

# SPORTS MEDICINE

August 1, 2023

## 1. CONCUSSION REGULATIONS - Implementation of State Law and NFHS Playing Rules Related to Concussion

It is important for all individuals involved in interscholastic athletics to recognize the potential for catastrophic injury and even death from concussions. Thus it is extremely important that each coach, administrator, contest official and medical support personnel review their responsibilities in protecting students. Further both students and parents have responsibilities in this area as well.

**Note:** It has always been the ultimate responsibility of the coaching staff, in all sports, to ensure that students are only put into practice or contests if they are physically capable of performing. However, all individuals involved in the conduct of interscholastic competition have responsibilities in this endeavor.

In January 2011, the OHSAA Board of Directors adopted a sports regulation which incorporated the National Federation of State High School Associations (NFHS) playing rules related to concussion recognition and management. On April 26, 2013, legislation adopted by Ohio's General Assembly on concussion and head injuries in youth sports became effective. On February 14, 2013, the OHSAA Board of Directors mandated that these regulations become effective on April 26, 2013, for the remainder of the spring sports season and thereafter. This OHSAA regulation, as amended to incorporate this recent legislation, now reads:

Any student, while practicing for or competing in an interscholastic contest, who exhibits signs, symptoms or behaviors consistent with having sustained a concussion or head injury (such as loss of consciousness, headache, dizziness, confusion or balance problems) shall be immediately removed from the practice or contest by either of the following:

- a. The individual who is serving as the student's coach during that practice or competition.
- b. An individual who is serving as a contest official or referee during that practice or competition.

### 1.2) Return to Play Protocol

If a student is removed from practice or competition due to a suspected concussion or head injury, the coach or referee who removes the student shall not permit the student, **ON THE SAME DAY THE STUDENT IS REMOVED**, to return to that practice or competition or to participate in any other practice or competition for which the coach or contest official is responsible. Thereafter, which means no earlier than the next day, the coach or contest officials shall not permit the student to return to practice or competition until both of the following conditions are satisfied:

#### 1.21) The student's condition is assessed by either of the following:

- a. A physician, who is a person authorized under Chapter 4731 of the Ohio Revised Code (OCR) to practice medicine and surgery or osteopathic medicine or surgery (M.D. or D.O.)
- b. Any other licensed health care provider that the school district board of education or other governing authority of a chartered or non-chartered nonpublic school, authorizes to assess the student who has been removed from practice or competition.

#### 1.22) The student receives **written authorization** that it is safe for the student to return to practice or competition from a physician or other licensed health care provider authorized to grant the clearance. Go to the "Sports Medicine" Section of the OHSAA website (OHSAA.org) to retrieve the OHSAA's Medical Authorization to Return To Play (RTP) form.

A school district board of education or governing authority of a chartered or non-chartered nonpublic school may authorize a licensed health care provider who is not a physician to make an assessment and grant authorization for a student to return to participation *only* if the provider is acting in accordance with one of the following as applicable to the provider's authority to practice in Ohio:

- a. In consultation with a physician;
- b. Pursuant to the referral of a physician;
- c. In collaboration with a physician, or
- d. Under the supervision of a physician.

**Note:** A physician or other licensed health care provider who makes an assessment or grants clearance for a student to return to participation may be a volunteer.

### 1.3) Coaches Requirements

All coaches, paid and volunteer, must possess a current Department of Education-issued Pupil Activity Program/Coaching Permit. When renewing this permit, the coach will be required to complete an online concussion education course as stipulated in the section entitled **Approved Online Concussion Education Course**. This course is valid for three years and expires at the time the Pupil Activity Program/Coaching Permit expires.

### 1.4) Contest Requirements

**Legislation signed into law by the Governor provides that no school "shall permit" an individual to referee interscholastic athletic contests unless the individual holds a Pupil Activity Program/Coaching Permit or has successfully completed within the last three years a training program in concussion recognition.** Therefore, all OHSAA

licensed officials shall possess either a current Department of Education-issued Pupil Activity Program/Coaching Permit or **show evidence of completing an approved online concussion education course** as stipulated in the section entitled **Approved Online Concussion Education Courses**. This course is valid for three years from the date of completion and must be entered on the official's *myOHSAA* profile.

#### 1.5) Student and Parent Requirements

All students and their parents or legal guardians shall review and sign the "Concussion Information Sheet" which has been developed by the Ohio Department of Health and which shall be distributed by OHSAA member schools to all students and their parents prior to each sports season. Students and parents shall review and sign this form each year and should keep a copy of the form. In addition, parents and students are encouraged to complete an approved concussion education course.

#### 1.6) Approved Online Concussion Education Courses

**The following free online training courses have been approved by the Ohio Department of Health for coaches and contest officials:**

**National Federation of State High School Associations Concussion in Sports:**

<https://nfhslearn.com/courses/concussion-in-sports-2>

This free online course is available through the NFHS. Complete a brief registration form to take the course. In addition:

- Click the "order course" button to access the free concussion course. Continue following prompts. Although it may look like you will be charged for the course, there is no cost.
- Once you've completed "Checkout," you will be able to take the free online course.
- When you have completed and passed the course, you have the option of printing a certificate of completion.
- All Ohio Officials should select this option to print, retain a copy of the certificate and carry it with them to all contests.

**Centers for Disease Control and Prevention Heads Up Concussion in Youth Sports Online Training Program:**

<https://www.cdc.gov/headsup/youthsports/training/index.html>

**Note:** Both courses offer a "certificate of completion" upon successful passage. The **NFHS course** allows organizations to search for and track coaches and other individuals such as contest officials who have completed the course, while the CDC course does not.

**Coaches' Tool Chest:**

<https://coachestoolchest.com>

Coaches' Tool Chest provides annual training that meets the concussion training requirement and other training requirements necessary for a coach to obtain or maintain their required Pupil Activity Permit.

#### 1.7) Frequently Asked Questions

##### 1.71) *What are the "signs, symptoms, or behaviors consistent with a concussion?"*

The National Federation rule lists some of the signs, symptoms and behaviors consistent with a concussion. The U.S. Department of Health and Human Services, Centers for Disease Control and Prevention has published the following list of signs, symptoms and behaviors that are consistent with a concussion:

**SIGNS OBSERVED BY OTHERS**

- Appears dazed or stunned
- Is confused about assignment
- Forgets plays
- Is unsure of game score or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness
- Shows behavior or personality changes
- Cannot recall events prior to hit
- Cannot recall events after 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

##### 1.72) *Who is responsible for administering this rule?*

All individuals who have responsibilities and duties in the interscholastic athletics environment are responsible: coaches, contest officials, administrators, students, parents and medical personnel.

##### 1.73) *What is the role of coaches in administering this rule?*

- Coaches are to review and know the signs and symptoms of concussion and to prohibit any athlete who displays these signs or symptoms from participating in a practice or a contest.

- Coaches are not medical professionals and have no authority to determine whether or not a student has sustained a concussion. The coach is responsible for insuring that the student’s parents are notified and the student is referred to a medical professional.
  - Coaches shall be aware that any student removed from a practice or a contest due to a suspected concussion or head injury shall not return to participation on the same day as the removal.
  - Coaches shall possess a current Pupil Activity Program/Coaching Permit and shall take one of the approved online concussion courses upon renewal of the permit.
- 1.74) *What is the role of contest officials in administering the rule?*
- Officials are to review and know the signs and symptoms of concussion and to direct immediate removal of any student who displays these signs or symptoms. When informing the head coach about removal of an athlete, the official shall be accompanied by another (second) official if possible.
  - An official shall not permit the athlete who has been removed under this rule to return to competition that same day.
  - If a contest official is aware that a student has been permitted to return to competition on the same day as removal, that official shall immediately stop play and remove that student from competition and report the incident to the OHSAA.
  - Note that officials are not medical professionals and have no authority to determine whether or not a student has sustained a concussion. The official is responsible for directing removal when he or she observes signs and symptoms that may indicate a student is concussed.
  - All Officials shall possess either a current Pupil Activity Program/Coaching Permit or shall complete one of the online concussion courses which are valid for three years from the date of completion.
  - At initial licensure or renewal of the OHSAA officiating permit, the official shall indicate that he or she has either a current Pupil Activity Program/Coaching Permit or has completed one of the approved online concussion courses.
  - All officials should carry with them evidence of completion of one of these options at all times while officiating a contest.
  - Officials are required to submit to the OHSAA the “OHSAA Concussion Report” within 48 hours whenever a student has been removed from a contest under this regulation.
- 1.75) *What are the expectations of student-athletes in concussion management?*
- While all individuals involved in the interscholastic athletics program have a responsibility to recognize the potential for catastrophic injury and even death from concussions, it is also the responsibility of student-athletes to recognize the signs, symptoms and behaviors consistent with a concussion.
  - Student-athletes who exhibit symptoms such as loss of consciousness, headache, dizziness, confusion or balance problems, have the responsibility to report these immediately to their coach and/or health care professional. Teammates also share the responsibility to report these symptoms when they are exhibited by a fellow student-athlete.
  - Student-athletes shall review and sign, on an annual basis, along with their parents or legal guardians, the Ohio Department of Health’s Concussion Information Sheet found on the OHSAA website and at this link: [https://ohsaaweb.blob.core.windows.net/files/Sports-Medicine/PPE\\_2020-21.pdf](https://ohsaaweb.blob.core.windows.net/files/Sports-Medicine/PPE_2020-21.pdf)
- 1.76) *Who decides if an athlete has not been concussed and/or who has recovered from a concussion?*
- **Only** an M.D. (Medical Doctor), D.O. (Doctor of Osteopathy), or another health care provider approved by the school’s Board of Education or other governing body who is acting in accordance with one of the following as applicable to the provider’s authority to practice in Ohio:
    - a. In consultation with a physician;
    - b. Pursuant to the referral of a physician;
    - c. In collaboration with a physician;
    - d. Under the supervision of a physician is empowered to make the on-site determination that an athlete has **not** received a concussion. **Even if that determination has been made, however, the student may not return to practice or competition on the same day he/she has been removed from a practice or competition** (see No. 7 below).
  - If any one of these physicians or authorized medical providers has answered that “yes” there has been a concussion, that decision is final.
- 1.77) *Can an athlete return to play on the same day as he/she has been removed from a practice or competition for a suspected concussion?*
- No, under no circumstances can that athlete return to play that day.
  - No coach or contest official shall allow a student to return to practice or to competition on any day after the

initial removal until that student has been assessed and cleared for return with **written authorization** by a physician or licensed health care provider authorized by the school.

- If the event continues over multiple days, then the designated event physician has ultimate authority over return to play decisions.

1.78) *Once the day has concluded, who can issue authorization to return to practice/competition in the sport for a student who has diagnosed with a concussion?*

- Once a concussion has been diagnosed by a physician or other approved health care provider, only a physician or approved provider can authorize subsequent Return To Play (RTP), and such authorization shall be in writing to the administration of the school. This written **RTP authorization shall be kept at the school indefinitely** as a part of that student’s permanent record. Go to the “Sports Medicine” section of the OHSAA website (OHSAA.org) to access the OHSAA “Medical Authorization to Return to Play” Form.
- School administration shall then notify the coach as to the permission to return to practice or play.

1.79) *What should be done after the student is cleared by an appropriate health care professional?*

- After a clearance has been issued, the student’s actual return to practice and play should follow a graduated protocol.
- The National Federation of State High School Associations has included the following graduated protocol in its Suggested Guidelines for Management of Concussion in Sports: (**Note:** This is simply a suggested protocol. The appropriate health care professional who issues the clearance may wish to establish a different graduated protocol.)

1.8) NFHS Suggested Medical Clearance Return To Play Protocol

- No exertional activity until asymptomatic.
- When the athlete appears clear, begin low-impact activity such as walking, stationary bike, etc.
- Initiate aerobic activity fundamental to specific sport such as running or skating, and may also begin progressive strength training activities.
- Begin non-contact skill drills specific to sport such as dribbling, fielding, batting, etc.
- Full contact in practice setting.
- Game play/competition.
  - Athlete must remain asymptomatic to progress to the next level. (It is often suggested that an athlete not be allowed to progress more than one level per day.)
  - If symptoms recur, athlete must return to previous level and should be reevaluated by an appropriate health care professional.
  - Medical check should occur before contact. (Final written clearance from the medical professional shall be obtained before the athlete engages in any unrestricted or full contact activity.)

1.9) Quick Links From The Ohio Department Of Health

**Information for Coaches, Officials, Parents and Students, Plus Additional Resources –**

<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/child-injury-Prevention/youthconcussions/>

**Ohio’s Return to Play Law –**

<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/child-injury-prevention/resources/rtp-law>

1.10) Additional Concussion Resources

**Nationwide Children’s Hospital – Concussion Information Toolkit**

<https://www.nationwidechildrens.org/specialties/concussion-clinic/concussion-toolkit>

**CDC Materials on Returning to School for Parents, School Nurses and Educators**

<https://www.cdc.gov/headsup/schools/index.html>

## 2. SUDDEN CARDIAC ARREST REGULATIONS

Ohio law requires additional coaching requirements for all interscholastic coaches (paid and volunteer) and new educational standards for parents and student-athletes regarding Sudden Cardiac Arrest. This law, known as Lindsay’s Law, became effective beginning with the 2017-18 school year.

The OHSAA has collaborated with the Ohio Departments of Health and Education, along with other major Ohio healthcare organizations and the Ohio Chapter of the American College of Cardiology, to provide education that is relevant and easily accessible so that interscholastic coaches and the parents of our student-athletes can come into compliance with the statute.

With the leadership provided by ODH, ODE, the Ohio Chapter of the American College of Cardiology and other major Ohio healthcare organizations, we have developed our own “Ohio” materials to be used to comply with this requirement. The materials include a short video for parents, which is posted to the ODH, ODE and the OHSAA (OHSAA.org) websites; an informational handout and a sign-off form (much like the current Concussion Form) which must be signed by parents and student-athletes and is included

in the package of consent forms found in the OHSAA PPE and the paper forms; and a training video and informational handout for coaches which is posted on the ODE website and includes a completion certificate for verification. Additionally, Coaches' Tool Chest (<https://coachestoolchest.com/>) offers an updated and approved Sudden Cardiac Arrest course that includes the requirements to satisfy Ohio's Lindsay's Law mandates.

The videos can be assessed through the OHSAA website (OHSAA.org) under the "Sports Medicine" section. Likewise, the educational materials for parents and students, which include a short memo and video, and the sign-off forms for parents and students, are also available on the OHSAA website (OHSAA.org) under the "Sports Medicine" section.

It is strongly recommended that each member high school in the state have at least one functional automated external defibrillator (AED) on site at the school and/or facility at all times and easily accessible during any school related function, including athletic practices, contests and/or other events, for use during emergencies. A person or entity that acquires an AED shall comply with all regulations governing the placement within a facility of an AED. AEDs are to be made available under the advice and consent of a physician by individuals with proper training and certification.

#### AED Use and Location Recommendations:

- a. All Athletic Trainers, coaches, administrators and any other school personnel should have access to an AED on the school property.
- b. It is recommended that institutions sponsoring athletic events and/or activities have an AED on site, or access to one, at each athletic venue for practices, contests or other athletic events.
- c. In the event of cardiac arrest, the Emergency Action Plan should be activated, AED retrieved and EMS activated, simultaneously.
- d. It is recommended that an AED should be located within two minutes (American Heart Association) of the location and venue of any athletic activity and available at any time.
- e. The AED should be stored in a safe and accessible location and should be well marked, publicized and known.
- f. AEDs should be inspected to ensure they are in proper working order. This includes making sure the batteries are charged and wires and electrodes are in good condition.

**Note:** As of this printing, pending state law may modify this recommendation to make it a requirement. If a change occurs, the OHSAA will share updates with the membership.

### 3. HEAT ACCLIMATIZATION AND EXERTIONAL HEAT ILLNESS PREVENTION

- 3.1) The following information should be reviewed with coaching and sports medicine staff prior to any interscholastic practice this August. Please remember that there are four OHSAA sports that have a required acclimatization period prior to the commencing of any contests or physical contact, which is the case for football. The other sports are boys and girls cross country and 7-8th grade track and field, which require a minimum of 10 days of interscholastic practice prior to any competition for a student. The following is the regulation that addresses the mandatory five-day period in football.
- 3.2) Five Days of Acclimatization Required — Acclimatization is a period of time when players can become accustomed to the heat and humidity. Health professionals recommend at least a five-day period. All football candidates must participate in five days of pre-season, non-contact acclimatization prior to any physical contact. No pads may be worn on the first two days. Shorts, helmets, shoes may be worn. Shoulder pads may be added on day three and four, but no contact is permitted. Full equipment may be worn on the fifth day, but contact is prohibited. Candidates reporting late must participate in five days of non-contact acclimatization. This rule applies to all school teams from grades 7-12.
- 3.3) All coaching and medical staff personnel shall observe the following precautions for **all sports competed outdoors and/or in a hot, humid environment:**
  - 3.31) Stress to participants the importance of properly hydrating themselves during the day leading up to the contest, and also to drink 8-to-12 ounces of water or sport drinks 20 minutes prior to the contest. This practice can help prevent problems during practice and contests.
  - 3.32) Schools should have unlimited amounts of water and sport drinks on hand during a contest, and coaches in team sports should be prepared to play a lot of players rather than just the starters.
  - 3.33) Contest officials are permitted to establish predetermined breaks during a contest, such as halfway through each period. At that time players can drink water and remove their equipment, which should also take place at halftime (the more skin that is exposed, the more cooling that can take place). This provision applies to all sports.
  - 3.34) NFHS football playing rules allow the referee to shorten periods per mutual agreement by the opposing coaches. In addition, by mutual agreement a game may be terminated at any time.
  - 3.35) Contest managers are advised to monitor conditions for others affiliated with the contest, like cheerleaders, band members, coaches, officials and especially spectators.
  - 3.36) In football, if schools decide NOT to play a contest, it becomes an open date for both. If one school desires to play but the other does not, there are no forfeits involved. Again, it would become an open date for both schools. However, schools do have the option to reschedule contests, and OHSAA regulations do permit schools to play more than one contest per week. There also are no OHSAA regulations that prohibit games from being played on Sundays. The same concepts apply to all other OHSAA sports.

3.37) Please review the OHSAA General Sports Regulation 30 on inclement weather and lightning. In short, upon the first indication that thunderstorm development is within 10 miles of the game site, the activity shall be suspended until 30 minutes after the storm has left this 10-mile zone. Individuals should move to a safe area until the storm has moved away.

3.38) Know both the Temperature and Humidity. The greater the humidity, the more difficult it is for the body to cool itself. Test the air prior to practice or a game using a wet bulb, globe, temperature index (WBGT index) which is based on the combined effects of air temperature, relative humidity, radiant heat and air movement.

The wet bulb temperature should be measured prior to practice, every 30 minutes at minimum during practice, and the intensity and duration of practice adjusted accordingly. Recommendations are as follows:

WBGT	Recommendation
<79.7°F	Normal activities Three separate 3 minute breaks per hour
79.8-84.6°F	Three separate 4 minute breaks per hour Helmets and other equipment should be removed when the athlete is not directly involved with the competition, drill or practice and it is not otherwise required
84.7-87.6°F	Maximum practice time of 2 hours Four separate 4 minute breaks per hour FB: Limit to helmet, shoulder pads, and shorts during practice Considering postponing practice to later in the day Allow athletes to change to dry shirts and shorts at defined intervals
87.8-89.7°F	Maximum of 1 hour of training with four separate 5 minute breaks in that hour No additional conditioning allowed FB/LAX: No helmets, shoulder pads, or other equipment is permitted Consider postponing practice to later in the day Allow athletes to change to dry shirts and shorts at defined intervals
≥ 89.8°F	No outdoor workouts No indoor workouts unless air conditioned

(Reference: Grundstein et al. Regional heat safety thresholds for athletes in the contiguous United States. Appl. Geography. 2015)

3.39) The OHSAA advises careful monitoring of the weather and plans to modify training and competition including:

- Modification of equipment, if applicable to the sport;
- Allowance for more frequent rest breaks and the use of shaded areas for those breaks;
- Modification of practice time;
- Availability of water always;
- Availability of cold water immersion tubs for onsite cooling;
- If exertional heat stroke is suspected, immediate onsite cooling using cold water immersion before transport by EMS, and**
- Review and practice of the OHSAA's recommended Emergency Action Plan, "Anyone Can Save A Life," or similar plan for all sports teams with special emphasis on the heat illness section.

**Note:** It is strongly recommended that schools have cold water immersion tubs available for onsite cooling. The onsite cooling recommendation is if exertional heat stroke is suspected (core temperature greater than 105°F), the athlete be cooled immediately in cold water immersion and their core temperature reaches 102°F prior to transport by EMS. The athlete would then be removed from the cold water immersion when their core temperature reaches 102°F, if core temperature measuring devices are accessible.

Visit the OHSAA Sports Medicine webpage (<https://www.ohsaa.org/medicine>) for references on WBGT, cold water immersion and exertional heat stroke references.

#### 4. EMERGENCY ACTION PLANS

Per state law, all schools shall ensure that there is a venue specific written athletic Emergency Action Plan (EAP) in place that describes steps to be taken in the event of an emergency. It is recommended that each athletic venue has specific language. It is recommended that the following items are included, at minimum, in the EAP:

- a. List all on-site emergency equipment that may be needed in an emergency situation;
- b. Include appropriate contact information for EMS;
- c. Steps to take in event of an emergency;
- d. Map of the venue with emergency access identified;
- e. Healthcare professional who will provide medical coverage during practices, games and/or other events.

Emergency Actions Plans shall:

- a. Be rehearsed annually, at a minimum. The rehearsal shall include pertinent school staff and onsite medical providers.
- b. Be reviewed each year, at a minimum. The review shall include pertinent school staff and the local EMS provider.
- c. Be distributed to all athletics staff members, as well as healthcare professionals who will provide medical coverage during practices, games and/or other events onsite.

#### 5. TOBACCO, ALCOHOL, ILLEGAL DRUGS AND STEROIDS

##### 5.1) Tobacco/Vaping

School participants (coaches, players, trainers, managers, statisticians, scorekeepers, cheerleaders, etc.) and contest officials in an athletic contest are prohibited from using any form of tobacco or electronic cigarettes or similar devices (e.g. vaping) at the playing site of an interscholastic contest. Penalty for violation by school participants is disqualification from that contest. Violations by contest officials shall be reported to the OHSAA.

##### 5.2) Alcohol and Illegal Drugs

The sale of, the distribution of, or the consumption of alcoholic beverages or illegal drugs is not permitted at the site of any contest involving OHSAA member schools.

##### 5.3) Steroids

A student who uses anabolic steroids or other performance-enhancing drugs is ineligible for interscholastic competition until such time as medical evidence can be presented that the student's system is free of anabolic steroids or other performance-enhancing drugs.

**Note:** At its September 1998 meeting, the OHSAA Board of Directors endorsed the position statement issued by the Sports Medicine Advisory Committee of the National Federation of State High School Associations on the use of drugs, medicine and food supplements in interscholastic sports. The statement is as follows:

“School personnel and coaches should not dispense any drug, medication or food supplement except with extreme caution and in accordance with policies developed in consultation with parents, health-care professionals and senior administrative personnel of the school or school district.

“Use of any drug, medication or food supplement in a way not prescribed by the manufacturer should not be authorized or encouraged by school personnel and coaches. Even natural substances in unnatural amounts may have short-term or long-term negative health effects.

“In order to minimize health and safety risks to student-athletes, maintain ethical standards and reduce liability risks, school personnel and coaches should never supply, recommend or permit the use of any drug, medication or food supplement solely for performance-enhancing purposes.”

#### 6. ATHLETIC TRAINER SERVICES

Consistent with the American Medical Association, the American Academy of Family Practice, the American Academy of Neurology and others, it is strongly recommended that a licensed Athletic Trainer is present at all sporting events, including practices, where student-athletes are at a high risk of injury, or for contact or collision sports.

#### 7. OTHER IMPORTANT LINKS

- Ohio State Medical Association - [www.osma.org](http://www.osma.org)
- Ohio Athletic Trainers' Association - [www.oata.org](http://www.oata.org)
- Coaches' Tool Chest - [www.coachestoolchest.com](http://www.coachestoolchest.com)