Vanderbilt Sports Medicine

ADVERSE WEATHER CONDITIONS - LIGHTNING

WHEN DO WE CLEAR THE FIELD???

Postpone or suspend activity if a thunderstorm appears imminent before or during a practice or game (regardless of whether lightning is seen or if thunder is heard) until the hazard has passed.

*Signs of imminent thunderstorm activity include darkening clouds, high winds, and thunder or lightning activity.



Recommended Guidelines

- Have a means of monitoring local weather forecasts and warnings.
- Designate a safe shelter for each venue.
- Use the flash-to-bang count to determine when to go to safety. By the time the flash-to-bang count approaches 30 seconds all individuals should be inside a safe structure.
- Once activities have been suspended, wait at least 30 minutes following the last sound of thunder or lightning flash prior to resuming an activity or returning outdoors.

If you can hear thunder, you are close enough to the storm to be struck by lightning!

FLASH-TO-BANG RATIO

- To use the flash-to-bang method, begin counting when sighting a lightning flash.
- Counting is stopped when the associated bang (thunder) is heard.
- Divide this count by five to determine the distance to the lightning flash (in miles).

For example, a flash-to-bang count of thirty seconds equates to a distance of six miles. **Lightning has struck from as far away as 10 miles from the storm center!**

<u>Vanderbilt Sports Medicine athletic trainers will carry lightning detectors and use the</u>
<u>"Flash-to-Bang" method to make a recommendation to the administrative and coaching staff whether to suspend or return to activity concerning threatening weather.</u>



Vanderbilt Sports Medicine

LIGHTNING SAFETY

Avoid being the highest point, in contact with, or in proximity to the highest point in an open field. Also avoid being on the open water. Do not take shelter under or near trees, flagpoles, or light poles.

- 1. There should be no contact with metal objects (bleachers, fences, golf clubs, bats).
- 2. Avoid single or tall trees, tall objects and standing in a group.
- 3. If there is no other shelter you may seek refuge in a hardtop vehicle.
- 4. The existence of blue skies and/or absence of rain are not protection from lightning. Lightning can strike 10 miles from the rain shaft.
- 5. DO NOT LIE FLAT ON THE GROUND.
- 6. Avoid using a land line telephone.
- 7. Avoid standing water and open fields.
- 8. If in a forest, seek shelter in a low area under a thick grove of small trees.
- 9. If you feel your skin tingling immediately crouch and grab your legs and tuck your head.
- 10. Persons who have been struck by lightning do not carry an electrical charge.
- 11. All individuals have the right to leave an athletic site in order to seek a safe structure if the person feels in danger of impending lightning activity, without fear of repercussions or penalty.

<u>Lightning safe position</u>: crouched on the ground, weight on the balls of the feet, feet together, head lowered, and ears covered. Assume the lightning safe position for individuals who feel their hair stand on end, skin tingle, or hear "crackling" noises. (See Figure 2.)

Figure 2: Lightning Safe Position

SAFE SHELTER

A safe location is any substantial, frequently used building. The building should have four solid walls (not a dug out), electrical and telephone wiring, as well as plumbing, all of which aid grounding a structure.

The secondary choice for a safer location from the lightning hazard is a fully enclosed vehicle with a metal roof and completely closed windows. It is important to not touch any part of the metal framework of the vehicle while inside it during ongoing thunderstorms.

It is not safe to shower, bathe or talk on landline phones (cell phones are allowed) while inside a safe shelter during thunderstorms.

Basic First Aid for Lightning Strike Victim

- Survey the scene for safety
- Activate local EMS
- Lightning victims do not "carry a charge" and are safe to touch
- If necessary, move the victim with care to a safer location
- Evaluate airway, breathing and circulation, and begin CPR if necessary
- Evaluate and treat for hypothermia, shock, fractures and/or burns.

