Winthrop University
Athletic Department
Lightning Policy

Lightning strikes to individuals are rare but can be deadly. It is also the most consistent and significant weather hazard that may affect athletic participation. Due to the nature of lightning and the arrangement of the university's athletic facilities there must be a policy in place to respond to the occurrence of lightning.

The National Severe Storms Laboratory recommends that athletic participation cease when lightning is detected within 6 miles. For our purposes this will be indicated by either a 30 second flash-to-bang count (table1) as assessed by an ATC or as indicated by the Skyscan unit. This information will be supplemented by monitoring of the Weather Channel as well as local news reports for storm warnings. The decision to delay participation will be announced by three blasts of an air horn followed by radio contact to each sport training outdoors.

When the decision has been made to delay participation, teams will report to their assigned Safe Structure. As Safe Structure is defined as "any building normally occupied or frequently used by people, i.e., a building with plumbing and or electrical wiring that acts to electrically ground the structure". Teams will remain within these structures until thirty minutes after the last bolt of lightning has passed. Safe Structures will be assigned as followed:

Softball- Softball Hitting Facility/Locker-room
Baseball- Underneath of Stadium
Men's and Women's Soccer- Track and Soccer Field house
Men's and Women's Cross Country- Track and Soccer Field house
Men's and Women's Tennis- Locker rooms/Tennis Tower
Men's and Women's Track and Field- Track and Soccer Field house

In the event of lightning, precautions must be taken to ensure the safety of fans as well as players. When an event is delayed for lightning, an announcement will be made to spectators regarding the reason for the delay as well as suggestions for their safety. Spectators should either go inside a safe structure or at least get into automobiles which have a solid metal roof (not convertible) and roll up windows. It is not the tires that protect from lightning strikes it is the large area of the roof which dissipates the lightning around the vehicle.

Skyscan- the Skyscan unit is an electronic portable lightning/thunderstorm detector. It is able to detect lightning and thunderstorm activity as far as 40 miles away. The unit will indicate lightning activity at ranges of 20-40 miles, 8-20 miles, less than 8 miles and less than 3 miles away.

Table 1

Lightning Quick Facts
It takes the sound of the bang of a thunderclap five seconds to travel one mile, lightning flash is seen instantaneously. Therefore for every five seconds between the flash of lightning and the bang of thunder, lightning is one mile away. A thirty second Flash-to-Bang count means lightning is 6 miles away.
The average length of a lightning bolt is 3-6 miles long.
The average speed of a thunderstorm is 25 MPH.
Lightning can strike from a clear blue sky.

Table 2

Lightning Don'ts
Avoid using shower facilities for a safe structure and do not use showers or plumbing facilities during a thunderstorm.
Trees are not good options for shelter during a thunderstorm, especially lone or single trees.
If caught outdoors with no shelter stay away from the tallest objects, crouch down with only the balls of you feet touching the ground. Try to minimize your body's surface area and minimize contact with the ground. DO NOT lie flat.
Avoid using land line telephones except in emergency. Cellular or cordless phones are a safe option within a safe structure.

Safe Shelter:

1. A safe location is any substantial, frequently inhabited building. The building should have four solid walls (not a dug out), electrical and telephone wiring, as well as plumbing, all of which aid in grounding a structure.
2. The secondary choice for a safer location from the lightning hazard is a fully enclosed vehicle with a metal roof and the windows completely closed. It is important to not touch any part of the metal framework of the vehicle while inside it during ongoing thunderstorms.
3. It is not safe to shower, bathe, or talk on a land line phones while inside of a safe shelter during a thunderstorm. (cell phones are OK)

Flash-to-Bang:

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 to thirty seconds equates to a distance of six miles. Lightning has struck from as far away as 10 miles from the storm center. "If you hear it, if you see it, flee it" Postpone or suspend activity if a thunderstorm appears imminent before or during an activity or contest, (irrespective of whether lightning is see or thunder is heard) until the hazard has passed. Sign of imminent thunderstorm activity are darkening clouds, high winds, and thunder or lightning activity.

P.S.A. for Unsafe Weather Conditions

Attentions ladies and gentlemen, unsafe weather conditions have been detected. The National Severe Storm Laboratory recommends that during thunderstorms people should take shelter inside building such as a classroom, gymnasium, or place of business. Inside a vehicle with a solid metal roof should be a safe alternative. If you are unsure of the appropriateness of your automobile please seek shelter indoors immediately.

NATA Recommendations for Lightning Safety

1. Established a chain of command that identifies who is to make the call to remove individuals from the field.
2. Name a designated weather watcher (A person who actively looks for the signs of threatening weather and notifies the chain of command if severe weather becomes dangerous.)
3. Have a means of monitoring local weather forecasts and warnings.
4. Designate a safe shelter for each venue.
5. Use the flash-to-bang count to determine when to go to safety. By the time the flash-to-bang count approaches thirty seconds all individuals should be already inside a safe structure.
6. Once activities have been suspended, wait at least thirty minutes following the last sound of thunder or lightning flash prior to resuming an activity or returning outdoors.
7. Avoid being the highest point in an open field, in contact with, or proximity to the highest point, as well as being on the open water. Do not take shelter under or near trees, flagpoles, or light poles.
8. Assume the lightning safe position (crouched on the ground, weight on the balls of the feet, feet together, head lowered, and ears covered) for individuals who feel their hair stand on end, skin tingle, or hear “crackling” noises. Do not lie flat on the ground.
9. Observe the following basic first aid procedures in managing victims of lightning strike:
    1. Survey the scene for safety.
    2. Activate local EMS
    3. Lightning victims do not “carry a charge” and are safe to touch
    4. If necessary, move the victim with care to a safer location
    5. Evaluate airway, breathing, and circulation, and begin CPR if necessary.
    6. Evaluate and treat for hypothermia, shock, fractures, and/or burns.
    7. 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 form anyone.