Electrocutions are the fifth leading cause of occupational injuries. The three leading causes of these fatalities are:

- contact with overhead power lines
- contact with wiring and other electrical components
- contact with electrical current from machines/power tools/fixtures

**Remember:** You don’t have to be an electrician to be exposed to electrical hazards!

**Electrical accidents can result in:**
- Minor shocks;
- Electrical burns;
- Arc flash explosions;
- Falls from heights;
- Fires;
- Electrocutions – death!

**When using electrically powered machines, equipment, or tools, the following can ensure your safety:**

- Guards – cover live electrical parts to prevent contact;
- Double insulation or grounding – protect the user against shock in case of internal electrical system failure;
- Fuses – shuts off power if too much current is flowing through a circuit; and
- Ground Fault Circuit Interrupters (GFCI) – shuts off power if it senses an imbalance between current to the energized and return conductor.

**KEEP IN MIND:**

**FUSES:** Protect against fires and property damage.

**GFCI’s:** Protect against electrical shocks.

**Always** test the GFCI prior to using it!

**Here are some basic practices to follow when using electrical tools or machines:**

1. Ensure the tool, safety devices, and wiring are in good repair prior to using.
2. Beware of overloading and interconnecting multiple extension cords and power strips.
3. Always use a GFCI when working outside, in wet environments, or around sources of water.
4. Never handle a tool by its cord.
5. Always use power tools that are grounded (three-pronged) or double-insulated.
6. Tag and remove from service any damaged equipment.

**ADDITIONAL INFORMATION:**

Review the following policies on the Environmental Health and Safety website:

- Hand and Portable Power Tools, Lockout/Tagout, and Machine Guarding

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