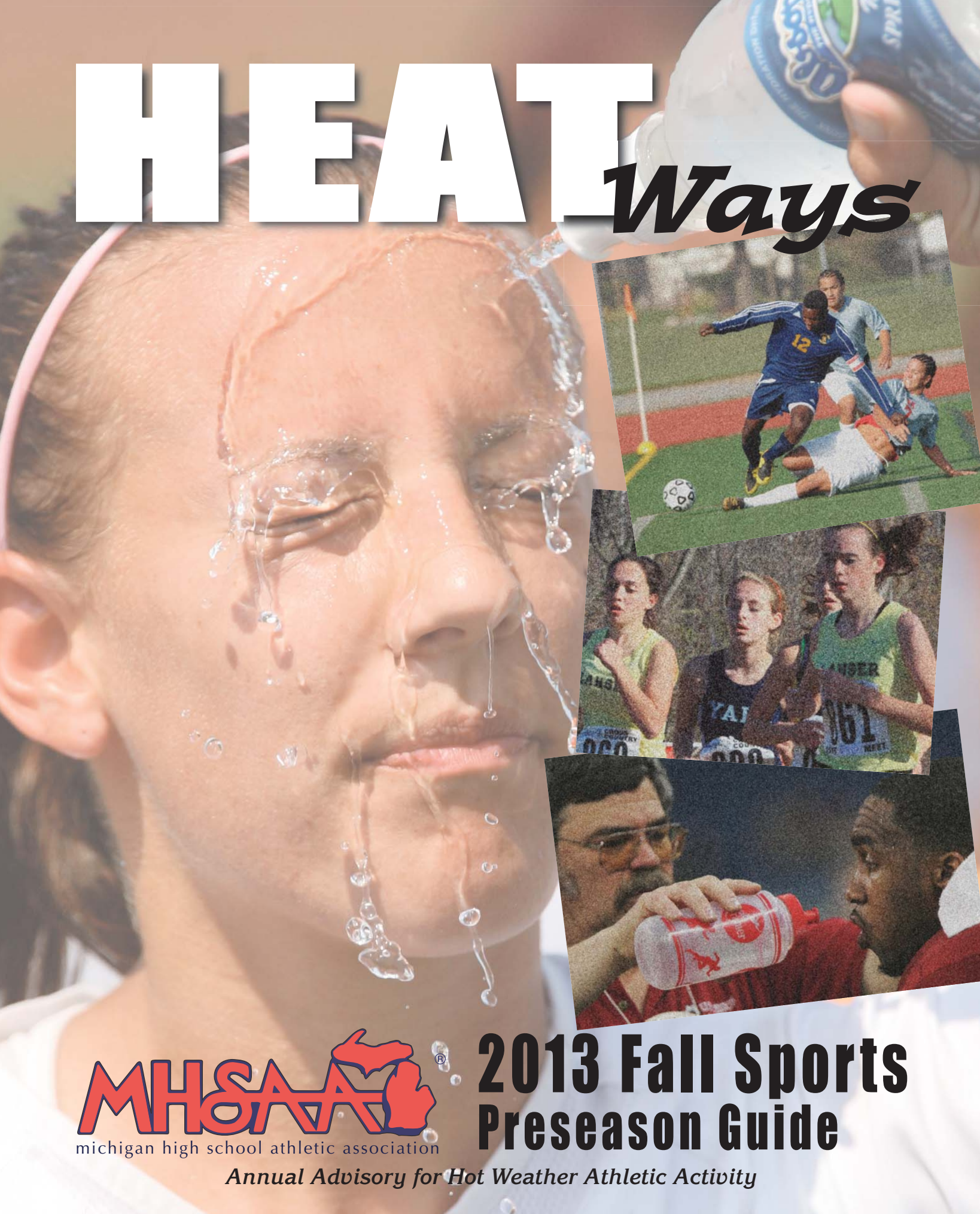


HEAT *Ways*



michigan high school athletic association

2013 Fall Sports Preseason Guide

Annual Advisory for Hot Weather Athletic Activity

2013 MHSAA Fall Sports Preseason Guide

Coaches and administrators of all fall sports should review the material below and also consider similar procedures as are detailed specifically for football that may well serve other sports. Football-specific material is found at [mhsaa.com /resources/fbalert.pdf](http://mhsaa.com/resources/fbalert.pdf)

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RESOURCE LINKS

Hydration Tips and Fluid Guidelines - Click Below

www.nfhs.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6208&libID=6229

Infectious Skin Disorders in Contact Sports - Click Below

www.nfhs.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=6208&libID=6229

NOTES AND RESOURCES

Catastrophic Insurance: Since 1970-71 the MHSAA has arranged for Catastrophic Athletic Accident Insurance Coverage for eligible participants at each member high school and all registered officials. The program is catastrophic excess accident insurance intended to help pay medical bills to administer to injuries sustained in athletic activities under MHSAA jurisdiction. Details of the coverage and claims administration for 2013-14 are posted on the Administrators page of MHSAA.com, and also can be found in the 2013-14 *Handbook*.

Summer Dead Period, Preseason Down Time: For clarifications check the MHSAA *Handbook*, or visit the Administrators page of MHSAA.com

Coaches should complete one of the brief Online Concussion Courses listed on the [Health & Safety Page](#) of MHSAA.com.



BACK TO SCHOOL – RULES MEETINGS

2013 Football/Soccer/Volleyball
Begin: July 29, 2013 — End: Sept. 9, 2013

2013 Cross Country/Golf/Tennis/Swimming
Begin: Aug. 12, 2013 — End: Sept. 13, 2013

Heat Acclimatization and Conditioning in Hot Weather

Exertional Heatstroke and Heat Illness is the leading cause of preventable deaths in high school athletics. Students participating in high-intensity, long-duration or repeated same-day sports practices and training activities during the summer months or other hot-weather days are at greatest risk.

The Michigan High School Athletic Association recognizes that there are unique and variable climates in Michigan and that there is no “one-size-fits-all” optimal acclimatization plan. However, we strongly encourage member schools to incorporate all of the fundamentals into any heat acclimatization plan.

Exertional Heatstroke and Heat Exhaustion is Preventable

Heat Acclimatization Safety Priorities:

- Recognize that exertional heatstroke is the leading preventable cause of death among high school athletes
- Know the importance of a formal Pre-Season heat acclimatization plan
- Know the importance of having and implementing a specific hydration plan, keeping athletes well hydrated while encouraging and providing ample opportunities for regular fluid replacement

Fundamentals of a Heat Acclimatization Program

1. Physical exertion and training activities should begin slowly and continue progressively. An athlete cannot be “conditioned” in a period of only two to three weeks.
 - A. Begin with shorter, less intense practices and training activities, with longer recovery intervals between bouts of activity.
 - B. Minimize protective gear (helmets only, no shoulder pads) during first several practices, and introduce additional uniform and protective gear progressively over successive days.
 - C. Emphasize instruction over conditioning during the first several practices.

Rationale: The majority of heat-related deaths happen during the first few days of practice, usually prompted by doing too much, too soon, and in some cases with too much protective gear on too early in the season (wearing helmet, shoulder pads, pants and other protective gear). Players must be allowed the time to adapt safely to the environment, intensity, duration, and uniform/equipment.

2. Keep each athlete’s individual level of conditioning and medical status in mind and adjust activity accordingly. These factors directly affect exertional heat illness risk.

Rationale: Athletes begin each season’s practices and training activities at varying levels of physical fitness and varying levels of risk for exertional heat illness. For example, there is an increased risk if the athlete is obese, unfit, has been recently ill, has a previous history of exertional heat illness, or has Sick Cell Trait.

3. Adjust intensity (lower) and rest breaks (increase frequency/duration), and consider reducing uniform and protective equipment, while being sure to monitor all players more closely as conditions are increasingly warm/humid, especially if there is a change in weather from the previous few days.

Rationale: Coaches must be prepared to immediately adjust for changing weather conditions, while recognizing that tolerance to physical activity decreases and exertional heat illness risk increases, as the heat and/or humidity rise. Accordingly, it is imperative to adjust practices to maintain safety and performance.

4. Athletes must begin practices and training activities adequately hydrated.

Rationale: While proper hydration alone will not necessarily prevent exertional heat illness, it will decrease risk.

5. Recognize early signs of distress and developing exertional heat illness, and promptly adjust activity and treat appropriately. First aid should not be delayed!

Rationale: An athlete will often show early signs and/or symptoms of developing exertional heat illness. If these signs and symptoms are promptly recognized and the athlete is appropriately treated, serious injury can be averted and the athlete can often be treated, rested and returned to activity when the signs and symptoms have resolved.

6. Recognize more serious signs of exertional heat illness (clumsiness, stumbling, collapse, obvious behavioral changes and/or other central nervous system problems), immediately stop activity and promptly seek medical attention by activating the Emergency Medical System. On-site rapid cooling should begin immediately.

Rationale: Immediate medical treatment and prompt rapid cooling can prevent death or minimize further injury in the athlete with EHS. Ideally, pools or tubs of ice water to be used for rapid cooling of athletes should be available on-site and personnel should be trained and practiced in using these facilities for rapid cooling. Ice water baths are the preferred method for rapid cooling, however, if ice water pools or tubs are not available, then applying ice packs to the neck, axillae, and groin and rotating ice water-soaked towels to all other areas of the body can be effective in cooling an affected athlete.

7. An Emergency Action Plan with clearly defined written and practiced protocols should be developed and in place ahead of time.

Rationale: An effective emergency action plan (EAP) should be in place in case of any emergency, as a prompt and appropriate response in any emergency situation can save a life. The EAP should be designed and practiced to address all teams (freshman, junior varsity, varsity) and all practice and game sites.

References:

American Academy of Pediatrics. Policy Statement—Climatic Heat Stress and Exercising Children and Adolescents. *Pediatrics*. 2011;128(3):e741-7.

Andersen JC, Courson RW, Kleiner DM, McLoda TA. National Athletic Trainers’ Association Position Statement: Emergency Planning in Athletics. *Journal of Athletic Training*. 2002;37:99-104.

Casa DJ, et al. National Athletic Trainers’ Association Position Statement: Preventing Sudden Death in Sports. *Journal of Athletic Training* 2012;47(1):96-118.

Casa DJ, Csillan D. Inter-Association Task Force for Preseason Secondary School Athletics. Preseason Heat-acclimatization Guidelines for Secondary School Athletics. *Journal of Athletic Training*. 2009;44:332-3.

Approved April 2012

DISCLAIMER – NFHS Position Statements and Guidelines

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.

MHSAA Model Policy for Managing Heat and Humidity

Adopted March 22, 2013

1. **Thirty minutes prior to the start of an activity, and again 60 minutes after the start of that activity**, take temperature and humidity readings at the site of the activity. Using a digital sling psychrometer is recommended. Record the readings in writing and maintain the information in files of school administration. Each school is to designate whose duties these are: generally the athletic director, head coach or certified athletic trainer.
2. **Factor the temperature and humidity into the Heat Index Calculator and Chart** to determine the Heat Index. If a digital sling psychrometer is being used, the calculation is automatic.

3. If the Heat Index is below 95 degrees:

All Sports

- o Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire.
- o Optional water breaks every 30 minutes for 10 minutes in duration.
- o Ice-down towels for cooling.
- o Watch/monitor athletes carefully for necessary action.

If Heat Index is 95 to 99 degrees:

All Sports —

- o Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire.
- o Optional water breaks every 30 minutes for 10 minutes in duration.
- o Ice-down towels for cooling.
- o Watch/monitor athletes carefully for necessary action.

Contact sports and activities with additional equipment:

- o Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire.
- o Optional water breaks every 30 minutes for 10 minutes in duration.
- o Ice-down towels for cooling.
- o Watch/monitor athletes carefully for necessary action.

Contact sports and activities with additional equipment:

- o Helmets and other possible equipment removed while not involved in contact.

- **Reduce time of outside activity. Consider postponing practice to later in the day.**

- **Recheck temperature and humidity every 30 minutes to monitor for increased Heat Index.**

If Heat Index is 99 to 104 degrees:

All Sports —

- o Provide ample amounts of water. This means that water should always be available and athletes should be able to take in as much water as they desire.
- o Mandatory water breaks every 30 minutes for 10 minutes in duration.
- o Ice-down towels for cooling.
- o Watch/monitor athletes carefully for necessary action.
- o Alter uniform by removing items if possible.
- o Allow for changes to dry t-shirts and shorts.
- o Reduce time of outside activity as well as indoor activity if air conditioning is unavailable.
- o Postpone practice to later in the day.

Contact sports and activities with additional equipment:

- o Helmets and other possible equipment removed if not involved in contact or necessary for safety. If necessary for safety, suspend activity.
- **Recheck temperature and humidity every 30 minutes to monitor for increased Heat Index.**

If Heat Index above 104 degrees:

All Sports

- o **Stop all outside activity in practice and/or play, and stop all inside activity if air conditioning is unavailable.**

Note: When the temperature is below 80 degrees there is no combination of heat and humidity that will result in need to curtail activity.

— See Next page for Heat Index Chart —

Heat Index FAQ

Note: By its very nature, a “model” policy is intended to be flexible so that when it is being considered for local adoption, local authorities can factor in the details of their unique facilities and schedules as they prescribe the manner in which this heat and humidity management policy is implemented.

Remember that even with rigorous implementation of this policy, the need remains for supervising staff to provide for adequate hydration and rest breaks at all times and places, and to arrange for cooling devices and strategies that respond to heat illness emergencies.

1. Where do I find a device that automatically provides the heat index?

A Most health care professionals with whom schools work know about these devices, called digital psychrometers, and know where to obtain them. Many medical supply stores carry the devices. Even Home Depot does.

If you Google “Devices for measuring heat and humidity,” you will find many options.

The MHSAA has established a relationship with School Health which has provided the ac-companying information sheet. Place orders by phone, 866-323-5465, or by fax, 800-235-1305, or by email, orders@schoolhealth.com, or via Web, sportshealth.com. School Health accepts credit card or PO payments or can invoice schools. Discount pricing will be received by referring to the reference code for the particular item, MK90727 (Heat Watch) or MK61253.

–SEE NEXT PAGE FOR FURTHER DETAILS–

2. If I don't have a digital psychrometer that provides the heat index calculation, how do I get readings for temperature and relative humidity, and how do I calculate the heat index?

A A thermometer and humidity gauge will usually be necessary. Get each reading and then refer to the “Heat Index Calculation and Chart” to determine the heat index.

3. Are there cell phone applications that can be utilized?

A There are cell phone applications that can do the calculations. There are also applications that can provide the heat index at certain locations, but those locations are unlikely to be close enough to the actual site of the practice or event to be useful.

Readings will differ indoors and out, on hills or in valleys, on natural grass or artificial turf. These and other variables make it necessary for the person designated to record and file the readings to actually take those readings 30 minutes before and 60 minutes into the activity.

4. Where in the school should the readings be filed?

A They should be placed on a regular and frequent basis in files maintained in the office of the superintendent, principal or athletic director. Those files may be electronic. Coaches might record the readings on their written practice plans which schools should then keep on file.

5. Are there any MHSAA sports or any venues for which the policy is inapplicable?

A Every practice and competition in every sport at every venue is intended to be subject to the policy when the temperature at the venue nears 80°F.

In the case of swimming & diving, the risk is greater to spectators than participants, who compete in water that may be cooler than the air temperature.

While most attention will be given to outdoor sports, do not neglect conditions at indoor venues, such as volleyball in facilities that are not air conditioned.

While most attention will be given to early fall and late spring activities, do not neglect conditions for **winter** sports, such as in the wrestling room.

Sometimes conditions will vary for different aspects of the same competition. For example, one tennis court may be in the shade, and another out of the wind. One part of a cross country course may be much hotter or more humid than other parts. The best course of action is to take the heat index at the place of the most severe conditions.

6. Who and what control when there are multiple devices and different heat index readings at a venue?

A Host management makes the decisions to suspend and to resume activity using those devices or systems usually relied upon at that venue.

7. After a heat index reading that would require delay or suspension of activities, is there a period of time that must pass before activities resume?

A No. Readings can be taken continuously during the delay or suspension of activities. When relief from high temperature and humidity is unlikely, local authorities should be implementing previously-considered contingency plans to relocate events to different venues or reschedule events to different days or times.

8. May a school decide to implement this model policy for practices but not regular season contests?

A Yes. However, MHSAA tournament managers will follow this policy for MHSAA tournament contests.

9. When the temperature at the site of the activity is less than 80°, do we need to check and record the heat and humidity?

A No. When the temperature is less than 80°, there is no combination of heat and humidity that will result in a need to curtail activity.

However, if the temperature is near 80°, it would be prudent to record that temperature in the usual way and to have a digital psychrometer programmed to alert you to increasing temperature or a heat index that prescribes precautions.

10. The Model Policy calls for a heat index reading 30 minutes before and 60 minutes into an activity. How frequently thereafter should the heat index be checked for half-day or day-long events?

A A reasonable expectation is to continue to check every 60 minutes while the temperature is 80°F or higher.



Managing HEAT & HUMIDITY



Be Prepared for the HEAT with Temp & Humidity Monitors

According to the new Managing Heat & Humidity Model Policy* from MHSAA a temperature and humidity monitor is recommended to take accurate and automatic calculations.



Heat & Humidity Monitor

Combines a professional level stopwatch with temperature, humidity and heat index readings. User settable heat index alarm. Stopwatch with 1/100 second resolution. Lap counter with 30 lap/split memory. Countdown timer, programmable alarm and calendar mode.

.....MK90727 \$37.42 ea.**



Precision Heat Index Instrument

Displays heat index, temperature, humidity and dew point. Danger icon has an audible beep when heat index becomes potentially dangerous.

- Extremely high accuracy & super fast response
- Large digital display
- Min/max memory storage
- Data hold
- Reset feature & auto power off
- Low battery indicator
- Pocket clip on back
- Microprocessor based design
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- Includes battery and full instructions

.....MK61253 \$78.64 ea.**



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*<http://www.mhsaa.com/Portals/0/Documents/health%20safety/heathumiditypolicy.pdf>

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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 appears in all National Federation sports rule books, reflects a strengthening of rules regarding the safety of athletes suspected of having a concussion. This language reflects an increasing focus on safety and acknowledges 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. 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 professional 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 activity.
 - 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 activity 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 enter 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 which they enter 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.

MHSAA Return to Competition Form



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 activity 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 activity 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 activity (may **not** return to practice or competition on the same day as the injury).

COMMENT: _____

PHYSICIAN'S SIGNATURE (Must be MD or DO)

DATE: _____

PHYSICIAN'S NAME (Printed): _____

Copies to: Team Coach and Athletic Director

Duplicate as Needed

Michigan High School Athletic Association, 1661 Ramblewood Drive, East Lansing, MI 48823