

Silsbee ISD Athletic Department

Lightning Policy



“Any individuals, athletes or staff who feel he or she is in danger of lightning has the right to leave the field to seek safe shelter.”

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INTRODUCTION:

Silsbee ISD Athletic Department' objective to this policy is to institute and maintain safeguards against the hazards of potential lightning risks. The safety and welfare of our student athletes, staff and patron are our highest concern.

EDUCATION and AWARENESS:

Lightning is the second leading cause of weather related deaths taking an average of 80 lives per year and injuring two and a half times as many. While the chances of being struck by lightning is slim, it is important to understand that the odds increase significantly when a thunderstorm is in the area and safety precautions have failed to be met. This policy will educate those coaches, officials, and administrators who are responsible for the safety of our student-athletes on the preventative measures and safety precautions to follow to avoid inherent risk and injury associated with lightning.

BACKGROUND:

Lightning occurs due to a natural electrical discharge within the atmosphere. As a thunderstorm develops a region of positive and negative charges are separated into layers. This separation produces an electrical potential, which continues to build in strength until the air can no longer resist the attraction resulting in a flash. This flash is commonly categorized in one of two ways: a cloud discharge/in cloud lightning, or cloud to ground lightning. Cloud to ground lightning is initiated by an electrical breakdown between the positive and negative charge regions. A faint luminous channel, known as the stepped leader descends in a downward pattern towards the ground. As this stepped leader nears the ground an opposite discharge ascends from the ground or other object to meet the stepped leader. At this point of junction the cloud is short-circuited to the ground and a brilliant flash of high current is seen. A flash has a billion volts of energy, with a peak current between 10,000 and 200,000 amperes.

Thunder is created when the air immediately around the lightning channel is superheated. This heated air expands rapidly producing the claps, rumbles and all other sounds of thunder. Thus, thunder is actually the results of lightning and always accompanies it. Thunder

at a distance is heard beginning with a rumble while at nearer vicinities it is initiated as a clap followed by a long rumble. Since light travels much faster than sound, the amount of time between a lightning bolt and thunder clap allows the distance of the lightning to be calculated based on the sound traveling at a rate of one mile per five seconds. This method of calculation is know as the "flash to bang" system and will be discussed in more detail in the methods of gathering information section.

Cloud to ground lightning strikes is most prominent from late spring to early autumn, with the number of positive flashes peaking in July. Strikes tend to occur most frequently during the afternoon and early evening and the majority of fatalities have been reported to occur between 10 a.m. and 7 p.m. This puts athletics at an increased risk since practices traditionally takes place during the periods of elevated lightning occurrences.

Summary:

The goal of this policy is to minimize the risk of lightning casualties by emphasizing advanced planning and the recognition of a potential threat. However, it is also important to know what to do if caught by surprise. If you are caught in a dangerous situation, too far from shelter and you feel your hair stand on end or your skin tingle you should immediately crouch down on the balls of your get with your arms wrapped around your knees and your head down. Minimize your body's surface area and minimize contact with the ground! Don't be the highest object or connected to anything taller than its surroundings, avoid metal objects, individual trees and standing pools of water.



No place outside is safe when thunderstorms are in the area. Immediately move to safe shelter, a substantial building or inside an enclosed metal-topped vehicle. A fully-enclosed, all-metal vehicle is very safe, but don't touch interior metallic areas on a vehicle.

SILSBEE ISD LIGHTNING POLICY

It is the policy of SILSBEE ISD Athletic Department that in the event of severe weather that the following methods will be used to determine suspension of athletic activities due to lightning.

Lightning Monitoring Method:

Schneider Electric Service – WeatherSentry™

The Silsbee ISD athletic department will monitor the weather/lightning using the Schneider Electric Service – WeatherSentry™ weather service (<http://weather.dtn.com>). This weather service provides real time radar and lightning activity in our area. It enables us to know exactly where and when lightning is present. It is accessible by computer or cell phone. If lightning is present within a eight-mile radius, athletic activity will be suspended and the 30-30 Lightning Safety rule will be in effect. If the online service is not available then the “Flash-to-Bang” method will be used.

How to Use “Flash-to-Bang”

Count the number of seconds from the time lightning is sighted to the time that the corresponding thunder is heard. Divide by 5 to obtain the distance from your location, in miles, that the lightning is occurring. Example: If an individual counts 15 seconds between seeing a flash of lightning and hearing the bang of thunder, $15 / 5 = 3$; therefore, the lightning flash is approximately 3 miles away. Play is suspended if the Flash-to-Bang count is less than or equal to 50 seconds. This indicates that the lightning is within the 10-mile range.

30-30 Lightning Safety Rule – Resumption of Play

Play can resume only when lightning and/or thunder has not been detected for 30 minutes. Every time lightning or thunder is detected, the 30-minute clock restarts. If the online service is not available then the “Flash-to-Bang” method will be used.

Safe Locations

Primary locations - Any building normally occupied or frequently used by people. (Example: a building with plumbing and/or electrical wiring acts to electrically ground the structure). Avoid using shower facilities for safe shelter and DO NOT USE the showers or plumbing facilities during a thunderstorm.

Secondary locations - In the absence of a sturdy, frequently inhabited building, any vehicle with a hard metal roof (not a convertible or a golf cart) and rolled-up windows can provide a measure of safety. A vehicle is certainly better than remaining outdoors. It is not the rubber tires that make a vehicle a safe shelter, but the hard metal roof, which dissipates the lightning strike around the vehicle. DO NOT TOUCH THE SIDES OF THE VEHICLE.

Additional Safety Precautions

Avoid being in or near high places and open fields, isolated trees, unprotected gazebos, rain or picnic shelters, baseball dugouts, communications towers, flagpoles, light poles, bleachers (metal or wood), metal fences, convertibles, golf carts, water (ocean, lakes, swimming pools, rivers, etc.)

When inside a building, avoid the use of landline telephones, taking a shower, washing your hands, doing dishes, or any contact with conductive surfaces with exposure to the outside such as a metal door or window frames, electrical wiring, telephone wiring, cable TV wiring, plumbing, etc.

During games or events at Tigers Stadium, Baseball Field, and Softball Field a public address announcement will be conducted by press box personnel.

LIGHTNING : Public Address Announcement

Hazardous lightning has been monitored in the immediate area and this sporting event has been temporarily suspended. All team members have been advised to seek shelter in a safe location. This suspension will last a minimum of 30 minutes. Stadium seating is an unsafe location during a lightning storm. All spectators are advised to leave the bleachers and seek shelter.

First Aid

People who have been struck by lightning do not carry an electrical charge. Therefore, cardiopulmonary resuscitation (CPR) is safe for the responder. If possible, an injured person should be moved to a safer location before starting CPR.

Lightning strike victims who show signs of cardiac or respiratory arrest need emergency help quickly. Prompt, aggressive CPR has been highly effective for the survival of victims of lightning strikes.

The Licensed Athletic Trainer, coach, or other medical personnel should consider his or her own personal safety before venturing into a dangerous situation and rendering care.

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Safe Locations:

Tiger Stadium:

Primary Locations:

Dauphin Fieldhouse

Visitor Fieldhouse at Tiger Stadium

Secondary Locations:

School Gyms

Main School Building Locker rooms

** Visiting Teams will use their buses if no other option is available.*

Baseball Field , Softball Field , Tennis Courts:

Primary Locations:

Dauphin Fieldhouse

Visitor Fieldhouse at Tiger Stadium

Secondary Locations:

School Gyms

Main School Building Locker rooms

** Visiting Teams will use their buses if no other option is available.*

Football Practice Field:

Primary Location:

Main School Building / Locker rooms

Secondary Locations:

Gyms

Dauphin Fieldhouse

Band Practice Field:

Primary Location:

Band Hall

Secondary Location:

Main School Building

Middle School Practice Fields and Track:

Primary Locations:

Middle School Fieldhouse

Main School Building / Locker rooms

Secondary:

Gyms

** Avoid being in or near high places and open fields, isolated trees, unprotected gazebos, rain or picnic shelters, baseball dugouts, communications towers, flagpoles, light poles, bleachers (metal or wood), metal fences, convertibles, golf carts, water (ocean, lakes, swimming pools, rivers, etc.)*

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