

Guidelines for Thunder /Lightning Safety

Termination, or temporary suspension, must always take place when an electrical storm is imminent. The decision to

terminate or suspend a game/meet/event when an electrical storm is imminent may be made by either the host school or the official.

As noted previously, a chain of command and designated decision-maker should be established for each organized practice and competition.

Recognition:

Coaches, certified athletic trainers, athletes and administrators should be educated regarding the signs indicating thunderstorm development. Since the average distance between successive lightning flashes is approximately 2-3 miles, any time that lightning can be seen or thunder heard, the risk is already present. Weather can be monitored using the following methods:

Monitor Weather Patterns - Monitor Weather Patterns - Be aware of potential thunderstorms by monitoring local weather forecasts the day before and morning of the practice or competition, and by scanning the sky for signs of potential thunderstorm activity

National Weather Service (NWS) - Weather can also be monitored using small, portable weather radios from the NWS. The NWS uses a system of severe storm watches and warnings. A watch indicates conditions are favorable for severe weather to develop in an area: a warning indicates severe weather has been reported in an area and for everyone to take proper precautions.

Management:

- **Evacuation** - If lightning is imminent or a thunder storm is approaching, all personnel, athletes and spectators must evacuate to available safe structure or shelters. A list of the closest safe structures should be announced and displayed on placards at all athletic venues.
- **Thirty - minute rule** - Once lightning/thunder has been recognized, it is mandatory to wait at least 30 minute after the last flash of lightning is witnessed or thunder is heard. Given the average rates of thunderstorm travel, the storm should move 10-12 miles away from the area. This significantly reduces the risk of local lightning flashes. Any subsequent lightning or thunder after the beginning of the 30 - minute count must reset the clock and another count should begin.
- When one contest is suspended on a site due to thunder being heard and/or lightning being observed, all contests on that site will be suspended.

Education on Lightning Danger:

Coaches, athletic trainers, official, administrators, as well as athletes **must** be educated regarding the signs indicating nearby thunderstorm development. Generally speaking, it is felt that anytime that lightning can be seen, or thunder heard, risk is already present.

Criteria for Suspension and resumption of Activity:

Once lightning/thunder has been recognized or thunder **heard** by an official, a coach,, the host site management personnel, or by lightning detection system, the game **must** be suspended immediately with all players, coaches, spectators, and officials directed to appropriate shelters.

After the suspension, the plan **must** include strict, documented criteria for the resumption of activities. It is **mandatory** to wait at least 30 minute after the last flash of thunder/ lightning is witnessed or thunder is heard. **Any subsequent lightning or thunder after the beginning of the 30 - minute count should reset the clock and another count should begin.**

Once the contest has been suspended, the 30 minute mandatory suspension in play is in effect. If the lightning detection system gives an "all clear signal" prior to the end of the 30 minute suspension time, the contest shall not be resumed until the 30 minute suspension time limit has elapsed, per the NJSIAA and NFHS policy.

Evacuation Plan:

All personnel, athletes, and spectators **must** be clearly informed of available safe structures or shelters in the event a thunderstorm approaches. A list of the closest safe structure **must** be announced and displayed on placards at all athletic venues. The person in authority must be aware of the amount of time it takes to get to each structure and the number of persons each structure can safely hold. For large events, time needed for evacuation is increased and there must be a method (i.e., announcement over the loud speaker) for communicating the need for evacuation and directing both athletes and spectators to the appropriate safe shelter.

Safe Structures:

The most ideal structure is a fully enclosed, substantial building with plumbing, electrical wiring and telephone service, which aids in grounding the structure. A fully enclosed automobile with a hard metal roof and rolled up windows is also a reasonable choice. School buses are an excellent lightning shelter that can be utilized for large groups of people. However, it is important to avoid contact with any metal while inside the vehicle.

Avoid using shower facilities for safe shelter and do not use showers or plumbing facilities during a thunderstorm as the current from a local lightning strike can enter the building via the plumbing

pipelines or electrical connections. It is also considered unsafe to stand near utilities, use corded telephones or headsets during a thunder storm, due to the danger of electrical current traveling through the telephone line. Cellular and cordless telephone are considerable reasonably safe and can be used to summon help during a thunderstorm.

When caught in a thunderstorm without availability or time to reach safe structures, you can minimize the risk of lightning-related injury by following a few basic guidelines:

- Avoid being the highest object. Seek a thick grove of small trees or bushes surrounded by taller trees or a dry ditch.
- Avoid contact with anything that would be attractive to lightning. Stay away from freestanding trees, poles, antennas, towers, bleachers, baseball dugouts, metal fences, standing pools of water and golf carts.
- Crouch down with legs together, the weight on the balls of the feet, arms wrapped around the knees, and head down with ears covered.

For more detailed information and a complete list of references, please see:

Zinder, S.M. and Shults, S.J. Lightning Safety. National Federation of State High School Associations Resource Document. <http://www.nfhs.org>