

2024

PRESS RELEASE

For More Information:

ELLEN G. DUYSEN

Central States Center for Agricultural Safety and Health

University of Nebraska Medical Center

College of Public Health, Room 3035

984388 Nebraska Medical Center

Omaha, NE 68198-4388

402.552.3394

FOR IMMEDIATE RELEASE

*By UNMC, Central States Center for Agricultural
Safety and Health, Omaha, NE*

LOOK UP!

You can't be too careful when you work around electrical power.

Photo by Canva

Every year in the United States, electrical incidents result in nearly 300 deaths and more than 3,500 injuries. That's according to the Electrical Safety Foundation International (ESFI).

ESFI reports that, of the electrical fatalities that occurred between 2011 and 2021 outside the workplace, 69% of those victims worked in non-electrical occupations. Of those fatalities, the greatest number, 582, were due to contact with overhead powerlines. In the workplace, 40% of all electrically related fatalities are caused by overhead powerlines. Being aware of your surroundings when working on the farm is essential.

Studies have shown that little or no electrical safety training is an element of most of these incidents. Power lines may be a safety hazard that's easily overlooked. However, you don't have to touch a power line to be in danger of high voltage. Electricity can jump to anyone who gets too close, so staying at least 10 feet away from power lines and their connections is critical. If digging in a site is necessary, ensure there are no underground power lines in that area by contacting the power company before digging.

The NASD (National Ag Safety Database) reports that the most common causes of overhead powerline electrocutions involve portable grain augers, oversized wagons, large combines, irrigation pipes, and other tall equipment that comes into contact with power lines. Farm equipment involved in these incidents includes tractors with front-end loaders and fold-up cultivators.

To avoid potential electrocution:

1. Be aware of the location of overhead power lines in your work area.
2. Always look up in all directions to ensure you know where nearby power lines are located.
3. Travel in areas with no overhead power lines as much as possible. If that isn't feasible/possible, always lower a portable grain auger before anyone moves it even a few feet.
4. Store irrigation pipe at least 100 feet away from overhead power lines.
5. Never turn an irrigation pipe vertically or upright if it is within 100 feet of overhead power lines.
6. Keep all irrigation equipment and water streams at least 10 feet from high-voltage power lines.
7. Always treat any overhead power line as if it will threaten your life.

Additional safety tips for working around power lines include:

- Locate all overhead power lines in the work area.
- Keep yourself and your equipment 10 feet away from all overhead power lines in all directions.
- Carry ladders and other equipment horizontally to avoid accidental contact.
- Lower equipment apparatus before driving/moving it.
- Be aware of fencing near power lines.
- Never spray water near power lines.
- Stay at least 35 feet away from fallen power lines. If conditions are wet, you need to stay even further away.

When working around overhead power lines, Ohio State University (OSU) Extension recommends observing these guidelines:

- Use a spotter when operating large machinery near power lines.
- Use care when moving equipment, such as extending augers or raising the bed of grain trucks around power lines or poles.
- Inspect the height of farm equipment to determine clearance.
- Ask your power company to determine transport and clearance of power lines whenever it's necessary to work around them.

If a vehicle or piece of equipment comes into contact with a power line, take these steps to remain safe:

- Stay calm, disengage gently and back away if possible, and immediately call an emergency number (911).
- Have someone immediately contact the local utility company to shut off the power.
- Stay in/on the vehicle unless there is a fire.
- If there is an emergency, such as an electrical fire, and you must leave the vehicle/equipment, jump as far away from it as possible.
- Don't allow any part of your body to touch the equipment and the ground simultaneously. **DO NOT** step down from the vehicle/equipment.
- Never make contact between an electrically energized vehicle or piece of equipment and the ground.
- Shuffle away from the spot where you jumped. To do this, do not completely lift either foot off the ground. Keep both feet in contact with the ground at all times. Shuffling

reduces current flow through your body from the ground. Slowly shuffle away from the equipment until you are at least 100 feet away.

- Be aware that electrical current from high voltage lines can flow through vehicles/equipment and energize the surrounding area for up to 100 feet.
- Once you leave the vehicle/equipment, never attempt to get back on or even touch it. It's better to assume it's energized than lose your life.

Ensure that everyone who may be potentially exposed to electrocution while working on the farm is aware of the hazards and knows how to stay safe. All seasonal workers should be well-trained by supervisors regarding the hazards related to any specific task/site. Safety decals should be attached to all equipment that may pose electrical hazards. Explain the decals to all workers who use the equipment.

Keep in mind that, as NASD notes, "electrocution is quick and deadly and one of the most overlooked hazards of farm work."

Sources include: Texas Cooperative Extension, National Institute of Occupational Safety and Health (NIOSH), Centers for Disease Control (CDC), Illinois Cooperative Extension.

Funding for this educational article comes from the Central States Center for Agricultural Safety and Health and the University of Nebraska Medical Center.