



Electrical Safety (Part 1)

Why is it so important to work safely with or near electricity?

The electrical current in regular businesses and homes has enough power to cause death by electrocution. Even changing a light bulb without unplugging the lamp can be hazardous because coming in contact with the "hot" or live part of the socket could kill a person.

What kinds of injuries result from electrical currents?

There are four main types of injuries: electrocution (fatal), electric shock, burns, and falls. These injuries can happen in various ways:

- Direct contact with the electrical energy.
- When the electricity arcs (jumps) through a gas (such as air) to a person who is grounded (that would provide an alternative route to the ground for the electricity).
- Thermal burns including flash burns from heat generated by an electric arc, and flame burns from materials that catch on fire from heating or ignition by electrical currents. High voltage contact burns can burn internal tissues while leaving only very small injuries on the outside of the skin.
- Muscle contractions, or a startle reaction, can cause a person to fall from a ladder, scaffold or aerial bucket. The fall can cause serious injuries.

Electrical Safety is discussed further in URS SMS 012 and its three attachments.

