

51. Lightning Safety Guidelines (Excerpts from “*NFHS Sports Medicine Handbook*”)

Recognition. 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 the morning of the practice or competition, and by scanning the sky for signs of potential thunderstorms.

Flash to Bang – This method is used to assess how far away lightning is striking. It is determined by counting the number of seconds it takes to hear a clap of thunder after witnessing a flash of lightning. The number of seconds is then divided by five to get the distance, in miles to the lightning flash. Generally, a 30-second or less flash to bang count suggests removal of the athletes from the field to a safe shelter.

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 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 announced and displayed on placards at all athletic venues.

Thirty-minute rule – Once lightning has been recognized, it is recommended to wait at least 30 minutes 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 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 in order:

Advance planning.

A systematic approach for monitoring local weather conditions.

Education of staff to recognize sign of nearby lightning activity.

Criteria for suspension and resumption of play.

Evacuation plan including nearby safe shelters.

Periodic review and practice of the plan by appropriate high school personnel.