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# Electric Shock

A 5-Minute Safety Training Aid

Electricity is one of the most valuable resources in today's living. You cannot see, hear, or smell electricity, yet it is so powerful it can hurt or even kill you. Since electricity is so much a part of our lives, we must learn to apply safe work practices when using it.

## At Home or At Work

Electricity does not discriminate! Electricity is always seeking a path to ground and if you become a part of that path, you could get a bad shock or be killed. Electric shock is a common cause of injury, both at work and home. Safe work practices should always be applied when working with or around electric power tools, appliances, light fixtures, and machinery. Familiarize yourself with the safe operating instructions for all the electrical devices that you use. This can be accomplished by reading the manufacturer's safe operating guide. Children should be taught the dangers of electricity and instructed to avoid "playing" with electrical appliances.

Electric shock can be fatal regardless of the level of voltage. The severity of shock is measured by the amount of current flowing through the body, the path the current takes through the body, and the length of time the body is in contact with the current. The human body is a very good conductor of electricity due to the body's high water content.

## Safety Precautions

Here are some basic safety precautions to remember when working with electricity:

- inspect power cords regularly and replace when needed;
- always use ground fault circuit interrupters (GFCI) around areas where there is water, i.e., bathrooms, kitchens, deep sinks, or outside;
- wear rubber-soled shoes and safety gloves when operating power tools, replacing fuses, or working where there is a possibility of electric shock;
- use double insulated tools;
- utilize nonconductive tools and ladders;
- use rubber floor matting, when available;



- clean and inspect tools when the job is finished;
- when working outside, look up to be sure you will not come in contact with power lines;
- never use electric appliances or tools around water;
- do not use power tools with defective or broken insulation;
- always disconnect the power source before repairing electrical equipment;
- do not overload circuits;
- never remove the grounding wire on a three-pronged cord;
- do not assume you have unplugged an electrical device (check it to be sure); and
- do not leave electric devices where small children may have access.

Always check your tools and appliances before using them. If a tool is defective, get a new one. If you are at work, remove the tool from service, tag it, and report it to the proper authority.

Using good safety precautions when working with or around electricity will reduce the risks of electrical shock and may even save your life.

Remember to practice safety. Don't learn it by accident.

The Texas Department of Insurance,  
Division of Workers' Compensation (TDI/DWC)  
E-mail [resourcecenter@tdi.state.tx.us](mailto:resourcecenter@tdi.state.tx.us)  
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