



Electric Safety



Table of Contents

Keep an Eye on Electric Safety	1
Safety in an Emergency	1
Downed Power Lines	1
Electricity – How It Works	2
Safety in the Home	3
Appliances	3
Children	4
Fuses and Circuit Breakers	4
Safety in the Workshop	5
Power Tools	5
Safety in the Outdoors.	6
Look Up and Around	6
Call Before You Dig	7
Terms You Should Know	8

Keep an Eye on Electric Safety

Electricity is everywhere, and people need to understand how to use electricity and electrical products safely. OPPD offers the following information so that you can keep an eye on electric safety as you look around your home and go about your day.



Safety in an Emergency

Downed Power Lines

Treat every downed power line as if it were a live wire. Don't touch it – don't even go near it! Report downed wires immediately to OPPD.

- ◆ If a wire is downed during a storm, there probably is moisture in the area. Moisture, like wire, conducts electricity. Stay away and stay safe.
- ◆ Should you come across a downed wire while driving, back your car far away. Get out of your car only when safely clear of the wire. Do all you can to warn others, even setting up your own roadblock until help arrives. Then notify OPPD.

Important Phone Numbers

To report power out, lines down, streetlights out, please call: **1-800-554-6773**

Diggers Hotline

- | | |
|--------------------------|----------------|
| Metro Omaha | 344-3565 |
| Outside metro area. | 1-800-331-5666 |

Electricity – How it Works

Electricity travels in a path called a circuit. Your house is part of a circuit that begins at a power plant. Electricity travels through a grid of wires to the utility pole or underground lines outside your home. From the pole it travels to your home and through the inside wires – to the lights, wall switches and outlets.

When you flick a switch to turn on a light or start an appliance, power tool, radio, TV, or computer, you complete the circuit.



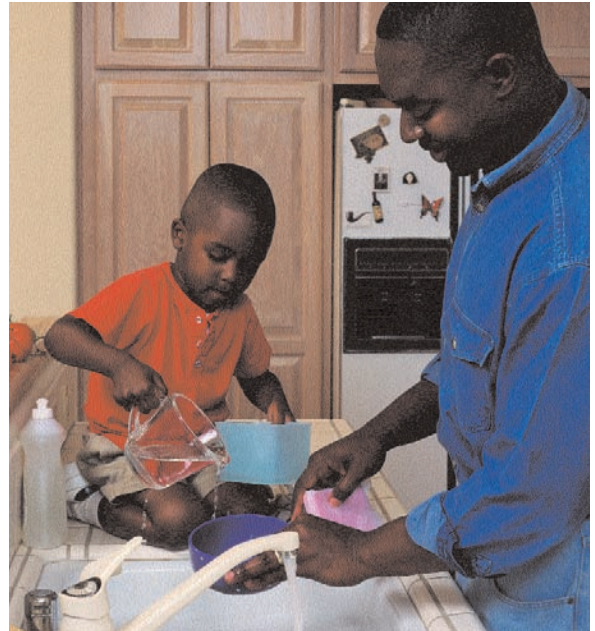
Electricity flows through the power cord to the device, then back through the cord to the outlet and out to the wires and into the grid again.

Electricity will not leave the circuit unless it can find an easier path to the ground. If you touch an energized wire or faulty appliance while you are grounded, the electricity will instantly pass through you to the ground, causing a shock that can be fatal.

Following a few simple electrical-safety rules can prevent injury – it may even save your life.

Safety in the Home

- ◆ Check outlets and extension cords to make sure they aren't overloaded.
- ◆ Examine electrical cords to make sure they aren't frayed, damaged or placed under rugs or carpets.
- ◆ Make sure that the proper wattage light bulbs are being used in light fixtures and lamps.



Appliances

Remember, electricity and water don't mix.

- ◆ Keep all electrical products and cords – such as a radio, TV, hair dryer or curling iron – away from water, a sink or bathtub. Consider installing ground fault circuit interrupters on outlets near water.
- ◆ Never reach into water to get an appliance that has fallen in without first unplugging the appliance.
- ◆ To avoid electric shock or damage to sensitive electronic equipment during a lightning storm, unplug appliances before the storm hits, or install surge-protection equipment. Unplug unnecessary electrical products when they are not in use.

- ◆ Unplug the toaster or toaster oven before removing a piece of food that is stuck.
- ◆ To prevent overheating, make sure there is nothing covering your electric blanket and don't tuck in the sides or ends of your electric blanket.
- ◆ Sleeping on a heating pad or electric sheet may cause serious burns, even at relatively low settings.
- ◆ Test smoke detectors periodically, and replace smoke detector batteries annually.
- ◆ For safety's sake, purchase appliances, such as irons, coffee pots, etc., with shut-off devices.

Children

Little fingers, little toys, big trouble

- ◆ Put safety covers on all wall outlets. Avoid ornamental safety caps that may tempt a child to play with wall outlets.
- ◆ Use extension cords on a temporary basis; they are not recommended as permanent household wiring. Make sure the cord is not wrapped around itself or another object. Do not plug one extension cord into another.
- ◆ Keep all electrical cords out of reach and out of sight to avoid children or pets pulling appliances off tables or counters.
- ◆ Never leave lamp sockets empty. Always replace burned-out light bulbs immediately.

Fuses and Circuit Breakers

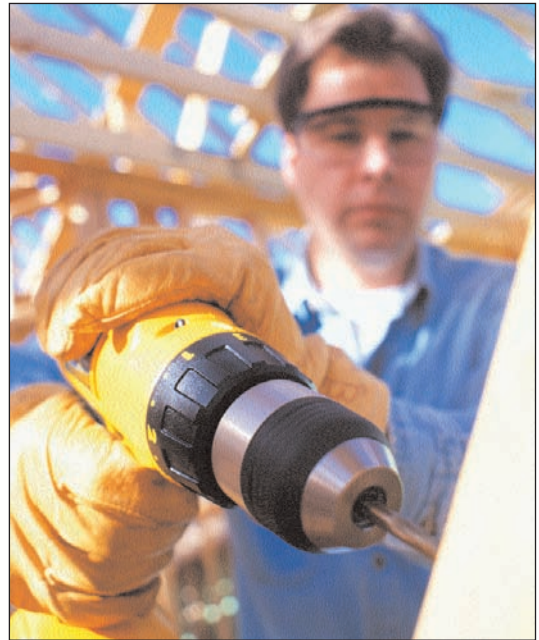
- ◆ If a fuse blows or a circuit breaker is tripped, don't just replace or reset it. Find out what caused the circuit to overload and correct the problem. Consult a qualified electrician, if necessary.
- ◆ Never replace a fuse or circuit breaker with one that exceeds the amperage rating for a given circuit.
- ◆ Avoid using several high-amperage appliances, such as microwaves, toasters, irons or other heat-producing appliances, on the same circuit.
- ◆ Never replace a fuse with a penny or any other material that conducts electricity.

Safety in the Workshop

Power Tools

Electric tools put a lot of power in your hands, saving you much time and effort. But they do require some extra safety precautions.

- ◆ Make sure there's no water in or around your workshop area.



- ◆ Use power tools outdoors only in dry weather. Stand on dry surfaces and use only dry materials. If you're working outside and it starts to rain, stop immediately.
- ◆ Power tools should be properly grounded wherever and whenever you use them. Consider purchasing a ground fault circuit interrupter, an effective electrical safety device recommended wherever portable electric tools and equipment are used.
- ◆ Be sure all cords, plugs, and tool casings are in good condition.
- ◆ Never remove the third prong of a plug. Use an adaptor instead.

Safety in the Outdoors

Look Up and Around

When working outdoors, take a minute to look up and see what's overhead. If power lines are nearby, keep your distance.

- ◆ If you're working with a metal ladder, watch where the ladder's top end goes. Position and move the ladder carefully, making sure that it is set securely and away from power lines.



- ◆ Don't climb any tree or let children climb any tree that has power lines in or near it.
- ◆ Install TV and CB antennas far enough away so they will not hit any power lines if they should topple. If a storm should blow your antenna into a power line, don't try to remove it. Stay away and call OPPD.
- ◆ Never fly a kite during a storm or near power lines.
- ◆ Never locate a swimming or wading pool under any power line. Ten feet of horizontal clearance is required from the edge of all pools, diving structures, platforms or towers.
- ◆ For outdoor lighting and wiring, use only weather-proofed fixtures. Your outside wiring and outlets should have special protection against moisture – preferably a flip-top cover.
- ◆ Use electrical equipment designed for outdoor use, but do not use in wet conditions.

Standby Electric Generation

If a person in your household is receiving medical treatment and would be seriously threatened in the event of a power outage, you may want to consider having a standby generator installed in your home. Here are some important things to keep in mind about standby generators:

- ◆ For the safety of your family and OPPD employees, only a qualified professional, such as a licensed contractor, should install a standby generator, including all wiring, piping, vents and gas line connections.
- ◆ The generator must be equipped with a transfer switch to isolate it from OPPD lines. Without a transfer switch, electricity from the generator may backfeed into OPPD lines, causing injury or death to line technicians working on those lines.
- ◆ All equipment must comply with legal codes and regulations.
- ◆ The output of the generator must be enough to meet your home's maximum electrical load.
- ◆ A portable generator should be kept outside. Using it in an enclosed area may cause a buildup of carbon monoxide or other harmful gases.
- ◆ Fuel should be stored properly, preferably in a separate building.

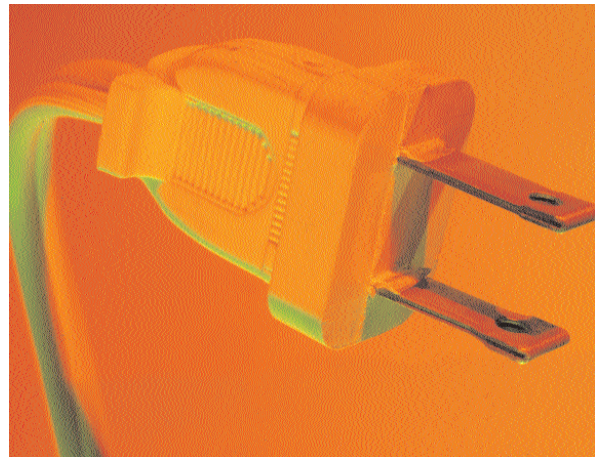
Call Before You Dig

Before beginning any project that requires you to dig into the ground, such as building a deck or planting a tree, call the Diggers Hotline to have underground utility lines located and marked. Call at least two business days before beginning the work to allow utilities adequate time to respond. In the Metropolitan Omaha area, the number is 344-3565. Outside the Omaha area, the number is 1-800-331-5666.



Terms You Should Know

- Amperage** – the strength of a current of electricity
- Circuit Breaker** – a switch that automatically interrupts an electric circuit under an abnormal condition
- Conductor** – a material that electricity can flow through easily
- Ground Fault Interrupter** – an electrical safety device that interrupts the flow of electricity to an appliance when an abnormal condition occurs



- Fuse** – an electrical safety device that interrupts the circuit when the current exceeds a particular amperage
- Ground** – a large conducting body (such as the earth) used as a common return for an electric current
- Insulator** – a material that electricity cannot flow through easily
- Lightning Arrestor** – a device for protecting an electrical apparatus from damage by lightning
- Overload** – the use of too much electrical equipment on one circuit
- Short** – a break in the flow of electricity between points on a circuit

For more about electric safety
or other energy information,
call OPPD's Energy Advisor
at 636-3850, or outside
the metropolitan area, call
toll-free 1-800-648-2658,
or contact your local
OPPD office.

your energy partner

OPPD

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