

Toolbox Talks

Your Safety On the Line



Your Safety On the Line: For Emergency Workers & Contractors

A Public Service of New Hampshire & The Northeast Utilities System

“Stopping to think for just a few seconds can prevent something from happening to you that’s gonna last a lifetime.” -Survivor, pole worker who came in contact with a live wire, lost both hands & most of his arms, damaged his right knee, & burned his body badly.

→Insight on Electricity & Safety from Contractors & Emergency Workers:

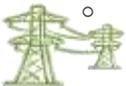
- There’s no forgiveness when it comes to working with electricity/electric power.
- Think before you act because in an instant your life could be over.
- There may be no discernible difference between a live wire & a dead wire.
- You can’t take shortcuts no matter how many times you’ve gotten away with it in the past because they will eventually catch up with you.
- Electricity is invisible & will kill you.
- Never assume anything in any situation; it could turn out to be the biggest mistake of your life.



→Basic properties of electricity have not changed; the incidence & prevalence of electrically powered appliances & equipment & the infrastructure needed to provide that power has grown tremendously. The voltage on that infrastructure has increased considerably over the last several years.

→Important concepts that will help you understand how to avoid hazardous situations:

- Light & electricity travel at 186,000 miles per second.
 - This is faster than you can react, & once a strong current has engaged you, it’s too late.
- Almost anything can be a conductor of electricity.
 - Water
 - Copper Wire
 - You – since our bodies are made up of mostly water, salt, & minerals, we make excellent conductors of electricity.
- Electricity will flow in a complete circuit.
 - There can be an electric current only where there exists a continuous path of conductive material.
 - Electricity is always seeking a return path to the earth.
 - You can become part of that circuit by touching a live line or even just a conductive object touching an energized line.
 - Voltage drops as it moves further away from the conductor.
- Do not touch power lines or power equipment for any reason.
 - Voltages are considerably higher now than they used to be, so always call the power company when it comes to power lines & equipment; never take matters into your own hands.



→Power Equipment Basics:

- Power lines are NOT insulated like the wires you see at your house.
- When a line’s down, assume the worst: that it’s electrically charged with maximum voltage.
- Transformers step voltage down to a level that can be used in our everyday lives.
 - Transformers have the potential to explode
 - They also contain hazardous chemicals that could leak out. Don’t spread or touch these chemicals; call the power company immediately if you see a transformer leaking.

→Guidelines for Contractors:

- Keep your distance from power lines, utility crews, & their equipment.
 - More information found in OSHA’s “Minimum Safe Working Distances for Nonqualified Employees” or contact the utility company in your area
- Use barriers where appropriate; make sure cranes or booms are grounded; call the power company to assist in preventative measures, including covering or moving lines.

Always call before you dig & always consider that there may be underground power lines.

 - Call 1-888-DigSafe 72 business hours before you plan to dig.

→When working around the outside of a home or business, call the power company to cover or de-energize service wires or other lines which may be close to work areas.

→If using a ladder near overhead lines, be sure it is made of non-conductive material, & maintain appropriate clearances from a primary wire.

→Should an accident occur & you find yourself trapped in a vehicle that you think may be electrically charged, either by downed lines or through underground excavation, use this procedure to evacuate your vehicle & avoid injury due to step potential:

- Notify 911 & your dispatch center of the potentially charged vehicle, & have them notify the power company.
- Stay in your vehicle; do not open doors or touch any part of the exterior.
- If you must exit the vehicle in case of fire or other impending danger, follow these rules:
 1. Jump out without touching any part of the vehicle.
 2. Then shuffle or hop away with your feet together & your arms close to your body.

“Accidents steal the most precious things in your life & never give them back.” -Survivor, same pole worker quoted above. He knows firsthand just how fast accidents can happen & just how much they can change your life in an instant...for the rest of your life, if you still have your life.