Sports Medicine – Lightning - Procedure

Summary

CSU Athletics procedures on lightning conditions, its impact on athletic events, and the treatment of lightning injuries.

Purpose

The purpose of this procedure is to provide guidelines for dealing with lightning, lightning related injuries, and to explain how lightning injuries occur.

Procedure

The chain of command for making the decision to remove a team or individuals from an athletic site or event is as follows. When present, the Certified Athletic Trainer (ATC) is responsible for keeping track of the proximity of imminent lightning activity. If the ATC is not present, the attending supervising student assistants are responsible for removing athletic participants from practice or competition. If there is no representative from Columbus State University Sports Medicine present, then the supervising coach is responsible.

One or more persons should be assigned as weather watchers, constantly scanning the area for approaching threatening weather. Signs of threatening weather include: darkening clouds, high winds, thunder, and/or lightning activity. Athletic trainers and coaching staff shall check local weather reports periodically starting no later than 2 hours prior to and up to the time of the scheduled game or practice. A blue sky is not a good indicator of when lightning will strike. Lightning may strike up to 10 miles ahead of the storm it may be associated with.

The coaching/sports medicine staff should know the location of the closest safe shelter to the athletic site and how long it takes to reach that shelter. A safe shelter is defined as: any sturdy building that has metal plumbing as described above; any vehicle with a hard metal roof (not a convertible or golf cart) with the windows rolled up is considered a safe shelter. In our case those places would include: athletic training room, Lumpkin Center, Woodruff Gym, soccer complex and the pavilion at the tennis courts. If not safe shelter is reachable, crouch with only your feet touching the ground and keeping your feet close together, wrap your arms around your knees, cover your ears, and lower your head to minimize your body surface area. You may perform this crouch in a thick grove of small trees surrounded by taller trees or in a dry ditch. DO NOT LIE FLAT!!! If you feel your hair stand on end or your skin tingle or hear crackling noises, immediately, crouch to minimize your body surface area. Stay away from tall or individual trees, lone objects (flagpoles or light poles), metal objects (fences or bleachers), standing pools of water, and open fields. Avoid being the tallest object in a field. Do not take shelter under a single tree.
The coaching/sports medicine staff should be aware if how close lightning is striking. This is accomplished by using the Telvent Weather Sentry Alert System. This system sends a text message “alert” when lightning has come within an 8 mile radius of the event site. This system will continue to update the 30 minute clock whenever there is another strike within the desired radius. Once there has been a 30 minute period of no-strikes, then they system will send out an “all clear” text signifying the ability to return to play.

An alternative method is the “flash-to-bang” method determines the distance, in miles, of the lightning strike. Count the seconds from “flash” (lightning) until the “bang” (thunder) is heard. Divide this number by 5 to determine how far away (in miles) lightning is occurring. If the “flash-to-bang” interval is decreasing rapidly, or the count is thirty (30) or less, all outdoor activities must stop. All persons must immediately leave the athletic site and seek safe shelter.

Allow 30 minutes to pass after the last sound of thunder or flash of lightning before resuming any intercollegiate activity. Resumption of event/practice should occur no earlier than 30 minutes after the last sound of thunder or flash of lightning is seen or heard. Also, checking the Telvent Weather Radar and if possible the local weather will be done prior to return to play. All individuals have the right to leave an athletic site in order to seek a safe structure if the person feels in danger of impeding lightning activity, without fear of repercussions or penalty form anyone. Remember, it is possible to have lightning without thunder; however thunder never occurs in the absence of lightning.

Use of phones will be limited to emergencies only and using cell phones or cordless phones. **DO NOT USE A LANDLINE PHONE.**

Lightning strike victims do not carry an electrical charge. The following steps provide information on how to manage a lightning strike victim.

- Survey the scene
- Activate Emergency Medical Service (EMS)
- Move the victim to a safer location, if necessary
- Evaluate and treat for: ABC’s (airway, breathing, and circulation), hypothermia, shock, fractures, and burns.
- CPR is safe for the responder and had been shown to be effective is reviving lightning strike victims.

**Related USG Policy**

N/A

**Last Update**

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**Responsible Authority**

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