

MARS HILL COLLEGE



DEPARTMENT OF ATHLETIC TRAINING

Policy Statement on Lightning & Severe Weather

{Updated as of 8/01/2007}

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I. Quick Facts

“Lightning is the most consistent and significant weather hazard that may affect intercollegiate athletics. Within the United States, the National Severe Storms Laboratory (NSSL) estimates that 100 fatalities and 400-500 injuries requiring medical treatment occur from lightning strikes each year. While the probability of being struck by lightning is extremely low, the odds are significantly greater when a storm is in the area and the proper safety precautions are not followed.”

- Excerpt from NCAA Guide Line 1d Lightning Safety

A. Lightning 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.

B. 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 your 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.

II. Chain of Command

- The responsibility for removing athletes from a practice/scrimmage area due to the threat of lightning lies with the head coach of that particular sport.
- In the event the head coach is not present, an assistant coach designated by the head coach will assume responsibility.
- In the event neither head coach nor designee is present, the MHC staff athletic trainer will assume responsibility.
- The MHC staff athletic trainer present will be responsible for monitoring the weather and advising the head coach or his/her designee on the situation.
- The responsibility for removing athletes from a game area due to the threat of lightning lies with the official, referee or umpire in charge.
- It is the responsibility of the MHC staff athletic trainer or present to inform the official, referee or umpire in charge and the visiting team's athletic trainer or head coach of the lightning policy.
- It is also the responsibility of the MHC staff athletic trainer present to monitor the weather and advise the official, referee or umpire in charge on the situation.

III. Means of Monitoring Weather

- MHC has several portable lightning detector devices for use during athletic practices and games.
- Flash/Bang Method: Count the number of seconds which past between a lightning strike (flash) and the following sound of thunder (bang). Take the number of seconds between flash and bang then divide by five, the resulting number is the approximate distance, in miles, from the practice/game area to the lightning flash.

IV. Obligation to Warn

- According to a basic principle of tort law, an individual has a duty to warn others of dangers that may not be obvious to a guest of that person.
- A public address message should be given warning spectators of MHC athletic events if lightning activity becomes an imminent danger in the immediate area.
- Lightning safety information and tips should be published in game programs and media guides.

V. Criteria for Evacuation of the Practice/ Game Area

- a. A member of the MHC Athletic Training Department will monitor one or more of the following for lightning, severe weather, and/or storms:
 - National Weather Service and/or National Oceanic & Atmospheric Administration (NOAA) local weather radar (www.noaa.gov or www.weather.com);
 - Commercial lightning detector.
 - “*Flash / bang*” count.
- b. When an appropriate Weather Data warning is received, the “flash/bang” count reaches **50 seconds**, and/or a **severe weather watch** has been issued for the Mars Hill area, a member of the MHC Athletic Training Department and will notify the following persons-
 - An appropriate member of the MHC Athletic Training Department (if applicable)
 - The MHC head coach and/or his/her designee;
 - The game official / umpire (at a break in the action);
 - The visiting team’s athletic trainer and/or coach (if applicable).

At this point, all outdoor game / practice activities are to cease **IMMEDIATELY**, and ALL personnel are to evacuate to a safe structure or location. Additionally, all activities taking place in whirlpools and/or in-ground hydrotherapy pools should cease.

The head coach and/or his/her designee is not permitted to override the decision to stop an outdoor game / practice in the event of lightning and/or severe weather. If a coach and/or game official(s) / umpire(s) make the decision to continue to practice and/or continue with a game or other activity despite a National Weather Service Severe Weather Warning, the cancellation of classes, and/or the verbal instruction by a Mars Hill College Athletic Trainer, they will be doing so against the recommendations of the MHC and Department of Intercollegiate Athletics.

c. **Safe Locations from a Lightning Hazard**

A safe structure or location is defined as- “**any sturdy, fully enclosed, substantial, and frequently inhabited building that has plumbing and/or electrical wiring that acts to electrically ground the structure**”. Examples of locations that routinely DO NOT meet the criteria include-

- Baseball / softball dugouts.
- Baseball / softball “covered” batting cages.
- Convertible / “soft-top” vehicles.
- Golf carts / John Deere Gator vehicles.
- Outside storage sheds; and/or Canopy / awning / tent.

d. In the absence of a sturdy, fully enclosed, substantial, and frequently inhabited location as described above, a secondary structure such as a fully enclosed vehicle with a hard metal roof, rubber tires, and completely closed windows can provide a measure of safety. Persons should not touch the sides of the vehicle! **Convertible and “soft-top” vehicles and golf carts do not provide a high level of protection and cannot be considered safe from lightning.**

e. Persons should avoid taking showers and using plumbing facilities (including indoor and outdoor pools, whirlpools, Jacuzzis, and hot tubs) and land-line telephones during a thunderstorm

f. **Unsafe Locations from a Lightning Hazard**

If no safe structure or location is within a reasonable distance, personnel should find a thick grove of small trees surrounded by taller trees or a dry ditch. Everyone should assume the “**lightning-safe**” position- a crouched position on the ground with the feet together, weight on the balls of the feet, head lowered, and ears covered. **DO NOT LIE FLAT!** Minimize the body’s surface area and minimize contact with the ground.

g. If unable to reach safe shelter, persons should stay away from the tallest trees or objects (i.e. light poles, flag poles, etc.), metal objects (i.e. fences, bleachers, etc.), individual trees, standing pools of water, and open fields. Persons should avoid being the highest object in an open field

h. In situations where thunder and/or lightning may or may not be present, yet someone feels his/her hair stand on end and skin tingle, **LIGHTNING IS IMMINENT!** Therefore, all persons should assume the “lightning-safe” position as described above.

i. A cellular and/or portable remote phone is a safe alternative to land-line phones, if the person and the antenna are located within a safe structure or location, and if all other precautions are followed.

j. If Mars Hill College administration has cancelled classes at the university due to severe weather, the University of Maryland Department of Intercollegiate Athletics strongly recommends the cancellation of all games, practices, and other activities

k. **All individuals should have the right to leave a site or activity, without fear of repercussion or penalty, in order to seek a safe structure or location if they feel that they are in danger from impending lightning activity.**

VI. Criteria for Safe Return to the Practice/Game Area

Personnel should not return to the practice/game area until:

- WeatherData has determined that the immediate threat has passed and the lightning / severe weather is greater than ten (10) miles away;
- Thirty (30) minutes have passed since the “flash/bang” count was 30 seconds; and/or the last lightning flash or the last sound of thunder.
- Each time the “flash/bang” count goes below 30 seconds, lightning is observed and/or thunder is heard; the “30-minute clock” is to be reset.

VII. Pre-hospital Care of Lightning Strike Victims

- Activate the local emergency management system.
- Lightning strike victims do not carry a charge and are safe to assess.
- The first rule of CPR, make sure the scene is safe, applies as well. If need be move the victim to a safe location.
- It has been demonstrated that there is a high success rate of resuscitating lightning strike victims using CPR. Thus, it is imperative to treat the “apparently dead” first by promptly initiating CPR.
- Secondary survey should include evaluating and treating these common injuries from lightning strikes: hypothermia, shock, fractures and burns.

VIII. Mars Hill College Venue Specific Safe Structures

Venue	Primary Safe Location(s)	Secondary Safe Location(s)	Unacceptable Location(s)
Ponder Practice Fields	Chambers Gymnasium	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Ponder Softball Field	Chamber Gymnasium	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
The Quarry Practice Facility	Chambers Gymnasium/ Fox Dormintory	Personal vehicles w/metal roof and/or team bus	convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Ammons Athletic Center	Chambers Gymnasium	Wren Student Union/ Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Henderson Baseball Facility	Chambers Gymnasium	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Tennis Center	Chambers Gymnasium/Phillips Field Hous	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Chapel Field	Chapel/Chambers Gymnasium	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
North Buncombe Track	North Buncombe High school.	Personal vehicles w/metal roof and/or team bus	Dugouts, BSB batting cages, convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
P.E. Field	Chambers Gymnasium	Personal vehicles w/metal roof and/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents
Madison High School Track	Football field house	Highs School gymnasium/personal vehicles/metal roof/or team bus	Convertible / “soft-top” vehicles, golf carts, storage sheds, canopy, awning, and/or tents

IX

Mars Hill College

DEPARTMENT OF INTERCOLLEGIATE ATHLETICS

Lightning / Severe Weather Statement to Be Read at Outside Events

In the event of lightning, thunder, or other severe weather, it is the policy of Mars Hill College Department of Intercollegiate Athletics that all spectators immediately evacuate the grandstand and/or bleacher areas. It is advised that spectators evacuate to hard-topped vehicles until it has been determined that it is safe to return to the grandstand and bleacher areas.

X. Annual Departmental Recommendations

- The athletic department reviews all policies and procedures with all coaching staff and administrators annually. At this time all questions can be answered and procedures updated as needed.
- The MHC risk management department reviews all policies annually.
- All first aid, CPR, AED and any other pre-hospital emergency care procedures are reviewed and practiced
- All weather data collection and lightening detection devices are reviewed to ensure the best available information and data is available in a timely fashion to expedite the implementation of the emergency action plan. That the device is in good working order and is reliable.