Safety Talk: **Electrical Safety**





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 hazards can cause burns, shocks and electrocution (death).

Assume that all wires are energized at lethal voltages.

Electrical accidents can result in:

- Minor shocks: •
- **Electrical burns:** •
- Arc flash explosions; .
- Falls from heights;
- Fires; and •
- Electrocutions death!

97% of electrician's have been shocked or injured on the job.

Ratio of fatalities are higher for electrical accidents compared to other categories of injuries.

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;
- Ground Fault Circuit Interrupters (GFCI) shuts off power if it senses an imbalance between current to the energized and return conductor.













ARE CAUSED BY WIRING, TRANSFORMERS, AND OTHER ELECTRICAL COMPONENTS