



# TOOLBOX TALKS

## Lightning Safety

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Lightning causes more deaths in the United States than hurricanes or tornadoes. In fact, lightning is the number two storm-related killer, surpassed only by flooding. Lightning also causes about \$5 billion in U.S. economic losses annually. Only about 10 percent of those struck by lightning are killed. Of the 90 percent who survive a lightning strike, the majority suffer life-long severe injury. Those injuries are primarily neurological, with a wide range of symptoms, and are difficult to diagnose. But the real tragedy of lightning's devastation is that protecting yourself is easy, although the simple safety precautions are sometimes inconvenient. It requires diligence and continual reinforcement and encouragement. Lightning safety is a multi-step process, with each step providing a decreasing level of protection plan around the weather, and has a lightning safety plan.

### 30-30 Rule

If you are planning to be outside, watch the weather forecast and know your local weather patterns. Make plans around the weather to avoid a lightning hazard. If you are outside when a storm approaches, stay near proper shelter and use the '30-30 Rule' to know when to seek proper shelter. When you see lightning, count the time until you hear thunder. If you count 30 seconds or less, seek proper shelter. If you can't see the lightning, wait 30 minutes or more after last hearing thunder before you leave shelter.

### Shelter from Lightning

The best shelter commonly available against lightning is a large fully enclosed, substantially constructed building, e.g., your typical house. Substantially constructed means it has wiring and plumbing in the walls. Once inside, stay away from any conducting path to the outside. Stay off the corded telephone. Stay away from electrical appliances, lighting, and electric sockets. Stay away from plumbing. Don't watch lightning from windows or doorways. Inner rooms are generally safer.

If you can't get to a house, a vehicle with a solid metal roof and metal sides is a reasonable second choice. As with a house, avoid contact with conducting paths going outside: close the windows, lean away from the door, put your hands in your lap, and don't touch the steering wheel, ignition, gear shifter, or radio. Convertibles, cars with fiberglass or plastic shells, and open framed vehicles don't count as lightning shelters.

### Myth

Cars are safe because the rubber tires insulate them from the ground.

### Truth

Cars are safe because of their metal shell.

### Places to Avoid

If you can't get to proper lightning shelter, at least avoid the most dangerous locations and activities. Those are:

- Higher elevations
- Wide-open areas including sports fields
- Tall isolated objects like trees, poles, and light posts
- Water-related activities: boating, swimming (includes indoor pools), and fishing.
- Golfing

