

Understand Electrical Safety

Overview

Electricity has long been recognized as a serious workplace hazard, exposing employees to such dangers as electrical shock, electrocution, burns, and fires. Using safe work practices while working on or near de-energized electrical parts can decrease your chances of being injured from electricity.

How can it hurt me?

You can receive a shock when a part of your body becomes part of an electric circuit. An electric shock can cause serious injury or sometimes even death. You will get a shock if you touch:

- both wires of an electric circuit.
- one wire of an energized circuit and the ground.
- part of a machine which is "hot" because it is contacting an energized wire and the ground.

Exposure Effects

The effects of an electric shock on the body can range from a tingle where the body touches the circuit to immediate cardiac arrest. A severe shock can cause more damage than can be easily seen.

Safety Rules

The following rules apply to all electrical equipment:

- Maintain electrical equipment—inspect tools, cords, grounds, and accessories. Have problem equipment repaired or replaced immediately.
- Use safety features like three-pronged plugs, double-insulated tools, and safety switches. Ensure machine guards are in place and that lockout/tagout procedures are followed.
- Install or repair equipment only if you're qualified and authorized to do so.
- Keep electric cables and cords clean and free from kinks. Never carry equipment by the cord.
- Use caution when working with electricity around water, damp surfaces, ungrounded metal, or any bare wires. Wear approved rubber gloves when working with live wires or ungrounded surfaces. Rubber-soled shoes or boots should be worn when working on damp or wet surfaces.
- Avoid wearing jewelry or metal objects (ring, watches, etc.) when working with electricity.

Good work habits soon become second nature. Don't take chances with electricity. One mistake could cost you your life.