

NFHS Track &Field

NFHS Guidelines for Lightning Safety

Tuesday, November 09, 2010

Guidelines for Lightning Safety 2001 –Revised 2008

A chain of command and designated decision-maker should be established for each organized practice and competition.

SIGNIFICANCE:

Lightning is one of the most consistent and underrated causes of weather-related deaths or injury in the United States. According to the National Service Storms Laboratory, approximately 100 fatalities and hundreds more injuries requiring medical attention occur in the United States each year. Lightning-related injuries are of particular concern during the late spring and summer months, and during daytime hours. Nearly all lightning-related injuries occur between the months of May and September, and the greatest number of lightning casualties occurs between the hours of 10 a.m. and 7 p.m., with the greatest risk concentrated between 2 p.m. and 6 p.m. Therefore, the risk of lightning-related injuries appear to be of greatest concern during some of the most active periods for outdoor scholastic activities.

RECOGNITION:

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

- Monitor Weather Patterns** –Be aware of potential thunderstorms by monitoring local weather forecasts the day before and day of the practice or competition, and by scanning the sky for signs of potential thunderstorms activity during events.
- 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. Any thunderstorm poses a risk of injury or death even if it does not meet the criteria for severe weather. Therefore, anytime thunderstorms are in the forecast (even if it's only a 20 percent chance), event

organizers should be at a heightened level of awareness to the potential danger of lightning.

MANAGEMENT:

•**Evacuation** –If lightning is imminent or a thunderstorm is approaching, all personnel, athletes and spectators should evacuate to available safe structures or shelters. A list of the closest safe structures should be announce and displayed on placards at all athletic venues.

•**Thirty-minute rule** –Competition or practice should be suspended once lightning has been recognized or thunder is heard. It is recommended to wait at least 30 minutes after the last flash of lightning is witnessed or thunder is heard prior to resuming practice of competition. 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 should reset the clock and another count should begin.**

PREVENTION:

In order to prevent lightning-related injuries, it is important to formulate and implement a proactive, comprehensive lightning emergency plan. The plan should include:

- Advance planning;
- A systematic approach for monitoring local weather conditions;
- Education of staff to recognize signs of nearby lightning activity;
- Criteria for suspension and resumption of practice or competition;
- Evacuation plan, including nearby safe shelters; and
- Periodic review and practice of the plan by appropriate high school personnel.

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