

EMS ISD Athletics/Fine Arts Department Environmental Policies

Heat Policy for Outdoor Practices/Activities

Elevated temperatures can present a dangerous situation for student athletes and coaches. It is not possible to prevent all heat related illnesses in all athletes, but with reasonable precautions those situations can be mitigated. The EMS ISD athletic department, under the direction of the Athletic Director, has adopted the following policies with regards to outdoor and non-air-conditioned indoor activities. The following policies are the minimum standard, the use of more stringent policies is up to each individual head coach. Outdoor sports include but are not limited to: Football, Cross Country, Baseball, Softball, Soccer, Tennis, and Track.

Campus athletic training staff and head coaches should collaborate prior to each practice/game to discuss specific weather conditions and any modifications/restrictions for activity. Whenever possible, the head coach of any middle school or high school sport and athletic trainer should consult with each other as early as possible during an individual day in order for all concerned parties to be notified of possible changes to practice schedules/activities appropriately.

In 2023, the UIL approved **Wet Bulb Globe Temperature (WBGT)** as the recommended forecast measurement to be used to monitor environmental conditions during outdoor physical activities. WBGT estimates the effect of temperature, relative humidity, wind speed, and solar radiation using a combination of temperatures from three thermometers.

The American College of Sports Medicine has recommended WBGT guidelines that dictate modifications in activity (work: rest ratios, hydration breaks, equipment worn, length of practice) at given WBGT temperatures to prevent Exertional Heat Stroke.

EMS ISD utilizes an on-site, internet-based weather station to monitor the WBGT. Athletic trainers and/or coaches will take WBGT readings every 30 minutes during practice. The UIL policy requires any outdoor athletic and marching band contest, practice, workout, or conditioning session held in WBGT temperature of 80.0 degrees or higher to always have a rapid cooling zone on site and available at all times for full body, rapid cooling of athletes experiencing heat illness.

The below table represents modified guidelines from the American College of Sports Medicine regarding:

- The scheduling of practices at appropriate WBGT levels
- The ratio of workout time to time allotted for rest and hydration at various WBGT levels
- The WBGT levels at which activities should be terminated

Temperature	Practices	Attire	Game	Fine Arts
WBGT < 82.0	Normal Activities: Normal attire. Must provide at least three 3-minute water breaks every hour.			
WBGT 82.0 – 86.9	Use discretion for intense or prolonged exercise. Must provide at least three 4-minute water breaks every hour, preferably in the shade	Football: remove helmets when possible & during breaks	Follow Guidelines	Use discretion for intense or prolonged exercise. Must provide at least three 4-minute water breaks every hour, preferably in the shade
WBGT 87.0 – 90.0	Maximum 2-hour practice with a 5-minute water break every 20 minutes	Football: helmet, shoulder pads & shorts only during practice. Remove helmets and shoulder pads when possible XC: runners must be in sight of a coach at all times	Follow Guidelines or delay start of game	Maximum 2-hour practice with a 5-minute water break every 20 minutes. Alter attire to loose-fitting, breathable clothing.
WBGT 90.1 – 92.0	Maximum 1-hour practice with 20 min of water breaks distributed throughout practice.	Football: No equipment & no conditioning activities XC: runners be in sight of coach a at all times	Follow Guidelines or delay start of game	Maximum 1-hour practice with 20 min of water breaks distributed throughout practice. Alter attire to loose-fitting, breathable clothing.
WBGT > 92.1	No outside practice, games, or activity until a cooler WBGT is reached.			

* Values in the above chart are WBGT measurements (not temperature or heat index measurements).

* North Texas follows Class 3 guidelines based on WBGT Regional Classification

* WBGT practice guidelines and limitations do not apply to UIL competitions. Leadership will monitor WBGT conditions prior to and during the competition and make appropriate and responsible modifications as needed

Heat Illness Key Terms and Definitions

Heat Cramps

Heat cramps are painful muscle spasms that occur most commonly in the calf and abdomen, although any muscle can be involved. The occurrence of heat cramps is related to excessive loss of water and several electrolytes or ions, which are each essential elements of muscle contraction.

Heat Exhaustion

Heat exhaustion results from inadequate replacement of fluids lost through sweating (dehydration). A victim of heat exhaustion will collapse and manifest profuse sweating, pale skin, mildly elevated temperature (102 degrees), dizziness, hyperventilation, and a rapid pulse.

Heatstroke

Heatstroke is a serious life-threatening emergency. The specific cause of heatstroke is unknown but is characterized by a sudden collapse with a loss of consciousness. Other symptoms include flushed, hot skin with less sweating than would be seen with heat exhaustion, shallow breathing, a rapid strong pulse, and the most important a core temperature of (106 degree) or higher. The heatstroke victim experiences a breakdown of the thermoregulatory mechanism caused by excessively high body temperature. The body loses the ability to dissipate heat through sweating.

Dehydration

When fluid loss exceeds fluid intake into the body.

Effects of Dehydration:

- Dehydration can affect an athlete's performance in less than one hour of exercise, sooner if the athlete begins the session dehydrated.
- Dehydration of 1%-2% of body weight can negatively influence performance.
- Dehydration of greater than 3% of body weight increases an athlete's risk of heat illness (heat cramps, heat exhaustion, heat stroke)

Warning signs of dehydration:

- Thirst / Irritability
- Headache / Dizziness
- Weakness / Cramps
- Nausea / Decreased performance

Hydration Guidelines

Before exercise:

- 2-3 hours before exercise: 17-20 oz. of water or sports drink.
- 10-20 minutes before exercise: drink another 7-10 oz. of water.

During exercise:

- Drink early - even minimal dehydration compromises performance.
- Drink every 10-20 minutes, at least 7-10 oz. of water. To maintain hydration, remember to drink beyond your thirst.

After exercise:

- Within 2 hours, drink enough to replace any weight loss from exercise. Drink 20-24 oz. of water or sports drink per pound of weight loss.
- A post-recovery drink such as chocolate milk will provide enhanced rehydration

Cold Policy for Outdoor Practices/Activities

Due to the risk of hypothermia and frostbite during cold weather, the following policy has been developed to protect EMS ISD athletes, coaches, game workers, and fans. The time of 2:00pm was chosen to provide ample time to contact all appropriate people to adjust plans for practices and games, and in most cases the temperature will not increase significantly after this time of day. To maintain consistency, all temperatures will be taken from on-site, internet-based weather stations located on each high school campus.

Although excessive and prolonged exposure to cold may be an infrequent problem in Texas high school athletics, the prevention, recognition, and management of cold-related conditions are still an important consideration for coaches, administrators, and athletic trainers.

The following actions must be taken to modify activity due to cold weather conditions:

Weather Conditions	Athletics/Fine Arts Practices	Attire
Wind chill 32-35 °F with precipitation	90 minutes of total exposure with a 15 min break inside at the 45 min mark	Extremities must be covered, change to dry clothing during break
Wind chill 32-35 °F without precipitation	90 minutes of exposure	Extremities must be covered
Wind chill below 32°F with precipitation	All practice indoors	Extremities must be covered
Wind chill 25-32 °F without precipitation	90 minutes of total exposure with a 15 min break inside at the 45 min mark	Extremities must be covered
Wind chill 25 °F and below	No outside practice, games, or activity until a warmer temperature/wind chill is reached.	

Game Play Modifications:

Games/contests postponed due to cold weather will be determined on a case-by-case basis by EMS ISD Administration to ensure safety measures are considered for all participants and spectators. An outside game/contest date will be considered for rescheduling if the following occurs:

- Wind Chill is 25°F or less, with precipitation.
- Wind Chill is less than 20°F, without precipitation.

School Day Modifications:

- Cancellation - full day: No travel or practice unless approved by the athletic director, principal and/or designee.
- Early dismissal: The athletic director, principal, and/or designee must approve practice. If approved, practices should end early.

Lightning Policy for Practices/Activities

Lightning may be the most frequently encountered storm hazard endangering participants of athletic/fine arts activities each year and sometimes striking with little or no warning. It is important to be prepared and have a plan in place to take the appropriate steps to reduce the risk of lightning related injury. This policy is for those responsible or sharing duties for making decisions concerning the suspension and restarting of practices and contests based on the presence of lightning.

The policy establishes a complete description for the criteria for both the suspension and resumption of athletic activities, games, or matches.

LIGHTNING SAFETY POLICY: FOR PRACTICES AND GAMES

1. Establish a Chain of Command:
If a Licensed Athletic Trainer is on duty, he/she will assume the authority to suspend a game at any time. The Athletic Trainer will work in coordination with any of the following: Athletic Director, Game Administrator, Athletic Coordinator, and/or Administrator on duty to implement the lightning policy. The Athletic Administrator on duty and Game Administrator assume the responsibility as the spokesperson to participating teams, school administrators, game officials, and press box.
2. Establish a "Weather Watcher":
If inclement weather is observed during outdoor activity, the athletic training staff/coaches of each sport affected are responsible for actively monitoring their EMS ISD weather system text alerts.
3. Weather Monitoring:
All representatives in the Chain of Command are required to monitor local weather forecasts. All EMS ISD Coaches and Athletic Admin are equipped with a weather tracking program to monitor weather from their phone. Although the home team is responsible for each game or match, it should be noted that the athletic trainer, head coach and/or administrator is responsible for the safety and well-being of adults and students in his/her charge. If no policy is in effect at the out-of-town site, it is recommended that the EMS ISD policy be followed.
4. Safe Structures for Evacuation:
The definition of a safe structure is any fully enclosed, substantial building. Ideally, the building would have plumbing, electrical wiring, and telephone service. Safe structures would be the weight room, turf room with the rolltop doors closed, the gymnasiums, cafeterias, and fieldhouse. Shelters that would **NOT** be considered safe are baseball/softball dugouts, under football stands, and any other structure that does not meet the above definition of a safe structure. Secondary safe shelters are any vehicle with a hard metal roof (i.e., school bus). Not a convertible or a golf cart. This is not the safest place to be, but it is better

than being outdoors. Everyone in a vehicle should be instructed not to touch any metal in that vehicle when lightning is in the area. Avoid using shower facilities for safe shelter and or do not use the showers plumbing facilities during a thunderstorm.

5. Criteria for the Suspension/Resumption of Athletic Activities:

10 Mile Rule

Criteria for suspension of activities: When the lightning detector indicates lightning strikes at a range of 10 miles or less from the venue, all individuals should evacuate to a safe shelter.

Criteria for resumption of activities: Wait at least 30 minutes after the last indication of lightning in the 10-mile range before leaving the safe shelter to resume activities. This is indicated by the “All Clear Warning Area” text alert from the EMS ISD weather system.

30 Minute Rule

The thirty-minute rule can be explained in another way. A typical thunderstorm moves at the rate of approximately 25 miles per hour. Experts believe that 30 minutes allows the thunderstorm to be about 10-12 miles from the area, minimizing the probability of a nearby and therefore dangerous, lightning strike. Blue sky in the local area or a lack of rainfall is not adequate reason to breach the 30-minute return to play rule. Lightning can strike far from where it is raining, even when the clouds begin to clear and show evidence of blue sky. This situation is often referred to as the “bolt out the blue.” Each time lightning is indicated in the 10-mile range, the 30-minute clock will be reset.

Announcements During Contests/Competitions

When the contest/competition is suspended due to lightning, an announcement will be made from the press box. This announcement should include the reason for suspension, the location of safe shelters, and criteria for resuming activity. Here is a sample announcement:

Hazardous lightning has been detected in the immediate area and this sporting event/contest has been temporarily suspended. All contest participants have been designated a safe location. This suspension will last a minimum of 30 minutes. All spectators are advised to leave the stadium bleachers at this time. Stadium seating is an unsafe location for you to remain while lightning is in the immediate area. Please return to your car or “venue designated safe area” until the inclement weather has passed. Please do not remain in the stands. Thank You

6. First Aid for Lightning Strike Victims:
 - Activate local EMS
 - Ensure your own safety before venturing out into the venue to provide aid
 - Lightning victims do not "carry a charge" and are safe to touch
 - Move patients to a safe location if necessary
 - Evaluate airway, breathing, and circulation, and begin CPR if necessary.
 - Evaluate and treat for hypothermia, shock, fractures, and/or burns, if able

References

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