



SSC Monthly Construction Contractor Meeting

Safety Presentation

Lightning Safety

July 07, 2022



Lightning Safety

National Weather Service and Occupational Safety and Health Administration (OSHA)

Lightning is a dangerous natural force. Annually in the United States, cloud-to-ground lightning occurs 20 to 25 million times and over 300 people are struck by lightning. During the past 30 years, about 50 people, on average, have been killed by lightning strikes every year, and many more suffer permanent disabilities.

National Lightning Safety Awareness Week started in 2001, in order to call attention to lightning being an underrated killer. Since then, U.S. lightning fatalities have dropped. This reduction in lightning fatalities is largely due to the greater awareness of lightning danger and people seeking safety when thunderstorms threaten.

Safe Plan of Action

There is no safe place outside when thunderstorms are in the area. If you hear thunder, you are likely within striking distance of the storm. Too many people wait far too long to get to a safe place when thunderstorms approach. Unfortunately, these delayed actions lead to many of the lightning deaths and injuries.

While on-site, the SSC Lightning Detection System [documented in Stennis Common Work Instruction (<u>SCWI-8715-0001</u>)] is operational 24 hours a day, seven days a week. This system audibly alerts personnel of a lightning <u>advisory</u> when potential or actual lightning activity has been detected within a ten-mile radius of SSC. Email notifications are also distributed. Lightning <u>warnings</u> are dispersed when lightning is indicated within 5 miles of SSC and instructs personnel to "immediately secure outside activities and take shelter in a secure location." If you hear a lightning advisory or warning, follow the precautions.



Do you think it is possible to get struck by lightning, even if it is not raining?

YES!

- Lightning CAN strike from a nearby thunderstorm, even when it may not be raining where you are located.
- Just because the rain decreases in intensity or stops, does not necessarily mean the lightning threat has decreased.
- If you hear thunder, you are close enough to a storm to be struck.

SAFE LIGHTNING SHELTERS:

Enclosed sturdy structures/buildings

There are 3 ways lightning can enter a structure: a direct strike, through wires/pipes that extend outside the structure or through the ground.

Stay away from:

- Windows/doorways and upper floors
- Plumbing (showers, washing dishes etc.)
- Plugged in appliances/electrical equipment
- Balconies, porches, open garages, car ports
- Concrete floors/walls

Lightning Myths

MYTH: Rubber tires on a vehicle protect you from lightning by insulating you from the ground.

Fact: Most cars are safe from lightning, but it is the metal roof and metal sides that protect you, NOT the rubber tires. Remember, convertibles, motorcycles, bicycles, open-shelled outdoor recreational vehicles and cars with fiberglass shells offer no protection from lightning. When lightning strikes a vehicle, it goes through the metal frame into the ground.

Lightning Myths

MYTH: If you're caught outside during a thunderstorm, you should crouch down or lie flat on the ground to reduce your risk of being struck.

Fact: Crouching doesn't make you any safer outdoors during a storm. Run to a substantial building or hard topped vehicle. If you are too far to run to one of these options, you have no good alternative. You are NOT safe anywhere outdoors. Lying flat actually increases your chance of being affected by potentially deadly ground current.