

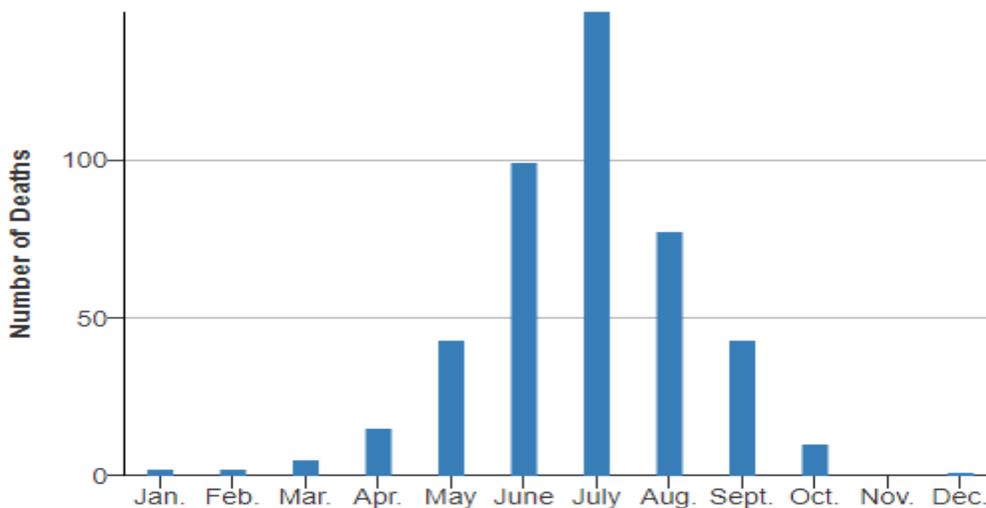


LIFEGUARDS – LIGHTNING BEST PRACTICES

About 40 million lightning strikes hit the ground in the United States each year. There are some factors that can put you at greater risk for being struck, such as participating in outdoor recreational activities or working outside. Regional and seasonal differences can also affect your risk of being struck by lightning.ⁱ

According to the Centers for Disease Control, there were 444 lightning strike deaths in the United States between 2006 and 2021. New Jersey has one of the highest recordings of lightning deaths and injuries. Lightning deaths can occur any time of the year, but most lightning deaths occur during the summer, especially during July.ⁱⁱ

Lightning Deaths by Month United States, 2006–2021



Data source: National Weather Service

Lightning most often strikes people who engage in outdoor recreational activities or work outside. Pool and beach lifeguarding personnel are in the top twelve occupations that have the highest risk of being struck by lightning.ⁱⁱⁱ

Two glaring facts from the CDC that are noticeable are that persons who engage in outdoor recreational activities and participate in the lifeguarding profession are at a higher risk of being struck by lightning.

Since this is a foreseeable risk, the question needs to be asked. “What can we do to mitigate the risks associated with lifeguarding and people using our beaches for recreational purposes?”

The first step is recognizing that we have a risk and that we need to develop an action plan to address these risks. Several resources are available, and we encourage all of our Municipal partners to research, adhere to, and implement best business practices.

One such resource is the “United States Lifesaving Association,” which provides a Guideline on Lightning Safety (www.usla.org).

The Guideline includes a policy statement, a Model Lightning Emergency Action Plan, and a Lightning Site Preparation Checklist.^{iv} Some of the highlights include:

- Developing an Emergency Action Plan
- Educate Staff
- Warning and Communication Tools
- Daily Operations
- Lightning Injury Response

The Model Lightning Emergency Action Plan should be tailored to local circumstances, available equipment, and predetermined evacuation options. For locations with high attendance or lack of nearby shelter, it may be prudent to initiate actions earlier than suggested.^v

The Action Plan^{vi} includes the designation of:

- Weather Watcher
- Threat Levels
- Protective Actions
- Ensuring Staff takes action to protect themselves
- Lightning Injury Response Protocols
- All Clear Protocols

The Lightning Site Preparation Checklist^{vii} includes.

- Having a Safety Plan in place when lightning becomes a threat.
- Weather Monitoring Tools (lightning detection systems)
- Communications
- Public Notification Tools (Public Address System, Outdoor Warning Sirens, Vehicle Announcement Patrol, Video Board Messaging, Site TV Override, Telephone Tree, Multimedia Notifications, Local Radio Broadcasting)
- Shelter – Identify areas of safe shelter, and ensure that Lightning rods are installed in compliance with NFPA 780 Guidelines

Considerations that need to be addressed:

- Training personnel not to stand on top of the lifeguard stand and use a whistle to direct people out of the water and to seek shelter. This increases their risk of being struck by lightning and creates confusion amongst the beach patrons.
- Signaling - Every municipality/lifeguard should have a separate emergency action signal for lightning threats. The use of an air horn, siren, or other devices (emergency lights (ADA concerns for the deaf or hearing impaired) should be used. A sign identifying the different signals used for safety and order on the beach should be available at the entrance to the beach and posted on the lifeguard stands.
- Lifeguards should be encouraged to report their concerns when observing dangerous conditions that may lead to a lightning strike.
- Lifeguards need to be given strong policy guidance regarding when they must leave the beach for their safety and seek shelter.
- Scenario training should be implemented. The training should include, at minimum, testing the guards to ensure they have a working knowledge of the organization's Lightning Emergency Action plan, identifying lightning threats, communication strategies, and dealing with uncooperative people who refuse to leave the water and or the beach.

This information will assist municipalities and their Lifeguards to prepare for and mitigate the risks of lightning events.

ⁱ [Lightning Strike Victim Data | Lightning | CDC](#)

ⁱⁱ Ibid.

ⁱⁱⁱ [Lightning Information for Workers | Lightning | CDC](#)

^{iv} https://cdn.ymaws.com/www.usla.org/resource/resmgr/Guidelines/USLA_Guideline_006_Lightning.pdf. pp.1-4

^v [USLA_Guideline_006_Lightning.pdf \(ymaws.com\)](#) p.1

^{vi} [USLA_Guideline_006_Lightning.pdf \(ymaws.com\)](#) pp.1-3

^{vii} [USLA_Guideline_006_Lightning.pdf \(ymaws.com\)](#) pp. 1-2