PISD LIGHTNING GUIDELINES

Prosper ISD uses WeatherSentry® By Schneider Electric. This application is able to detect lightning strikes within a set perimeter of specified Prosper ISD facilities. The Athletic Directors, and Athletic Trainers, have full access to this app. Every outdoor sport head coach (MS and HS) has been set up to receive text message alerts.

1. The chain of command that will make the call to remove individuals from the field will be as follows:
    a. 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.
    b. Games: The official(s) will make the call. 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. WeatherSentry® By Schneider Electric is utilized by PISD. Local Radar can be seen by those with full access to the app. 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 (See explanation of "Safe Shelter").

5. Use the Flash-to-Bang count to determine when to go to safety. By the time the flash-to-bang count approaches thirty seconds, all individuals should be already inside a safe structure (See explanation of "Flash-to-Bang"). Use ONLY if WeatherSentry® system in place, is not working.

6. Once activities have been suspended, wait at least thirty minutes following the last sound of thunder or lightening flash prior to resuming an 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. Assume the lightening safe position (crouched on the ground, weight on the balls of the feet, feet together, head lowered and eras covered) for individuals who feel their hair stand on end, skin tingle, or hear "crackling" noises. Do not lie flat on the ground.

9. Observe the following basic first aid procedures in managing victims of a lightning strike:
    a. Survey the scene for safety
    b. Activate local EMS by calling 911
    c. Lightning victims do not "carry a charge" and are safe to touch
    d. If necessary, move the victim with care to a safer location.
    e. Evaluate airway, breathing, and circulation, and begin CPR if necessary.
    f. Evaluate and treat for shock, fractures and/or burns.
10. 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.

Safe Shelter

1. 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.
2. 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.
3. It is not safe to shower, bathe, or talk on landline phones while inside a safe shelter during thunderstorms (cell phones are okay).

Flash-to-Bang:

1. To use the flash-to-bang method, begin counting when sighting a lightning flash. Counting is stopped when the associated bang (thunder) is heard. Divide this count by five to determine the distance to the lightning flash (in miles). 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.
2. Postpone or suspended activity if a thunderstorm appears imminent before or during an activity or contest, (irrespective 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.

PISD 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 be as serious as a subzero exposure. For this reason Prosper ISD is developing a cold weather policy using the wind chill f actor 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 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 for 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 (bronco 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

HIGH SCHOOL ATHLETIC COLD WEATHER GUIDELINES: PRACTICE GUIDELINES

- **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 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

Junior High Athletic Cold Weather Guidelines:

- **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

PISD ATHLETIC DEPARTMENT HOT WEATHER GUIDELINES

Practice of 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. To identify heat stress conditions on the field of play, regular measurements including ambient temperature and relative humidity will be taken 30 minutes prior to practice and every 30 minutes throughout practice. The website below includes a heat index table. Use this table to assess the heat index.

www.weatherimages.org/data/**heatindex**.html

4. Unlimited access to drinking water will be provided throughout practices and competitions.

High School Guidelines

- **Heat index of less than 100:**
  - Water breaks every 30-45 min.
- **Heat index of 100-105:**
  - 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.
- **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.
    - Off season Programs
        - 45 minutes total of heat exposure with a minimum of 1water 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.
    - Off season Programs
        - 30 minutes total of heat exposure with a minimum of 1water 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.
    - Off season Programs
        - 30 minutes total of heat exposure with a minimum of 1water break.
- **Heat Index of 118-120:**
    - All sports:
    - No outside practice will be allowed in any sport

Middle School Guidelines

- **Heat index of less than 100:**
    - Water breaks every 30-45 min.
- **Heat index of 100-106:**
    - 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 allowed to remove helmets while not in contact with drills.
        - Cardiovascular Conditioning:
            - remove shoulder pads and helmets. Decrease duration and intensity.
- **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.
- **No outside practice when temperature exceeds 109˚ F and/or heat index is 111˚ F.**