LAKE DALLAS ISD WEATHER POLICY

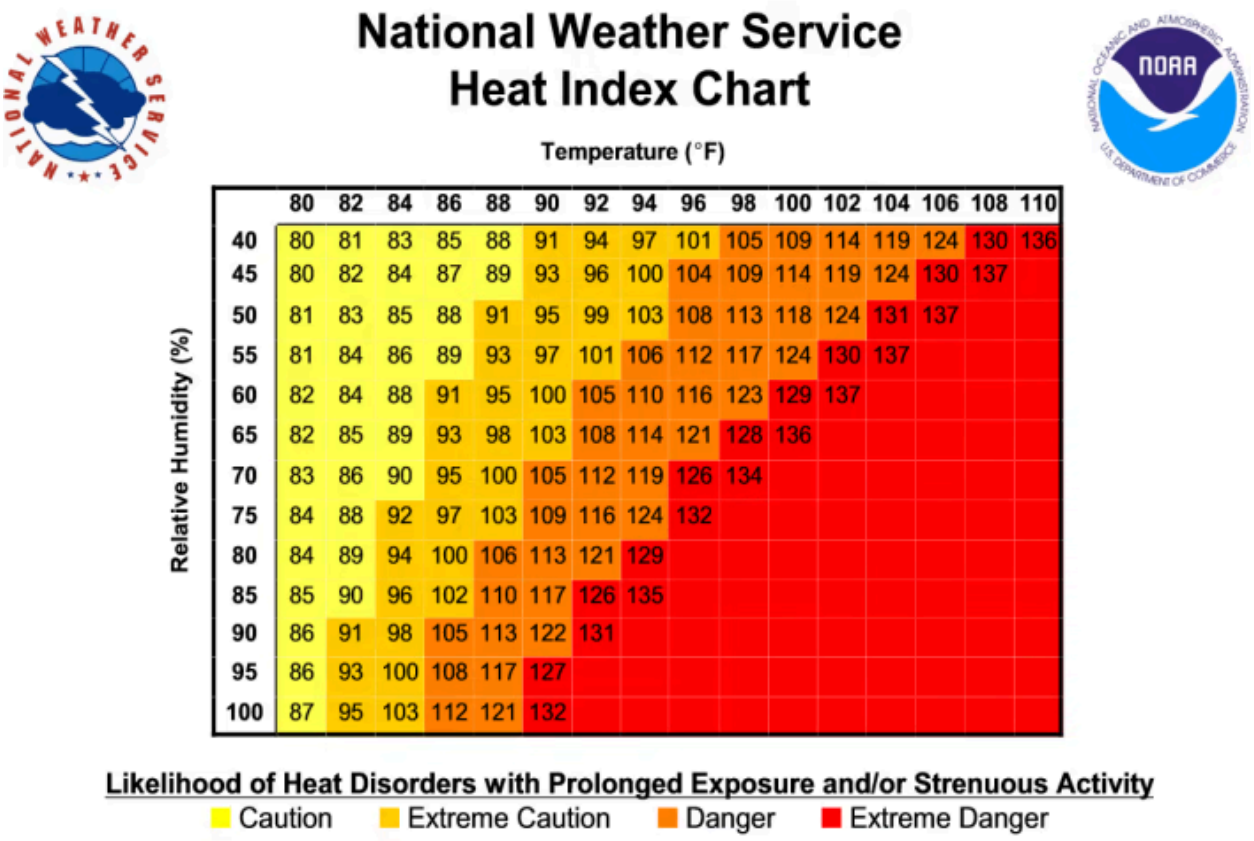
Heat Policy:

Exertional heat illness is a major concern in athletics due to the risk for sudden death caused by exertional heat stroke. Although athletes are typically the ones susceptible to developing heat illnesses, staff members, coaches, medical professionals and anyone else present during practices and competitions can also be at risk. Coaches, administrators, parents, emergency medical services and athletes should be trained by the sports medicine staff or a medical professional on the prevention and recognition of **Exertional Heat Illnesses** (NATA Position Statement).

Hot and humid environmental conditions can more readily expose an individual to exertional heat illness both indoors and outdoors especially in facilities where air conditioning is not available. (NATA Position Statement)

Heat Index:

Heat-related illnesses have many factors but can be caused when an individual is subjected to extreme temperatures and humidity and is unable to cool down (Gatorade).



Monitoring the Weather

The **Certified Athletic Trainer** assigned to provide coverage for a sporting event will work with the **Athletic Director** to monitor local weather forecasts before all outdoor events and make a decision about cancelling events before they begin.

Devices/Resources for Monitoring Heat Index/Relative Temperature

- National Weather Service Heat Index Calculator
- Perry Weather
- Wet-Bulb Globe Temperature Device

Modification/Suspension of Activity

Cat 3	Cat 2	Cat 1	Activity Guidelines
< 82.0°F <27.8°C	< 79.7°F <26.5°C	< 76.1°F <24.5°C	Normal Activities – Provide at least three separate rest breaks each hour with a minimum duration of 3 min each during the workout.
82.2 - 86.9°F 27.9-30.5°C	79.9 - 84.6°F 26.6-29.2°C	76.3 - 81.0°F 24.6-27.2°C	Use discretion for intense or prolonged exercise; Provide at least three separate rest breaks each hour with a minimum duration of 4 min each.
87.1 - 90.0°F 30.6-32.2°C	84.7 - 87.6°F 29.3-30.9°C	81.1 - 84.0°F 27.3-28.9°C	Maximum practice time is 2 h. 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.
90.1 - 91.9°F 32.2-33.3°C	87.8 - 89.6°F 31.0-32.0°C	84.2 - 86.0°F 29.0-30.0°C	Maximum practice time is 1 h. 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.
≥ 92.1°F ≥ 33.4°C	≥ 89.8°F ≥32.1°C	≥ 86.2°F ≥30.1°C	No outdoor workouts. Delay practice until a cooler WBGT is reached.

Per UIL recommendations, School sanctioned athletic programs should use the wet bulb globe temperature (WBGT) as a preventive measure against the heat . Lake Dallas ISD falls into Category 3. Certified Athletic Trainers will monitor the WBGT using the Perry Weather system or with the WBGT measuring field device. The device will be set up 30 minutes prior to practice and should be read 15 minutes prior to the start of practice. Per UIL guidelines, WBGT readings should be taken every 30 minutes during practice.

When there's a change in WBGT from one level to the next, responsible modifications to practice activities should be made based on the above WBGT Activity Guidelines. Per UIL, it is recommended that schools record and keep on file the WBGT temperatures associated for outside practice. Lake Dallas will keep an electronic record of readings .

Per UIL, 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.

Heat Acclimatization:

One significant factor in preventing heat illness is heat-acclimatization. The National Athletic Trainers' Association recommends that individuals should be acclimatized to heat gradually over 7-14 days. This involves slowly increasing the intensity and duration of physical activity performed in a warm or hot environment (whether indoors or outdoors) and phasing in protective equipment (UIL). Heat-acclimatization protocols may differ depending on age group, sport or geological location. Differences also exist between collegiate settings and secondary schools. Lake Dallas ISD follows UIL heat acclimatization protocols and is overseen by Coaches. **Athletes with medical conditions that predispose the athlete to heat illness should be given special considerations , such as sickle cell trait, diabetes, etc. This will be determined by the athlete's parents, Athletic Trainers, and/or Physician.**

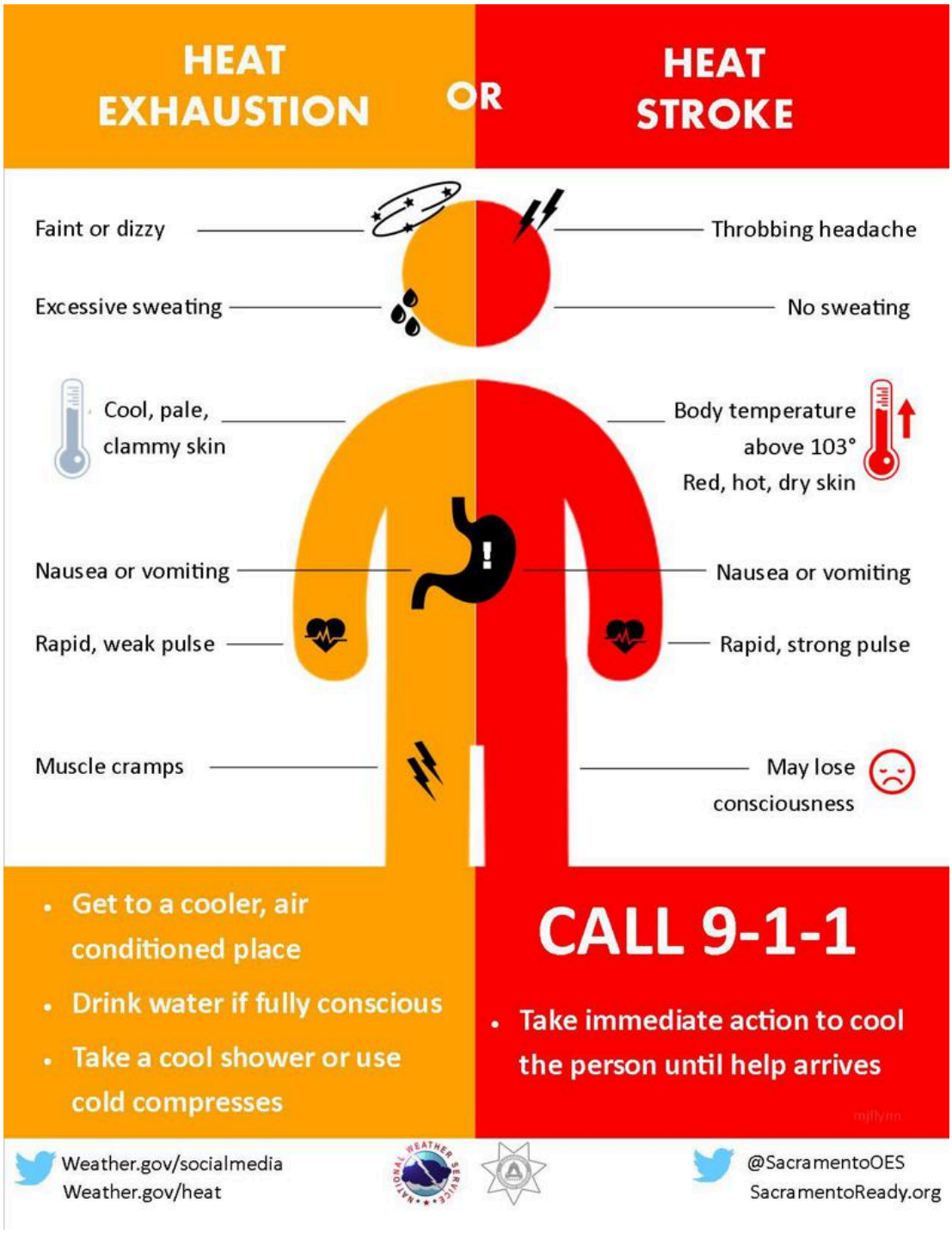
Hydration Protocol:

Per UIL guidelines, water will be available in unlimited quantities. Coaches will ensure that water is available based on their practice facility that day. Student-Athletes are encouraged to carry a water bottle with them so they can easily refill from one of the water filling stations around campus. Athletic Trainers will be responsible for ensuring that ample water and cooling devices are available to athletes during scheduled competitions. In extreme heat, a cold tub, Gatorade, and cold towels may also be available to student-athletes.

EMERGENCY MANAGEMENT OF EXERTIONAL HEAT ILLNESS:

Once an athlete has been identified as suffering from any form of heat illness, they need to be removed from activity and treated appropriately. Use the following guide to help identify and treat heat illness conditions.

Signs/Symptoms and Treatment of Exertional Heat Illness



Exertional Heat Stroke

A medical emergency exists when an athlete presents with **Exertional Heat Stroke**. This condition occurs when the body's ability to regulate heat is compromised. The only reliable way to determine core body temperature in an exercising athlete is by taking rectal temperature. In lieu of a rectal thermometer, the provider should assess the athlete via signs and symptoms.

Emergency Management (Nata JAT 2017)

1. Establish and manage airway as needed

2. Activate EMS/ Call 911

**** If you have access to rectal thermometer ****

3. Move to cool place and remove wet clothing

4. Elevate legs

5. Begin cooling with ice bags over major blood vessels

    a. Under arms, under knees

    b. Groin

    c. Back of neck

6. If Obtaining rectal temperature, you must take temperature to determine if the athlete is cool enough to transport. Once an athlete's temperature reaches approximately 101-102 degrees F he or she should be removed from the pool or tub to avoid overcooling.

**** If no rectal thermometer **or** athlete is in major distress **or** temp is >104°F ****

7. Begin rapid cooling procedures

    a. Cold water immersion- Full body (45° to 60° F)

    Or

    b. Ice bags over major blood vessels

8. Administer electrolyte fluids slowly

9. Monitor vitals

10. Prevent over chilling

**** Cool first, transport second ****

Cooling Equipment on-site:

- Cold tub or : large feed/water trough, kiddie pool, empty trash can, large tarp
    - o Rapid cooling zones will be available for each outdoor athletic and marching band practice, workout or conditioning session that is held in WGBT of 80 degrees or higher
        - Each zone should have immediate availability of cold-water immersion tubs or tarps
- Coolers of ice (ready to add to cold tub as needed or to make ice bags)
- Ice Bags
- Access to water
- Towels
- Electrolyte Fluids (Gatorade/Powerade, Pedialyte, Pickle Juice, etc)
- Fans or misting fans
- Source of shade

Fluid replacement

Proper hydration is the best safeguard against heat illness. Remember to have athletes drink water and sports drinks before, during and after training and competition.

<u>Before exercise</u>

1. 2-3 hours before exercise, drink at least 17-20 oz. of water or a sports drink.
2. 10-20 minutes before exercise, drink another 7-10 oz. of water or sports drink.

<u>During exercise</u>

1. Every 10-20 minutes you should drink at least 8 oz. of water
2. During scheduled breaks, remember to drink sports drinks and water
3. Sports drinks should contain: >7% carbohydrate and sodium chloride
4. Drinks should be cool: 50° to 59° F

5. Thirst = 1% to 5 % dehydrated

6. Dehydration of 1%-2% of body weight (1.5-3 lbs for 150lb. athlete) can negatively affect performance.

After exercise

1. Consume 20 oz. of water or sports drink for every pound of weight loss.

    a. Ex. 5 lbs. loss would require 100 oz. of fluid consumption within two hours of finishing training or competition.

2. Eat a well-balanced meal, fruits and vegetables, and **avoid** fried foods. It is important to lightly salt food. **Avoid** caffeine, alcohol, fruit juices, and carbonated beverages.

Return to Participation after EHS (Nata JAT 2017, 2013)

A medical provider will develop an appropriate timeline for return to activity for all athletes that present with EHS. Written clearance from the medical provider will be based on progress made during recovery, blood tests and severity of illness. Lake Dallas ISD requires student-athletes to obtain physician clearance prior to return to sport.

Cold Weather Policy

Cold exposure can be uncomfortable, impair performance and even become life threatening. Conditions created by cold exposure include frostbite and hypothermia. Wind chill can make activity uncomfortable and can impair performance when muscle temperature declines. Frostbite is the freezing of superficial tissues, usually of the face, ears, fingers, and toes. Hypothermia, a significant drop in body temperature, occurs with rapid cooling, exhaustion and energy depletion. The resulting failure to the temperature-regulating mechanisms constitutes a medical emergency.

Hypothermia frequently occurs at temperatures above freezing. A wet and windy 30-50 degree exposure may be as serious as a subzero exposure. For this reason Lake Dallas ISD is developing a cold policy using the wind chill factor not the ambient temperature. Wind speed interacts with ambient temperature to significantly increase body cooling.

When the body and clothing are wet (whether from sweat, rain, snow, or immersion), the cooling is even more pronounced due to evaporation of the water held close to the skin by the wet clothing. Clothing is one of the most important parts of keeping the athlete's body warm. Athletes should dress in layers and try to stay dry. Layers can be added or removed depending on temperature, activity and wind chill.

Athletes should layer themselves with wicking fabric next to the body, followed by lightweight pile or wool layers for warmth. Athletes should use a wind block garment to avoid wind chill during workouts. Heat loss from the head and neck may be as much as 50% of total heat loss; therefore the head and neck should be covered during cold conditions. Other extremities should be covered at all times to protect from the wind chill.

Cold Exposure:

• Breathing of cold air can trigger asthma attack (bronchospasm)
• Coughing, chest tightness, burning sensation in throat and nasal passage
• Reduction of strength, power, endurance, and aerobic activity
• Core body temperature reduction, causing reduction of motor output

Cold Recognition:

• Shivering, a means for the body to generate heat
• Excessive shivering contributes to fatigue, loss of motor skills
• Numbness and pain in fingers, toes, ears, and exposed facial tissue
• Drop in core temperature; athlete exhibits sluggishness, slowed speech, disoriented

Chain of Command:

The following chain of command will occur during cold weather days:

- Notification of temperature from Coach, Athletic Trainers, and/or Athletic Director using the Perry Weather App or Website

• The wind chill of the day will determine which protocol will be followed.
• Wind chill readings should be evaluated prior to athletic events

Enforcement of Policies :

• Head Coach / Staff Athletic Trainers will monitor time of exposure
• Staff Athletic Trainers will report any violations to the Coordinators/Athletic Director
• Coordinator will meet with the Head Coach
• Violations of policies will be reported to the Director of Athletics in writing

Athletics Cold Weather Guidelines:

PRACTICE

Wind Chill Factor 33 to 35 degrees (W/Precipitation):
- 35 minutes of exposure/20 minutes inside (may return outside after 20 minutes)
- 35 minutes exposure/20 minutes inside
- Dry clothing (socks, gloves)
- Athletes must be dressed in warm-ups with extremities covered

Wind Chill Factor 32 Degree or Below (W/Precipitation):
- All activities will be inside
- No outside exposure

Wind Chill Factor Under 31 to 32 degrees (Dry):
- 45 minutes exposure/ 15 minutes inside
- Athletes must be in warm-ups with extremities covered

Wind Chill Factor 26 to 30 Degree (Dry):
- 30 minutes of total exposure to chill factor
- 15 minutes inside for re-warming
- Warm-ups must be worn at all times, extremities covered

Wind Chill Factor of 25 degrees: • No outside activity • All work must be inside

GAMES

• Games to be postponed due to cold weather will be determined on a case by case basis by the Director of Athletics, Coaches, and Athletic Training staff. Postponed games to be re-scheduled will be determined by the Head Coach of that sport as well as the Director of Athletics.

Lightning Policy

Lake Dallas ISD will use Perry Weather System to determine lightning distance. All coaches, Athletic Administrators, and Athletic Trainers will have access to the Perry Weather system site.

Activity is postponed if lightning has been detected within 10 miles of the competition location, if lightning is seen, or as determined by Coaches, Athletic Administrators and/or Athletic Trainers.

Siren Delay: Perry Weather will siren for 30 seconds when we are under a lightning delay . This will occur at Middle School and High School campuses.

Siren All Clear: Perry Weather will siren for 5 seconds. Stop. Siren for 5 seconds. Stop. This will repeat for a total of 30 seconds. This will indicate all clear status and games/practices can continue.

The chain of command that will make the call to remove individuals from the field will be as follows:

Practices:
The athletic trainer, athletic director and the head coach or coaches will make the call. If an athletic trainer is not present, the head coach or coaches will make the call to remove the athletes from the field.

Games:
The Athletic trainers ,the officials, and/or administrators will make the call. If a school administrator is not present, the official and the head coach or coaches will make the call. The athletic trainer will be the designated weather watcher (A person who actively looks for the signs of threatening weather and notifies the chain of command if severe weather becomes dangerous). If an athletic trainer is not present, the head coach and coaches must be the designated weather watchers.

Safe Shelter Delay:
A safe location is any substantial, frequently inhabited building. The building should have four solid walls (not dug out), electrical and telephone wiring, as well as plumbing, all of which aid in grounding a structure. School buildings, the indoor practice facility, and gyms are the most common safe shelter locations.

The secondary choice for a safer location from the lightning hazard is a fully enclosed vehicle. All student-athletes will be required to stay with their teams and coaches during any delays.

Canceling/Postponing Competitions or Practices:

Games or Competitions may be canceled or rescheduled due to inclement weather. The Athletic Director, Head Coaches, and Athletic Trainers will utilize weather apps to determine inclement weather duration and severity.