

Lightning Protection

Hazard Alert



Lightning kills about 80 people in the U.S. each year and injures hundreds. Among construction workers, laborers, machine operators, engineers, roofers, and pipefitters have been struck by lightning most often on the job. Your chances of getting hit by lightning are greatest in Arkansas, Florida, Mississippi, New Mexico, and Wyoming. In most places, lightning hits most often in late afternoon in spring and summer. But lightning can hit anyone in the wrong place at the wrong time. Lightning can hit the same place many times too.

Lightning can stop your heart and kill you. But you can also get burns, nervous system damage, and other health problems. Some of these you may not notice until months after a lightning strike.

Protect Yourself

When to act

If you hear thunder and see lightning, act right away – especially if you count 30 seconds or less between the thunder and lightning. If the thunder gets louder or you see the lightning more often, the storm is getting closer. (Sometimes lightning will strike out of a sunny sky 10 miles or more from a storm.)

Lightning hits tall things, metal, and water – or a person standing on open ground or a roof.

Your worksite should have a plan for what to do in a lightning storm. (OSHA does not allow work on or from scaffolds in storms, in some cases.)*

If a storm is near

Do NOT:

- Be the tallest object in an area.
- Stand out in the open.
- Stand under a tree. (If the tree is hit, you can be too.)
- Stand in a gazebo or open shelter, like a baseball dugout or bus shelter.
- Stand next to metal objects – pipes or light poles or door frames or metal fences or communication towers – indoors or out.
- Stay next to water – ponds or running water – indoors or out. (Do not take a shower.)
- Use plug-in power tools or machines – indoors or out.
- Use a plug-in telephone (or a computer with a modem) – indoors or out.

(Please turn the page.)

* See the Code of Federal Regulations: CFR 1926.451(f)(12).

Do:

- Get into an enclosed building – like a house or shopping center or school or office building.
- Get into a car, van, truck, or bus with the windows closed all the way. Do not touch the doors or other metal inside. (Open cabs on heavy equipment will not protect you. A convertible with the top up will not protect you. Rubber tires will not protect you.)

If you are out in the open and have nowhere to go, squat down with your feet together and only let your feet touch the ground. Put your hands over your ears (to protect against noise). That way, you are so low the lightning may hit something else. And by not touching much of the ground, you have less chance that the lightning will move across the ground to you. Do not lie flat on the ground.

Do not go back to work outdoors until a half-hour after the lightning and thunder stop.

If someone is hit

Call emergency services (911).

A victim does not stay electrified. You can touch him/her right away. If the victim has no pulse, try CPR (cardio-pulmonary resuscitation). If there's a portable defibrillator, follow the instructions. But be careful about staying in the open in a storm to take care of the victim – or you can get hit too. If you can, move the victim to a shelter.

For more information, call your local union, the Center to Protect Workers' Rights (CPWR) (202-962-8490 or www.cpwr.com), the National Institute for Occupational Safety and Health (1-800-35-NIOSH or www.cdc.gov/niosh), or OSHA (1-800-321-OSHA or www.osha.gov).