

# Lightning Guidelines

All physical education teachers, athletic trainers, coaches, playground monitors, marching band instructors, school administrators and other appropriate personnel should be aware of safety precautions during inclement weather.

- ◆ Have an evacuation plan and follow it.
  - Determine where and how the group will evacuate.
  - Evacuate to the closest, safe structure (NOT dugouts, storage buildings, press boxes or under trees).
  - Avoid metallic objects like metal bleachers, flagpoles, power lines, standing water. Do not be the highest object, close to a high object, or connected to one.
  - Communicate this plan to the student group.
  - Have a planned evacuation procedure and signal.
- ◆ Be aware of weather predictions before the outdoor activities. Monitor weather conditions on a radio.
- ◆ Use the lightning detector as the primary warning system.
- ◆ Monitor the lightning detector if bad weather is expected. Appoint someone to monitor the detector.
- ◆ Use the 30-30- rule (Flash-to-Bang) as a secondary precautionary system.

## **FLASH-to-BANG or the 30-30- Rule**

- Person sees the stroke of lightning. Count the seconds until you hear the thunder. For each five-second count, the lightning is one mile away.
  - For a 30-second count, the lightning is six miles away.
  - The National Lightning Institute and the National Weather Service recommend evacuation to a safe structure that time.
  - The distance to a safe facility and the number of people involved in the outdoor activity will determine when you evacuate the area.
  - Wait a minimum of 30 minutes from the last nearby lightning strike (flash-to-bang count less than 30 seconds) before resuming activities.
- ◆ If a person is struck by lightning, administer CPR immediately, IF QUALIFIED. Get EMERGENCY help promptly.

# Ozone Response Plan Guidelines

Ground-level ozone is the most common air quality problem in Harris and Galveston Counties. Ozone pollution is mainly a daytime problem when temperatures are high, sunshine strong, and winds are weak. When this occurs, ozone can accumulate to unhealthy levels, especially for people with respiratory conditions who are participating in strenuous outdoor activities.

The school district has developed a plan to respond to high concentrations of ground-level ozone. The district's plan follows the recommendations for Harris County office of Emergency management and Texas Natural Resource Conservation Commission.

When the district receives an ozone alert from Harris County, district personnel including the high school trainers will carefully monitor ozone levels. When the ground-level ozone reaches unhealthy levels, campuses will be notified of specific ozone warnings:

ORANGE, RED, AND PURPLE. Base on the ozone warning level, certain strenuous outdoor activities , such as physical education, athletics, marching band, cheerleading, dance or recess will be curtailed for some or all students.

ROLLING AN OZONE WARNING, CAMPUSES WILL IMPLEMENT THE FOLLOWING GUIDELINES:

## **Orange Alert**

Students in the sensitive groups will curtail all outdoor activities. The sensitive group includes students with respiratory or heart conditions. Trainers, sponsors, directors, nurses, and coaches will have developed a list of students in this group based on physicals and health card information. All other students will participate as scheduled.

## **Red Alert**

Students in the sensitive group will curtail all outdoor activities. All other students will limit outdoor activity to one hour or less if the scheduled outdoor activity is longer than one hour, alternate plans will be implemented.

## **Purple Alert**

All students will curtail all outdoor activities regardless of the duration.

NOTE: If an ozone warning is expected, but has not yet occurred at the time an interscholastic game or event is scheduled to begin, that event may begin as scheduled.

If an interscholastic game or event is scheduled to begin and a warning is in effect, the event should be cancelled, delayed or rescheduled.

# Heat and Ozone Response Guidelines

Trainers will notify the coaches, sponsors, and principals when the temperature reaches 104 degrees.

## **Heat**

### Elementary Schools

- When the temperatures reach 95 degrees or above, elementary students will remain in air-conditioned areas of the school. This would pertain to physical education classes and to recess. All after-school programs will be held in air-conditioned areas of the school until 6:00 p.m.

### Intermediate and Secondary Physical Education Classes

- When the temperature reaches 100 degrees or above, all physical education students will remain in air-conditioned areas of the school

### Intermediate Extracurricular Activities

- When the temperature reaches 100 degrees, football players will be dressed in shirts and helmets only. All students in the sensitive group may sit out without penalty.
- When the temperature reaches 104 degrees, all outside practices will be moved to air-conditioned areas, called or begin after 6:00 p.m.

### Secondary Extracurricular Activities

- When the temperature reaches 100 degrees, all students in the sensitive group may sit out without penalty.
- When the temperature reaches 104 degrees, all outside practices will be moved to air-conditioned area, cancelled or being after 6:00 p.m.

All Coaches, Sponsors, and Directors are certified in first aid and CPR. They will receive heat stress training and lightning safety prior to the start of each school year.

## I. Heat Illnesses

### Prevention

- a. Shade – be sure to identify the spot before the season starts, may have to be indoors
- b. Water and sports drinks throughout the day
- c. Drink water during practice
- d. Water breaks must be taken no longer than 20 minutes apart
- e. Allow everyone to drink their fill on water breaks
- f. FB: have each child remove their helmets during water breaks
- g. Make everyone take a water break even if they feel they don't need it. This is an indication that the body's fluid levels are already too low.
- h. Stay in air-conditioned areas when not practicing so the body has time to cool itself.
- i. Avoid caffeine such as tea, coffee, and soda
- j. Avoid carbonated drinks
- k. Avoid spicy foods
- l. Three proper meals are a must every day
- m. Avoid a lot of fatty foods
- n. Add a small amount of additional salt on foods
- o. Discourage salt tablets. A little extra table salt on food is plenty
- p. If a child has been sick, do not attempt to have him/her go through an entire practice when he/she first returns.
- q. Encourage these foods: potatoes, bananas, oranges, orange juice
- r. Always have them wear light colored, lightweight, loose fitting clothes when possible.

### Types of Heat Illnesses

#### Heat cramps

1. Signs and symptoms include painful spasms usually in the calves and abdomen
2. Treatment is cooling techniques and stretching

#### Heat Exhaustion

1. Signs and symptoms include weakness, exhaustion, headache, dizziness, pupils are dilated, temperature can be normal – 102° F., Hyperventilation, vomiting, profuse sweating, decreased attention span, skin can be pale, and unconsciousness.
2. Treatment includes cooling techniques, lie down with feet elevated, student should be removed from practices for the remainder of the day unless qualified medical personnel clears them to play

## Heat Stroke

1. This is a medical emergency and can lead to permanent brain damage or even death.
2. When heat exhaustion has not been properly treated, heat stroke is the result.
3. Signs and symptoms include disorientation, collapsing, unconsciousness, red dry hot flushed skin, dark-skinned people look ashen, temperature of 104° F and higher, no sweating
4. Treatment is an immediate call to 911. While you await the arrival of the ambulance, begin cooling techniques.
5. Return to play should not occur with a doctor's release

## Cooling Techniques

1. Get to a shady area – identify before the start of the season
2. Use of icy water towels
3. Drink water and sports drinks
4. Remove equipment
5. Remove tight fitting clothing, if possible
6. Remove clothing that is sweat-soaked and replace with dry clothing, if possible
7. Identify who the person is responsible for staying with that student
8. Know where your phones are if 911 is needed
9. Know where your emergency cards are at every practice so the parents can be called expeditiously if needed.

## Heat Related Disorders

<b>Disorder</b>	<b>Signs and Symptoms</b>	<b>Treatment</b>
Heat Cramps	<ul style="list-style-type: none"><li>• Profuse Sweating</li><li>• Cramps in larger muscle groups (esp. in calf, hamstring, quads, abdomen)</li></ul>	<ul style="list-style-type: none"><li>• Stop the exercise/activity</li><li>• Rest in cool environment</li><li>• Passive stretching involved muscle</li><li>• Begin fluid consumption</li></ul>
Heat Exhaustion	<ul style="list-style-type: none"><li>• Weakness, faintness, dizziness</li><li>• Headache, loss of appetite, nausea</li><li>• Profuse sweating, chills</li><li>• Cool, clammy skin</li><li>• Anxiety, confusion, hyperventilation</li><li>• Slight temperature elevation</li><li>• Rapid pulse rate</li><li>• Usually have heat cramps initially</li></ul>	<ul style="list-style-type: none"><li>• Stop activity immediately</li><li>• Remove from heat immediately and try to place in cool environment to reduce body temperature.</li><li>• Replace fluids immediately</li><li>• Monitor</li><li>• If unconscious, get medical care</li></ul>
Heat Stroke	<ul style="list-style-type: none"><li>• Irritable, aggressiveness, hysteria progressing to disorientation</li><li>• May collapse and become unconscious</li><li>• Skin is hot and dry</li></ul>	<ul style="list-style-type: none"><li>• MEDICAL EMERGENCY</li><li>• Remove from heat immediately</li><li>• Cool the body by sponging with cool water and fanning</li></ul>

	<ul style="list-style-type: none"><li>• Strong rapid pulse</li><li>• Blood pressure falls</li><li>• Increasingly high core temperature, 106° or higher</li><li>• Can come on without a warning</li></ul>	<p>with a towel</p> <ul style="list-style-type: none"><li>• The longer the body temperature stays elevation, the greater the risk of death.</li><li>• Transport to hospital immediately, don't wait on an ambulance.</li></ul>
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