

## What electrical hazards are found on disaster sites?

[Ask the following questions and give time for answers.]

**What are the hazards?** Bodily contact with electricity, increased risk because of emergency circumstances, chaotic environment, re-energized lines, hidden hazards

**What are the results?** Shock, fire, burns, falls or death

**What should we look for?** Power lines, underground utilities, damaged electrical systems, generators, power tools, wet conditions

[Relate this incident or better one you know.]

**Actual Incident:** A 35-year-old tree-trimming leader was electrocuted when he stepped on a downed power line during the 1989 Hurricane Hugo clean up. The line was initially de-energized but became energized when a nearby gas station used a generator to power gasoline pumps. The main breaker at the station was not opened so current from the generator fed back to the transformer, charging the line and killing the worker.

[Ask the following question and ensure every item is covered.]

### How do we prevent these results?

- Treat all lines as live until proven otherwise by a qualified person.
- Check for underground utilities before you dig.
- Use generators according to manufacturers' instructions (maintain ground, keep dry, etc).
- Use GFCIs with all power tools and cords as close to the panel as possible.
- Avoid using electricity in wet conditions.
- Do not re-energize electrical systems that have been damaged until inspected by a qualified electrician.
- Use personal protective equipment for electrical safety



[Ask the following questions about this site and ensure every item is covered.]

### Let's talk about this site now.

- Have you been briefed on the hazards of this disaster?
- What are some issues that make electrical hazards at a disaster particularly dangerous? *Damaged utilities, damaged electrical systems, generators, wet conditions, uneven work surfaces.*
- How do you contact a qualified electrician or EMS?
- Do you know how to provide first aid to electrocuted workers?

[Record questions below that you want to ask about this site.]