



ALVIN ISD HEAT GUIDELINES

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The following are the recommendations of the AISD Athletic Department in accordance with the UIL. approved **Wet Bulb Globe Temperature (WBGT)** as the recommended forecast measurement to be used to monitor environmental conditions during outdoor physical activities, to ensure the safety and well being of all participants. 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. The district will obtain its **WBGT readings via Perry Weather** by logging on to <http://dashboard.pocketperry.com> or accessing the mobile app.

- Heat Illness refers to a range of conditions that results from exposure to high temperatures; normally caused by physical exertion, inadequate hydration, and/or failure of your body to regulate its core body temperature.
- The abnormal increase in core body temperatures can range from mild and self treatable to severe and life threatening.

Outlined below are the types of Heat Illnesses along with their associated signs and symptoms and treatment.

What is Heat Illness?

Heat illness is an umbrella term used to describe a group of serious medical conditions resulting from the body's inability to cope with a particular heat load, and consists of three separate but related conditions.

Exertional Heat Stroke (EHS) is the most severe of these conditions and can result in death if not recognized and treated immediately. EHS is defined by a high core body temperature of 104°F or higher. Core temperature refers to the temperature of the internal body organs. EHS is accompanied by central nervous system dysfunction (e.g. collapse, irritability, aggressiveness, confusion, altered consciousness, etc.). EHS is a medical emergency, and can progress to multi-organ system failure leading to death. The risk of mortality or long term complications increases the longer the individual's core body temperature remains above 104°F.

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| <ul style="list-style-type: none">• Irrational behavior, irritability, emotional instability• Altered consciousness, coma• Disorientation or dizziness• Headache• Confusion or just | <ul style="list-style-type: none">• looks "out of it"• Nausea or vomiting• Diarrhea• Muscle cramps, loss of muscle function/balance, inability to walk• Collapse, staggering or sluggish feeling• Profuse sweating or | <ul style="list-style-type: none">• no sweating• Decreasing performance or weakness• Dehydration, dry mouth, thirst• Rapid pulse, low blood pressure, quick breathing |
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Treatment for Exertional Heat Stroke (EHS): Activate EMS as Exertional Heat Stroke is a medical emergency **Remember: COOL FIRST, TRANSPORT SECOND**

- Move the person to a cooler environment
- Remove excess clothing
- Cool the person rapidly using whatever methods are available, such as:
 - Placing in a full body immersion tub or use of the (TACO Method) with ice cold water
 - Spraying with cool water from a garden hose
 - Sponging with cool water
 - Placing ice packs on the armpits, groin, neck, and back
- Continue cooling efforts for 10-15 minutes to allow the body temperature to drop to 101-102°F
- Do not give the person anything to drink if they are unconscious or not fully alert

Heat Exhaustion is the inability to exercise effectively in the heat, secondary to a combination of factors including cardiovascular insufficiency, hypotension, hypoglycemia (low blood sugar), energy depletion, and central fatigue. This condition is usually associated with an elevated but safe body temperature (between 98.6 and 104°F), as well as heavy sweating and potentially signs of dehydration.

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| • Fatigue | • Pale | • Sodium Loss |
| • Fainting | • Chills | • Decreased Blood Pressure |
| • Weakness | • Diarrhea | • Decreased Muscle Coordination |
| • Vomiting | • Heavy Sweating | • Hyperventilation |
| • Dizziness/ | • Dehydration | |
| • Light-Headedness | • Irritability | |
| • Nausea | • Headache | |

Treatment for Heat Exhaustion:

- Move to cool shaded area
- Remove excess clothing
- Elevate legs
- Cool with fans, ice towels, or ice bags
- Provide fluids (water, electrolyte beverage)

Exercise-Associated Muscle Cramps are sudden, painful, involuntary muscle contractions that occur during or soon after exercise. The cause of these involuntary muscle contractions is currently unknown, but may be attributed to poor diet/hydration, lack of physical conditioning, electrolyte imbalances (*too much or too little*), or other underlying health conditions.

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| • Dehydration, thirst, sweating | • Fatigue | • A precursor to the initial onset of cramps involves muscle twitches or fasciculations. |
| • Transient (short term) muscle cramps | • Painful, involuntary muscle spasms (usually in the legs) while exercising | |

Treatment for Exercise-Associated Muscle Cramps:

- Move to cool shaded area
- Remove excess clothing
- Elevate legs
- Cool with fans, ice towels, or ice bags
- Provide fluids (water, electrolyte beverage)

General Considerations for Risk Reduction of Heat Illnesses

1. **Hydration:** Staying well-hydrated helps regulate body temperature and prevents dehydration, a key factor in heat illnesses. Drink plenty of fluids before, during, and after exposure to hot conditions. Water is usually sufficient, but in prolonged activities or extreme heat, consider sports drinks that replenish electrolytes.
2. **Acclimatization:** Gradually increase the duration and intensity of exposure to hot environments over a period of 7-14 days. Pay attention to individual tolerance levels, as acclimatization rates can vary between people.
3. **Clothing:** Wear lightweight, light-colored, and loose-fitting clothing to allow for better air circulation and heat dissipation.
4. **Environmental Control:** Create shaded areas for outdoor activities to provide relief from direct sunlight. Set up cooling stations with fans, misters, and access to cool water. Plan strenuous activities during cooler parts of the day, such as early morning or late evening.
5. **Work/Rest Cycles:** Implement regular breaks to allow the body to cool down, especially during high temperatures or intense physical activity.
6. **Education:** Educate individuals on the signs and symptoms of heat illnesses, the importance of hydration, and preventive measures.
7. **Individual Risk Factors:** Be aware of medical conditions such as heart disease, obesity, diabetes, and medications that can increase susceptibility to heat illnesses. Younger children, older adults, and those with lower fitness levels are more vulnerable to heat-related issues.
8. **Emergency Preparedness:** Ensure that individuals are trained in first aid for heat illnesses, including recognizing symptoms and administering initial treatment. Have a clear plan for responding to heat-related emergencies, including access to medical care and emergency services.
9. Rest breaks must involve unlimited hydration intake and rest without any activity involved.

Cooling Zone

- Rapid cooling zones must be available for each outdoor athletic and marching band contest, practice, workout, or conditioning session that is held in wet bulb globe temperatures of 79.7 in Class 2 or 82 in Class 3 degrees or higher. Cooling zones should be equipped to facilitate a full body immersion in ice water if an individual is experiencing heat illness and distress.
- Rapid cooling zones are required to have immediate availability of cold-water immersion tubs or tarps that can be filled with ice and water and wrapped around individuals to rapidly cool internal body temperature (TACO Method) and are encouraged to include a combination of the following options: ice sponges, towels, water misters, and shade. The presence of an employee or volunteer trained to administer cold-water immersion is recommended

Wet Bulb Globe Temperature

Wet Bulb Globe Temperature (WBGT) is a composite temperature that considers several factors such as air temperature, humidity, wind speed, and solar radiation (sun exposure) to assess the heat stress on the body in direct sunlight during outdoor activity.

- This reading has been set as the Gold standard and will be followed by Alvin ISD. A record needs to be kept on file with the recordings of the WBGT temperature associated for outside practices.
- When using an on-site WBGT Heat Stress Tracker, the instrument should be set up 30 minutes prior to practice and should be read 15 minutes prior to the start of the practice or activity. If utilizing an internet-based application (Perry Weather) the WBGT should also be checked 15 minutes before the start of practice. In both cases, WBGT readings should be taken every 30 minutes during practice.
- Outdoor activities and equipment use (football) will be determined based on the readings before and during practice.
- When the WBGT increases from one level to the next threshold during practice, responsible modifications to practice activities and equipment restrictions will take into effect the WBGT Activity Guidelines in the chart listed below.
- Practices are defined as the time period that a participant engages in a school approved sport or band conditioning related activity supervised by a coach/director. Practices are timed from when participants report to the outside practice/workout area until the participants exit the area.

Competitions

- WBGT practice guidelines and limitations do not apply to UIL competitions, but it is recommended that schools monitor WBGT conditions prior to and during the game and use appropriate emergency action plans for extreme heat/high temperature and humidity.
- Any contest played in WBGT of 80.0 degrees or higher must have a rapid cooling zone on site and available at all times to allow for full body, rapid cooling of athletes experiencing heat illness.

Communications

- Campus Staff Athletic Trainers will use the designated weather service provider, Perry Weather and Heat Stress Tracker device to discuss and notify the Head Coach/Junior High coordinators and/or coaching staff members of any extreme heat conditions via SportsYou that would initiate any phases of the AISD Heat guidelines, so they can adjust their practices accordingly.
- WBGT Temperatures will determine which phase will be followed during practices and outside activities.
- All coaches will receive a text alert or email notification by Perry Weather when the WBGT has crossed an established threshold within the monitored area.
- Coaches and directors must adopt a heat injury prevention philosophy by promoting unrestricted access to water at all times and a student-athlete should never be denied access to water.
- Rest breaks must involve unlimited hydration intake and rest without any activity involved.

Specific heat conditions will determine activity restrictions during practice according to the following:

WBGT Activity Guidelines		
Class 3	Class 2	Activity Guidelines
< 82.0	<79.7	Normal Activities - Provide at least three separate rest breaks each hour with a minimum duration of 3 min each during the workout.
82.0 - 86.9	79.7 - 84.6	Use discretion for intense or prolonged exercise; Provide at least three separate rest breaks each hour with a minimum duration of 4 min each. MANDATORY ONSITE RAPID COOLING ZONE (INCLUDING TUB OR TARP)
87.0 - 90.0	84.7 - 87.6	Maximum practice time is 2 hours; For Football: players are restricted to helmet, shoulder pads, and shorts during practice. If the WBGT rises to this level during practice, players may continue to work out wearing football pants without changing to shorts. For All Sports: Provide at least four separate rest breaks each hour with a minimum duration of 4 min each. MANDATORY ONSITE RAPID COOLING ZONE (INCLUDING TUB OR TARP)
90.1 - 92.0	87.7 - 89.7	Maximum practice time is 1 hour; For Football: No protective equipment may be worn during practice, and there may be no conditioning activities. For All Sports: There must be 20 min of rest breaks distributed throughout the hour of practice. MANDATORY ONSITE RAPID COOLING ZONE (INCLUDING TUB OR TARP)
≥92.1	≥89.8	No outdoor workouts. Delay practices until a cooler WBGT is reached.

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

Policy Enforcement

- Campus Athletic Trainer/Head Coach will monitor time of exposure at practice.

****Scrimmages/Games** - Weather conditions will be monitored throughout the event/game. Adjustments to the event will be made upon the discussion between athletic directors (if applicable), game administrator, athletic trainers, coaches, and officials at the event.

****** All coaches must have access to their phones and have the notifications from Perry weather turned ON during all practice and game times in order to closely monitor and to adhere strictly to the district's guidelines. The campus athletic director, athletic trainer, and/or campus coordinator is responsible for making sure coaches are following proper procedure.