

Lightning Policy

Lightning is the most frequent weather hazard impacting athletic events. It is imperative for the safety of our student-athletes, coaches, staff and spectators that we develop and implement a lightning safety policy. There must be mandatory compliance with this policy to ensure the safety of all involved. These protocols will be reviewed with the Athletic Training Staff on a yearly basis.

Outdoor Siren System

Southeast Missouri State University has implemented an outdoor warning system to provide a portion of advance alert to severe weather. The National Weather Service and local emergency management agencies initiate all siren alerts. There are three types of alerts.

- **TORNADO WARNING**---3-minute steady sound
When you hear a steady 3-minute sound from the sirens, a tornado is imminent. A tornado has been sighted. Immediate action is to be taken.
IF INDOORS: Seek shelter in the lowest level of the building. Interior hallways are preferred. Stay away from windows and doors. Refer to tornado plan at each individual venue for safest location.
IF OUTDOORS: Take cover in the nearest ditch or low area away from power lines and trees. Do not stay in a car or attempt to outrun a tornado.
- **SEVERE WEATHER & OTHER EMERGENCIES**---short pulse tones
In the event of severe thunderstorm warnings or dangerous lightning for Cape Girardeau County, you will hear a series of short pulse tones followed by a recorder or live message. If possible, tune to the local weather broadcasts.
- **BUILDING EVACUATION**---3-minute repeated broken tones
If the evacuation of a building becomes necessary, the siren will sound with repeated broken tones that continue for 3 minutes. This means you should evacuate as quickly as possible. In this instance the sound may be followed by a message.

These sirens are tested on the first Wednesday of the month at noon. During testing, you will hear the short pulse tones and voice message announcing the test. The 3-minute tornado siren will then sound. Testing of the system will NOT occur if there is the possibility of severe weather in the area.

Methods of Gathering Lightning Information

Along with the Outdoor Siren System used by Southeast Missouri State University, there are additional methods that may be used to provide sufficient information used to cease activity.

“FLASH-TO BANG” Method

The National Severe Storms Laboratory (NSSL), National Collegiate Athletic Association (NCAA) and the National Athletic Trainers’ Association (NATA) recommend the use of the flash to bang ratio to help determine when cover should be taken. This method requires no equipment and is an easy way to determine the distance from the last lightning strike. To use the flash-to-bang method, begin counting on the lightning flash, and stop counting when the associated thunder is heard. Divide this number (in seconds) by 5 to determine the distance (in miles) to the lightning flash. For example, if the time in seconds between the lightning being spotted and the thunder being heard is equal to 30, divide that by 5,

and you get 6 ($30/5=6$). Therefore, that lightning flash was approximately 6 miles away from the observer.

Weather Sentry by Schneider Electric

The SEMO Athletic Department will utilize Weather Sentry by Schneider Electric for lightning detection. Weather Sentry is a weather tracking program that will send alerts to the cell phones of users indicating when lightning is in the area. The Athletic Training department will handle logging individuals into the program and educating them on how to properly use the program.

When using Weather Sentry, Athletic Trainer should notify their coaches when a lightning strike occurs in the 30-mile radius and then cease activity when there is a strike within the 10 mile radius.

Criteria for Suspension of Activity

It may be necessary for a Certified Athletic Trainer to suspend activity if they feel that people are in jeopardy due to inclement weather even if the outdoor warning system has not been activated. At this time all people in the area should seek shelter immediately.

Southeast Missouri State will use NCAA recommendations and OVC lightning policy when determining when to cease outdoor activity. The current OVC lightning policy states:

- When lightning is detected within a minimum of **10 miles** of the competition site, the competition shall be suspended.

However, if lightning is detected further than 10 miles away, and the Certified Athletic Trainer determines that the weather is becoming too dangerous to continue activity. The Certified Athletic Trainer has unquestionable authority to suspend activity.

When using the flash-to bang method, as the count approaches 30 seconds, all persons should be seeking, or already inside appropriate shelter. This is the minimal guideline when using the flash-to-bang method to halt activities and seek shelter.

When utilizing Weather Sentry, Athletic Trainer should notify the head coach when lightning strikes have been detected 20 miles from the practice site. When a lightning strike is detected within 10 miles or less, all activity must be suspended, and participants must seek shelter.

During a home contest the Certified Athletic Trainer will alert the Athletic Department Staff member, or game administrator in charge at that event, as well as the head coach and game official. The game officials (umpires, referees, etc.) will make the final decision to suspend the contest.

Criteria for Return to Activity

30-Minute Return-to-Play Rule

Southeast Missouri State University will use NCAA recommendations and OVC lightning policy when determining when it is safe to resume outdoor activity.

- Competition may be resumed after **30 minutes** of no detected lightning strikes within a 10-mile radius.

If a game, practice, or other activity is suspended or postponed due to lightning activity, it is important to establish criteria for resumption of activity. First off, the storm should continue to be monitored. Waiting at least 30 minutes after the last lightning flash or sound of thunder is recommended. Each time lightning is seen or thunder is heard the 30-minute clock should be reset. A blue sky or lack of rainfall is not an adequate reason to resume play, as lightning can strike far from where it is raining.

The primary choice for a safe location from lightning hazard is any substantial, frequently inhabited building. The electrical and telephone wiring and plumbing pathways aid in grounding the building. The secondary choice for a safe location from lightning hazard is a fully enclosed vehicle with a metal roof and the windows closed. You should avoid touching the sides of the vehicle. Convertible vehicles, golf carts, etc., are not adequate areas of shelter. You should avoid high places and open fields, isolated trees, rain or picnic shelters, baseball dugouts, communication towers, flagpoles, bleachers, metal fences, or any type of water.

Individuals who feel their hair stand on end or skin tingle or hear crackling noises should assume the lightning-safe position. That position is crouched on the ground, weight on the balls of the feet, feet together, head lowered and ears covered. **DO NOT LIE FLAT ON THE GROUND.** You must minimize the amount of contact that you have with the ground.

When lightning is detected within a minimum of 30 miles of the competition site, home team management shall utilize the public address system to inform those in attendance that inclement weather including lightning is within 30 miles and that patrons should be prepared to seek shelter. Additionally, home team management shall notify the game officials that inclement weather is moving into the area.

Managing Victims of Lightning Strike

In the event that a person is struck by lightning proper care should be given. Because lightning-strike victims do not remain connected to a power source, they do not carry an electric charge and may be safely handled. However, personal safety must be considered before venturing into a dangerous situation to render care. If care is decided to be given, the first priority should be to move to victim to a safe location. It is imperative to treat lightning-victims promptly, as rescue breathing and cardiopulmonary resuscitation (CPR), along with the early defibrillation through use of an automatic external defibrillator (AED), has been proven to be successful and restart breathing and circulation. In the case of a lightning strike incident in which there are multiple victims, care should be administered to the apparently "dead" first. The following are recommended pre-hospital care for treating lightning-strike victims:

1. Activate the Southeast Missouri State University Emergency Action Plan, and Emergency Management System
2. Survey the scene for safety
3. Carefully move the victim to a safe area, if needed.
4. Evaluate and treat for any breathing and/or circulation problems

5. Evaluate and treat for hypothermia and shock
6. Evaluate and treat for fractures
7. Evaluate and treat for burns

OTHER INFORMATION SYSTEMS

The following may also be used to determine if any severe weather is in the area.

Weather Forecast-Cape Girardeau: 573-334-8222

KFVS 12 Channel 8.5 on SEMO Cable www.kfvs.com

The Weather Channel Web page: www.weather.com/weather/local/63701

References Walsh, K.M., et al. (2000) National Athletic Trainers' Association Position Statement: Lightning Safety for Athletics and Recreation Journal of Athletic Training, 35, 471-477.

Severe Weather Shelter Locations

Houck Stadium Venue

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside of Houck fieldhouse or Gameday Locker room in the basement of Merrick Hall immediately.

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.

Abe Stuber Track Complex Venue

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside of the track house or locker room facility.

If there is immediate threat from a tornado you should seek shelter immediately. If you cannot make it to one of the buildings you should seek shelter in a low-lying ditch or depression. **DO NOT SIT IN YOUR CAR OR ATTEMPT TO OUT RUN A TORNADO.**

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.

Tennis Court Venue

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside the Tennis Locker Room Facility.

If there is immediate threat from a tornado you should seek shelter immediately. If you cannot make it to the building you should seek shelter in a low-lying ditch or depression. DO NOT SIT IN YOUR CAR OR ATTEMPT TO OUT RUN A TORNADO.

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.

Softball Venue

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside of the restrooms, in the maintenance building or in the concession stand area immediately.

If there is immediate threat from a tornado you should seek shelter immediately. If you cannot make it to the building you should seek shelter in a low-lying ditch or depression. DO NOT SIT IN YOUR CAR OR ATTEMPT TO OUT RUN A TORNADO

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.

Capaha Baseball Venue

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside the hitting facility.

If there is immediate threat from a tornado you should seek shelter immediately. If you cannot make it to the building you should seek shelter in a low-lying ditch or depression. DO NOT SIT IN YOUR CAR OR ATTEMPT TO OUT RUN A TORNADO

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.

Rosengarten Athletic Complex

If the outdoor warning system is activated or if a DPS officer or a Certified Athletic Trainer informs the coaching staff of inclement weather, you must seek shelter inside of the lowest level of the Rosengarten Athletic Building.

If any injuries should occur the Emergency Action Plan should be activated for that particular facility.