

## LEISD ATHLETIC DEPARTMENT – LIGHTNING POLICY

Lightning is the most consistent and significant weather hazard that can affect high school athletics. The National Severe Storms Laboratory estimates more and 100 fatalities and 400-500 injuries requiring medical treatment occur from lightning strikes every year. While the probability of being struck by lightning is extremely low, the odds are significantly greater when a storm is in the area and the proper safety precautions are not followed. Prevention and education are the keys to lightning safety and should begin long before any athletic event or practice.

Prevention starts with the staff athletic trainers obtaining weather reports before an activity begins, designating a weather watcher, and implementing an evacuation plan for event participants and spectators during a lightning storm.

Most people have been educated that lightning is a dangerous phenomenon, but the seeking of safe shelter and the specific time one should evacuate to a safe location is generally not known.

### Safe Shelter locations:

- Any **building** normally occupied that has plumbing or electrical wiring acts to electrically ground the structure. **Avoid taking showers during a lightning storm.**
- Any **vehicle** that is equipped with a hard metal roof and rolled up windows. It's not the rubber tires that make the vehicle safe. The hard metal roof dissipates the lightning strike around the vehicle. **Do not touch the outside of your vehicle during a lightning storm.**

**AVOID:** High places and open fields, isolated trees, gazebos, rain or picnic shelters, baseball dugouts, communications towers, flagpoles, light poles, bleachers (metal or wood), metal fences, convertibles, golf carts, water (ocean, lakes, ponds, swimming pools, rivers, etc.).

Difference between a thunderstorm "Watch" and a "Warning": **"Watch"**: Conditions are favorable for severe weather to develop in an area. **"Warning"**: Severe weather has been reported in an area.

**Lightning awareness should be increased with the first flash of lightning or the first clap of thunder, no matter how far away.** This activity must be treated as a wakeup call to those monitoring the inclement weather. The important aspect is to monitor how far away the lightning is occurring, and how fast the storm is approaching, relative to the distance of a safe shelter. A typical thunderstorm can travel up to 30 miles per hour. Lightning can and does, strike as far as 10 miles away from the rain shaft. The existence of blue sky and the absence of rain are not protection from lightning; it does not have to be raining for lightning to strike.

**To provide the best safety for student athletes who participate outdoors, Little Elm ISD has adopted the 30-30 Lightning Safety Rule. This rule incorporates the Flash-to-Bang method,** which is the most reliable, easiest, and most convenient way to estimate how far away lightning is occurring. Little Elm's lightning policy will also utilize the **WeatherBug's SPARK feature to determine the distance of the closest strike as an aid to the Flash-to-Bang method** by enhancing the observer's awareness during the initial stages of the storm. WeatherBug App is available for free download for Apple & Android devices. Even though technology and instrumentation have proven to be effective, they cannot guarantee the safety of our student athletes, coaches, officials, and spectators.

### The 30 / 30 Lightning Safety Rule

The premise upon which the **Flash to Bang method** is based on is the fact that light travels faster than sound, with sound traveling approximately one mile every 5 seconds. Thunder always accompanies lightning, even though its audible range can be diminished due to background noise and its distance from the observer. Audible range of thunder is approximately 8-10 miles.

**To estimate the distance between your location and a lightning flash, use the Flash-to-Bang method:**

1. **Count the number of seconds once lightning is sighted (flash), until the thunder is heard (bang).**
2. **Divide that number by 5 to obtain how far away (in miles) the lightning is occurring.**

Example: If an individual counts 15 seconds between seeing the flash and hearing the bang, 15 divided by 5 equals 3. Therefore, the lightning flash is approximately 3 miles away.

### Suspension of Play

**Play is suspended if the Flash-to-Bang method reaches 30 seconds. This indicates the lightning is at the 6-mile range.** As a minimum, the National Severe Storms Laboratory strongly recommends that by the time the observer obtains a Flash to Bang count of 30 seconds, all individuals should have left the athletics site and reached a safe location. **Additionally, we utilize WeatherBug's SPARK feature to assist in determining the distance of the closest strike.**

### Resumption of Play

**Resumption of play can continue only when lightning or thunder has not been detected for at least 30 minutes.** Each subsequent occurrence of lightning or thunder detected within the 30 minutes, the 30-minute clock restarts. Experts believe 30 minutes allows for thunderstorms to be approximately 10-12 miles from the area. This helps minimize the chances of a nearby lightning strike.

### First Aid

In the unfortunate event that someone becomes struck by lightning, call 911 immediately. It is safe for an individual to perform CPR on a lightning victim because their body will no longer carry an electrical charge. Prompt, aggressive CPR increases the survival rate of victims of lightning strikes. If possible, move the victim to a safer location before starting CPR.

### Proposed procedures for away events if inclement weather is suspected:

1. Ask if there is a standing district policy regarding lightning safety
2. If no policy is in effect, recommend the LEISD policy. Come to a consensus.
3. Notify officials and administrator on duty of the decided policy to implement prior to the event

For more information, see UIL Lightning Safety Guidelines. <http://www.uilTEXAS.org/health/info/lightning-safety>