

CPWR THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING

LIGHTING



Am I in danger?

If you hear thunder and are not in an enclosed building, then the answer is YES.

Lightning injures or kills hundreds of people in the U.S. each year. Construction workers who are outside/in open spaces or on roofs, towers, or other high places are at risk of being struck.

Lightning can stop your heart and kill you. It can also cause burns, nervous system damage, and other health problems you may not notice until months after a lightning strike.

Source: OSHA 29 CFR 1926.35, https://www.weather.gov/media/owlie/OSHA_FS-3863_Lightning_Safety_05-2016.pdf

If you are out in the open and have nowhere to go...

1. Squat down with your feet together. Only let your feet touch the ground. Do not sit or lie flat on the ground. Since lightning travels through the ground, the more contact you have with the ground, the greater your risk for injury or death.

2. Put your hands over your ears to **protect** against noise.

Use this position to reduce your risk of being struck by lightning.

Source: https://www.weather.gov/media/owlie/OSHA_FS-3863_Lightning_Safety_05-2016.pdf

If someone is injured by lightning...

- ▶ Call 911.
- Move them to a sheltered place. Someone hit by lightning does not stay electrified, so you can touch them right away.
- If the victim has no pulse:
 - Perform cardiopulmonary resuscitation (CPR)
 - Use a portable defibrillator if one is available, following the instructions.







Source: https://www.weather.gov/media/owlie/OSHA_FS-3863_Lightning_ Safety_05-2016.pdf

If you hear thunder or see lightning...

Get into an enclosed building

If you hear a rumble of thunder, the Occupational Safety and Health Administration (OSHA) recommends moving to a safe place immediately and staying there for at least 30 minutes after hearing the last sound of thunder. If you can't find a building, get into a hard-topped car or truck with the windows closed. Do not touch the doors or other metal inside.

According to the National Weather Service, "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".

You are still in danger on a covered porch or in an open shelter, like a baseball dugout or a bus shelter.

Avoid objects that conduct electricity



- ▶ Metal objects—fencing, scaffolds, heavy equipment, or light poles.
- ▶ Plug-in power tools or telephones, even if indoors.
- ► Water or wet items—puddles, pipes, wet ropes.
- ► Trees—if the tree is hit, you can be too.

Follow the Emergency Action Plan

Your employer should have an Emergency Action Plan (EAP) that includes written lightning safety procedures. The EAP should identify locations and requirements for safe shelters, describe when to stop outdoor work, and when it is safe to resume work.



Source: OSHA 29 CFR 1926.35

To learn more about lightning safety:

- Regulaciones: OSHA 29 CFR 1926.35 https://tinyurl.com/OSHA-Lightning
- CPWR Charlas Informativas: Protección de los Relámpagos http://www.cpwr.com/publications/toolbox-talks
- CPWR Soluciones de construcción: http://www.cpwrconstructionsolutions.org/ search.php?q=lightning

Find out more about construction hazards.

To receive copies of this Hazard Alert and cards on other topics call

301-578-8500 or visit cpwr.com/hazardalerts



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If you think you are in danger:
Contact your supervisor. Contact your union.
Call OSHA 1-800-321-OSHA