

Waxahachie Independent School District Lightning/Dangerous Weather Policy

Adopted from Texas A&M University Athletic Department Lightning Policy and Graham Independent School District Lightning Policy

Lightning brings a spectacular display and sometimes can attract the public's eye. Furthermore, lightning is sometimes seldom seen as a personal safety hazard. However, lightning is the second leading cause of weather related deaths taking an average of 80 per year and injuring 2.5 times as many. While the chances of getting struck by lightning are small, 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. It is the intent of this policy to educate coaches, officials, and administrators who are responsible for the safety of student athletes on the preventative measures and safety precautions to follow to avoid inherent risk and injury associated with lightning.

Lightning strikes are among the most feared of nature's tools and are sometimes among the most misunderstood. Here are some facts about lightning.

Fact: Lightning occurs due to a natural electrical discharge within the atmosphere.

Fact: A flash of lightning has a billion volts of energy, with a peak current between 10,000 and 200,000 amperes.

Fact: Thunder is the result of lightning and always accompanies it.

Fact: Cloud to ground lightning strikes are most prominent from late spring to early fall. Strikes tend to occur most frequently during the afternoon and early evening and the majority of fatalities have been reported to occur between 10 am and 7 pm.

The National Oceanic and Atmospheric Administration has also issued a reminder to separate fact from fiction in lightning safety factors.

Myth: If it is not raining, then there is no danger from lightning.

Fact: Lightning strikes often occur outside of heavy rain and may occur as far as ten miles away from any rainfall.

Myth: The rubber soles of shoes or rubber tires on automobiles will protect me from being struck by lightning.

Fact: Rubber soled shoes and rubber tires provide NO protection from lightning. However, the steel frame of a hard-topped vehicle provides increased Protection if you are not touching metal. Although you may be injured if lightning strikes you car, you are much safer inside your vehicle than outside.

Myth: People struck by lightning carry an electrical charge and should not be touched.

Fact: Lightning strike victims carry no electrical charge and should be attended to immediately.

Myth: “Heat Lightning” occurs after very hot summer days and poses no threat.

Fact: What is called “Heat Lightning” actually is lightning from a thunderstorm too far away for thunder to be heard. However, the storm may be moving toward you so be alert.

Lightning is unpredictable and it can strike from a clear blue sky.

The goal of this policy is to minimize lightning casualties by emphasizing advanced planning and the recognition of a potential threat to our student athletes and to visiting schools in competition in Waxahachie. However, it is also important to know what to do if caught by surprise. If you are caught in a dangerous situation, too far away from safe shelter, and you feel your hair stand on end or your skin tingle you should immediately crouch down on the balls of your feet 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.

TREATMENT FOR LIGHTNING STRIKES:

In the event that a person is struck by lightning do not hesitate to assist them; unlike electrical victims they do not carry a charge so they may be safely handled. If the victim is not breathing, yet has a pulse, begin mouth to mouth resuscitation, once every five seconds for adults. If a pulse is absent as well, it is imperative to initiate and sustain cardiopulmonary resuscitation (CPR) as soon as possible. The administration of CPR to a victim who appears dead can reverse cardiopulmonary arrest. If there are multiple victims, aid should be administered to the apparently “dead” first. If at all possible, have someone call 911 upon detection of lightning strike victims. Keep in mind, for the safety of the rescuer, the possibility of a second strike within the immediate area.

METHODS OF GATHERING LIGHTNING INFORMATION:

“Flash to Bang” Method – This is the easiest and most convenient. It requires no equipment and is an easy way to determine the distance from the last lightning strike. It is impossible to predict where the next strike will occur. This method is performed by beginning a count which is equivalent to one second at the time you see a flash of lightning and continue counting until you hear the thunder. Take that number and divide by 5 to determine the distance in miles that the strike was from you. Example: Thirty seconds are counted, this would indicate that the strike was approximately 6 miles away.

SkyScan – This is a small battery operated lightning detection device that estimates the distance of lightning. This unit can give a false reading because of interference with

communication devices and other electrical equipment. SkyScan should be used in conjunction with other methods. The unit must be turned on and be powered by a good 9 volt battery and pointed toward the storm clouds. The display lights up with a range of mile of the last strike detected.

iPhone Spark Lightning Technology – This is a service which is provided on the Weatherbug apps free for iPhones which can provide information on lightning strikes.

National Lightning Network – This network is a satellite network with 106 lightning sensors located throughout the United States. The network receives and disseminates this information every 15 seconds to the subscribers of this service.

Available Weather Internet Alerts – Our current weather service is through Weatherbug. It provides lightning, storm detection, and other weather alerts via email to our administrators and coaches throughout Waxahachie ISD who are on the email list serve.

Available Meteorologist – If there is an available meteorologist then they should be consulted. Time constraints in contacting them should be considered along with the risk of lightning continuing to move into your area.

DECISION MAKING:

The decision to suspend a game or practice will be made by the following individuals.

Practice – The final decision will be made by the head coach or acting head coach upon the recommendation of the Head Athletic Trainer. If the Head Athletic Trainer is not at onsite, then the Assistant Athletic Trainer is the designee and will make the decision and communicate to the Head Athletic Trainer. The coaching staff must assess the dangers by the methods stated in this policy. Whenever possible, the athletic trainer will advise the coach supervising the activity as to the danger of lightning. The responsibility still remains with the coach supervising the activity to remove the team or individuals from the field or event site. With the information presented in this policy, the coach can make an informed, intelligent and safe decision regarding the risk of a lightning strike. Any individuals, athletes, or staff who feels he or she is in danger of lightning has the right to leave the field and seek safe shelter.

Prior to Contest – The final decision will be made by the Game Administrator, and the Host Head Coach upon recommendation from the Host Athletic Trainer. If onsite, the Head Athletic Trainer will be involved in the decision making process. If not onsite, then the Assistant Athletic Trainer will be involved. These individuals must assess the dangers by the methods stated in this policy. Whenever possible, the athletic trainer will advise the Game Administrator and or Host Head Coach as to the danger of lightning. With the information presented in this policy, these individuals can make an informed, intelligent, and safe decision regarding the risk of a lightning strike. Any individual, athletes, or staff who feel he or she is in danger of lightning has the right to leave the field and seek safe shelter.

During Contest – The final decision will be made by the Head Official and the Game Administrator upon recommendation from the Head Athletic Trainer. If the Head Athletic Trainer is not onsite, then the Assistant Athletic Trainer will be the designee. The Game Administrator and or Head Coach shall inform the head official of the dangers associated with lightning and what our policy is. These individuals must assess the dangers by the method stated in this policy. Whenever possible, the Head Athletic Trainer or designee will advise the Game Administrator and or Head Coach as to the danger of lightning. The responsibility still remains with the head official supervising the activity to remove the teams or individuals from the field or event site. With the information presented in this policy, these individuals can make an informed, intelligent, and safe decision regarding the risk of a lightning strike. Any individual or staff who feels he or she is in danger of lightning has the right to leave the field and seek safe shelter.

SAFE SHELTER:

A safe shelter is defined as: any building normally occupied or used by people. For example, a building with plumbing and or electrical wiring that acts to electrically ground the structure. Avoid using shower facilities for safe shelter and do not use showers or plumbing, or telephone during a thunder storm. In absence of sturdy, frequently inhabited building, any vehicle with a hard metal roof (not a convertible or golf cart) and rolled up windows will provide safe shelter, it is hard metal roof that dissipates the lightning strike that protects you.

Some Safe Shelters at Waxahachie I. S. D.

Lumpkins Stadium – Fieldhouse, Concession Stands, Beneath bleachers under home stands.

Junior High Practice Fields – Gyms, Waxahachie Junior High, Fieldhouse

Wilemon Stadium – Concession stands, Maintenance building, Locker Rooms, Cars

WHS Tennis Courts – Concession Stands, J. W. Williams Gymnasium, Cars

WHS Lady Indians Softball Field – Concession Stand, J. W. Williams Gymnasium, WISD Multipurpose Facility, Cars

Richards Baseball Park – Concession Stand, Locker Rooms, Restrooms, Cars

YMCA Swimming Pool – YMCA, Cars

Waxahachie Country Club – Clubhouse

SUSPENSION:

The average distance from one lightning strike to the next is approximately 2 to 3 miles, yet can be as much as 10 miles. Therefore, a storm may still be several miles from your location yet the very next strike could be on top of you. Based on NCAA Guidelines all activity should be suspended and all persons should seek shelter when:

- Flash to Bang – This provides us the “30-30” rule. A 30 second or less flash to bang count is detected. This is equivalent to six miles or less.
- SkyScan – Two or more consecutive readings in the 0-8 mile range.
- Email Weatherbug Messaging – An email by Weatherbug stating lightning is within a 0-8 mile range.
- If available, consultation with a meteorologist concerning the status of dangerous weather/lightning in the area.

RETURN TO ACTIVITY:

Once a game or practice has been suspended the storm should continue to be monitored. No contest or practice should be resumed until all lightning activity within the 8 mile radius (30 second count) for 30 consecutive minutes. This is the “30-30 rule.” This is to prevent any casualties caused by a backflash. Most people consider it safe to resume activity once a storm has passed or it has stopped raining. However, a central Florida study found more casualties do occur after peak flash rate.

WAXAHACHIE I. S. D. LIGHTNING SAFETY GUIDELINES:

1. Athletic teams will go inside to shelter because of lightning when the lightning has been detected within a radius of 8 miles surrounding the activity area.
2. The W. I. S. D. Head Athletic Trainer or designee has been designated by the Athletic Director as responsible for informing coaches when it is unsafe if he or she is onsite at the activity.
3. The W. I. S. D. Head Athletic Trainer will use the SkyScan, the Flash to Bang Method, and Reports from radio, television, and internet to determine the severity of approaching storms with lightning and their danger. If necessary, reports from available meteorologists may be also used.
4. Upon confirmation from the athletic trainer of an unsafe area, coaches will escort their teams to shelter indoors.

5. Return to play will be considered after there is no lightning strike detected in a thirty minute time span within a radius of 8 miles surrounding the practice/competition site.
6. In a competition situation, the W.I.S.D. Head Athletic Trainer (if onsite) or designee (if not onsite) will be responsible for informing officials, the Athletic Director, the coaches, the teams and the opponents officials if he has detected approaching storms and lightning to be unsafe for play.
7. The WISD Head Athletic Trainer will be responsible for communication concerning suspension of game activity to appropriate WISD administration.
8. Information about approaching storms will be given to coaches by the Head Athletic Trainer or designee when information about approaching storms has been received.
9. Unsafe conditions exist when lightning has moved with an 8 mile radius of the competition or practice area.