

FISD LIGHTNING GUIDELINES

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

Practices: The athletic trainer 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 official(s) will make the call, based on weather information accessed by the athletic trainer or a school official. The official along with the school administrator 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.

2. 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 watcher.
3. Local weather forecasts and warnings will be monitored on the local radio stations, T.V. and the internet can also be used. Some websites that can be used to look at the Doppler radar include: www.weather.com and www.fox4news.com
4. Designate a safe shelter for each venue. Safe Shelter includes:
 - a. 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.
 - b. The secondary choice for a safer location from the lightning hazard is a fully enclosed vehicle with a metal roof and the windows completely closed. It is important to not touch any part of the metal framework of the vehicle while inside it during ongoing thunderstorms.
 - c. It is not safe to shower, bathe, or talk on landline phones while inside a safe shelter during thunderstorms (cell phones are okay).
5. When to go to a safe shelter:
 - a. Use the weather system program. The weather system program (WeatherSentry weather.dtn.com) will be used by FISD Athletic Trainers with the parameters set forth by the FISD Athletic Training staff: 20 mile advisory, 10 mile warning and 30 minute ALL CLEAR.
 - b. Use the Flash-to-Bang count. To use the flash-to-bang method:
 - o Begin counting when sighting a lightning flash.
 - o Counting is stopped when the associated bang (thunder) is heard.
 - o Divide this count by five to determine the distance to the lightning flash (in miles).
 - o For example, a flash-to-bang count of thirty seconds equals to a distance of six miles. Lightning has struck from as far away as 10 miles from the storm center.
 - o Postpone or suspend an activity if a thunderstorm appears imminent before or during an activity or contest, (regardless of whether lightning is seen or thunder is heard) until the hazard has passed. Signs of imminent thunderstorm activity are: darkening clouds, high winds and thunder or lightning activity.
 - o By the time the flash-to-bang count approaches thirty seconds, all individuals should be already inside a safe structure

6. Once activities have been suspended, wait until:
 - a. All clear received from weather alert system.
 - b. The last sound of thunder or lightening flash prior to resuming and activity or returning outdoors.
7. Avoid being the highest point in an open field, in contact with, or proximity to the highest point. Do not take shelter under or near trees, flagpoles, or light poles.
8. Observe the following basic first aid procedures in managing victims of a lightning strike:
 - Survey the scene for safety
 - Activate local EMS by calling 911
 - Lightning victims do not “carry a charge” and are safe to touch
 - If necessary, move the victim with care to a safer location.
 - Evaluate circulation, airway, breathing, and begin CPR if necessary.
 - Evaluate and treat for shock, fractures and/or burns.
9. All individuals have the right to leave an athletic site in order to seek a safe structure if the person feels in danger of impending lightning activity, without fear of repercussions or penalty from anyone.

FISD ATHLETIC DEPARTMENT

COLD WEATHER GUIDELINES

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 F degree exposure can be as serious as a subzero exposure. For this reason Frisco ISD is developing cold weather guidelines using the wind chill factor instead of the ambient temperature. See website for a wind chill factor chart.

www.mste.uiuc.edu/dildine/wind_chill

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 the 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 as dry as possible. 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 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 an asthma attack (broncho spasm)
- Coughing, chest tightness, burning sensation in throat and nasal passage
- Reduction of strength, power, endurance, and aerobic capacity
- Core body temperature reduction, causing reduction of motor output

Cold Recognition:

- Shivering is 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

General Guideline:

- Wind Chill Factor will be assessed prior to practices
- Coaches will obtain weather report from weather.com, using the zip code based on campus location.
- The wind chill will determine which protocol will be followed.
- Wind chill readings will be taken before teams leave for traveling for competitions, and an hour by hour report will guide our decisions for the event.

HIGH SCHOOL ATHLETIC COLD WEATHER GUIDELINES:

PRACTICE PROTOCOL

Wind Chill Factor 33-35° F with Precipitation:

- 35 min. of exposure/20 min. inside gym (may return outside after 20 min.)
- Dry clothing (socks, gloves)
- Athletes must be dressed in warm-up with extremities covered

Wind Chill Factor 31-32° F (Dry):

- 45 min. exposure/ 15 min. inside gym (may return outside after 20 min.)
- Athletes must be in warm-ups with extremities covered

Wind Chill Factor 32° F or lower with precipitation:

- All practices will be inside
- No outside exposure

Wind Chill Factor 26-30° F (Dry):

- 30 min. of total exposure to chill factor
- 15 min. inside
- Warm-ups must be worn with all extremities covered at all times

Wind Chill Factor of 25° F or lower:

- No outside practices
- All work must be inside

MIDDLE SCHOOL ATHLETIC COLD WEATHER GUIDELINES:

PRACTICE PROTOCOL

Wind Chill Factor less than 45° F with precipitation:

- 35 min. of exposure 20/minutes inside gym (may return outside after 20 min.)
- Dry clothing (Socks, gloves)
- Athletes must be dressed in warm-up with extremities covered

Wind Chill Factor less than 35° F:

- All practices inside

Both High School and Middle School Outdoor Competition Protocol:

Games to be postponed due to cold weather will be determined on a case by case basis by the Frisco ISD Administration.

Postponed games to be re-scheduled will be determined by the Head Coach of that sport as well as the Athletic Director or Assistant Athletic Director. An outside sport game date will be considered for rescheduling if the following occurs:

- * Wind chill reaches 25 degrees or less, with precipitation.
- * Wind chill is less than 20 degrees, without precipitation.

FISD ATHLETIC DEPARTMENT

HOT WEATHER GUIDELINES

Practice or competition in hot and humid environmental conditions poses special problems for student-athletes. Heat stress and resulting heat illness is a primary concern in these conditions. Although deaths from heat illness are rare, constant surveillance and education are necessary to prevent heat-related problems. The following practices should be observed.

General Considerations for Risk Reductions

1. Encourage proper education regarding heat illnesses (for athletes, coaches, parents, medical staff, etc.) Education about risk factors should focus on hydration needs; acclimatization, work/rest ratio, signs and symptoms of exertional heat illnesses, treatment, dietary supplements, nutritional issues, and fitness status.
2. Assure that onsite medical staff has authority to alter work/rest ratios, practice schedules, amount of equipment, and withdrawal of individuals from participation based on environment and/or athlete's medical conditions.

General Guidelines:

1. Gradual acclimatization of the athlete to hot/humid conditions is a must. We advise that student-athletes should gradually increase exposure to hot and/or humid environmental conditions over a period of 7 to 10 days to achieve acclimatization.
2. Clothing and protective gear can increase heat stress. Dark colors absorb solar radiation, clothing, and protective gear interfere with the evaporation of sweat and other avenues of heat loss. During acclimatization process, student athletes should practice in T-shirts, shorts, socks, and shoes. Rubberized suits should never be worn.
3. Unlimited access to drinking water will be provided throughout practice and competitions.
4. To identify heat stress conditions on the field of play and determine practice and competition modifications due to hot weather one of two methods will be used:
 - a) Wet Bulb Globe Temperature (WBGT)- a measurement of ambient temperature, relative humidity, radiant heat from the sun, and wind speed.
 - i. Utilizing the Kestrel Heat Stress Unit and NATA Guidelines: See Chart below
 - b) Heat Index- measure of how hot it really feels when relative humidity is factored with the actual air temperature.
 - i. The website below includes a heat index table. Use this table to assess the heat index. <http://www.weatherimages.org/data/heatindex.html>
 - ii. See heat index specific guidelines below.

*** These measurements will be taken 30 minutes prior to practice and every 30 minutes throughout practice.

WBGT READING	ACTIVITY GUIDELINES & REST BREAK GUIDELINES
UNDER 82.0	NORMAL ACTIVITIES -- Provide at least three separate rest breaks each hour of minimum duration of 3 minutes each during workout.
82.0 - 86.9	USE DISCRETION for intense or prolonged exercise; watch at-risk players carefully; Provide at least three separate rest breaks each hour of a minimum of four minutes duration each.
87.0 - 89.9	MAXIMUM PRACTICE TIME IS TWO HOURS. For Football: players restricted to helmet, shoulder pads, and shorts during practice. All protective equipment must be removed for conditioning activities. For all sports: Provide at least four separate rest breaks each hour of a minimum of four minutes each.
90.0 - 92.0	MAXIMUM LENGTH OF PRACTICE IS ONE HOUR, no protective equipment may be worn during practice and there may be no conditioning activities. There must be 20 minutes of rest breaks provided during the hour of practice.
OVER 92	NO OUTDOOR WORKOUTS; CANCEL EXERCISE; delay practices until a cooler WBGT reading occurs.

Heat Index Specific Guidelines: High School Athletics

Heat index of less than 100:

- Water breaks every 30-45 min.

Heat index of 100-105:

Football:

- Full pads
 - Water breaks every 30 min.
 - Break duration 1 period (5 min.)
- Shorts/shirts/helmets.
 - Water breaks every 40 min.
- Cardiovascular Conditioning: remove helmets.

Other Sports:

- Water breaks every 40 min.

Heat index of 106-110:

Football:

- Full pads
 - Water breaks every 20 min.
 - Practice will not exceed 1 hr. 45 min.
- Shorts/shoulder pads/helmets
 - Water breaks every 30 min.
 - Practice will not exceed 2 hr.
- Athletes allowed to remove helmets while not in contact with drills.
- Cardiovascular Conditioning: remove shoulder pads and helmets.

Cross Country/Men's and Women's Track:

- Long Distance runners must be directly supervised by coaches at all times.
- Water breaks every 30 min.

- Practice will not exceed 2 hr.
- Track and Field athletes- Water breaks every 30 min.
- Practice will not exceed 2 hr.

Baseball, Softball, Soccer and Tennis:

- Water breaks every 30 min.
- Practice will not exceed 2 hr.

Other Sports and Off Season Programs:

- 45 minutes total of heat exposure with a minimum of 1 water break

Heat Index of 111-115:

Football:

- Shorts/Shoulder Pads/Helmets only
 - Water breaks every 20 min.
 - Practice not to exceed 2 hr. total
- Cardiovascular Conditioning duration and intensity decreased.
 - Remove shoulder pads and helmet

Cross Country/Men's and Women's Track:

- Long Distance runners must be directly supervised by coaches at all times.
- Water breaks every 20 min.
- Practice will not exceed 2 hr.

Baseball, Softball, Soccer and Tennis:

- Water breaks every 20 min.
- Practice will not exceed 2 hr.

Other Sports and Off Season Programs:

- 30 minutes total of heat exposure with a minimum of 1 water break

Heat Index of 116-117:

Football:

- Shorts/Shirt/Helmets only
 - Water breaks every 20 min.
 - Practice not to exceed 1 hr. 30 min. total
- NO Cardiovascular Conditioning

Cross Country/Men's and Women's Track:

- Long Distance runners must be directly supervised by coaches at all times.
- Water breaks every 15 min.
- Practice will not exceed 1 hr. 30 min.

Baseball, Softball, Soccer and Tennis:

- Water breaks every 20 min.
- Practice will not exceed 2 hr.

Other Sports and Off Season Programs:

- 30 minutes total of heat exposure with a minimum of 1 water break.

Heat Index of 118-120:

All Sports:

- No outside practice will be allowed in any sport

Heat Index Specific Guidelines: Middle School Athletics

Heat Index of less than 100:

All Sports:

- Water breaks every 30-45 min.

Heat Index of 100-105:

Football:

- Full pads
 - Water breaks every 20 min.
 - Practice will not exceed 1 hr. 30 min.
- Shorts/shoulder pads/ helmets
 - Water breaks every 30 min.
 - Practice will not exceed 1 hr. 45 min.
- Athletes are allowed to remove helmets while not in contact with drills.
- Cardiovascular Conditioning: remove shoulder pads and helmets. Decrease duration and intensity.

Other Sports:

- Water breaks every 30 min.
- Practice will not exceed 1 hr. 45 min.

Heat Index of 106-110:

Football:

- Shorts/Shoulder Pads/Helmets only
 - Water breaks every 15 min.
 - Practice not to exceed 1 hr. 30 min. total
 - No cardiovascular conditioning.

Other Sports:

- Water breaks every 15 min.
- Practice not to exceed 1 hr. 30 min. total
- No cardiovascular conditioning.

No outside practice when temperature exceeds 109° F and/or heat index is 111° F.

AIR QUALITY INDEX POLICY

Air Quality Index

Good: **Code Green**

Moderate: **Code Yellow**

Unhealthy for Sensitive Groups: **Code Orange**

Unhealthy: **Code Red**

Very Unhealthy: **Code Purple**

Guidelines to Follow

No action taken

No limit to exercise, but watch those that may be affected: Asthma

2 ½ hr practice limit, but watch those that may be affected: Asthma

2 hr practice limit, but watch those that may be affected: Asthma

1 ½ hr practice limit, but watch those that may be affected: Asthma