# ELECTRICAL SAFETY





## **SAFETY FIRST**

Electricity is a necessary part of our lives we tend to take for granted. Remember to make electrical safety a priority.

#### Why Worry About Electricity?

Given the right circumstances, electricity can:

- kill or maim an individual.
- elicit a painful shock.
- · damage sensitive equipment.
- ignite combustible materials.

Each year, thousands of people in the United States are critically injured as a result of electrical fires and accidents in their own homes and workplaces. The National Safety Council estimates 600 people die annually from electrical accidents. Many electrocutions and home fires can be prevented by understanding basic electrical safety principles and adhering to safe practices.

#### The Basic Rules to Stay Safe Are Simple!

- Treat electricity with respect.
- · Look up to avoid contact with power lines.
- Be extra careful using electricity in damp areas and outdoors.
- Use properly maintained and correct cords, cables and plugs.
- · Use licensed electricians for installations and repairs.
- Use safety switches as additional protection against electrical shock.

Call 811 before you dig. Iowa law requires everyone to locate underground utilities before digging.



## FOR MORE INFORMATION VISIT

Electrical Safety Foundation International www.esfi.org

> Safe Electricity www.safeelectricity.org

lowa One Call www.iowaonecall.com

Iowa Electrical Licensing & Inspection iowaelectrical.gov



guthrie-rec.coop

1406 State Street Guthrie Center, IA 50115 (641) 747-2206

## **PORTABLE GENERATORS**

#### What You Need to Know

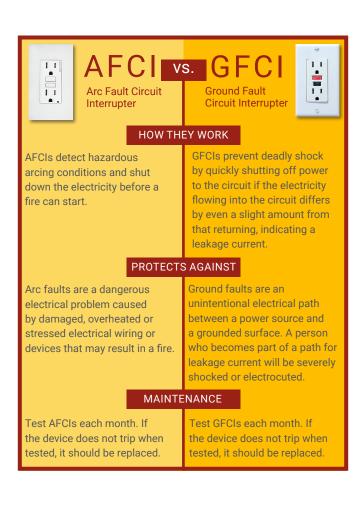
Portable electric generators provide a good source of power during electrical outages, but if improperly installed or operated, can become deadly. These precautions can help keep you and your family safe from carbon monoxide poisoning and electrical shock.

- Do not connect generators directly to household wiring without an appropriate transfer switch installed. An improperly connected generator can "back feed" electricity from a home to the transformer. This can be fatal for linemen working on power lines.
- Make sure your generator is properly grounded. Use a ground fault circuit interrupter (GFCI).
- Keep the generator dry.
- Make sure extension cords used with generators are rated for the load; are free of cuts and worn insulation; and have three-pronged plugs.
- Do not overload the generator. A portable generator should be used only when necessary, and only to power essential equipment or appliances.
- Never operate the generator in enclosed or partially enclosed spaces. Use carbon monoxide detectors in nearby enclosed spaces to monitor levels.
- Keep children away from portable generators at all times.
- Before refueling, always turn the generator off and let it cool down.
- Turn off all appliances powered by the generator before shutting it down.

Tamper resistant receptacles (TRRs) provide a simple, permanent solution for preventing common childhood shock and electrical burn injuries. TRRs look like ordinary outlets, but are designed with spring-loaded cover plates that close.

#### **AFCI AND GFCI**

Arc Fault Circuit Interrupter (AFCI) protection circuit breakers and Ground Fault Circuit Interrupter (GFCI) protected electrical receptacles are important safety devices with different functions. AFCIs are intended to address fire hazards; GFCIs address shock hazards. The amount of electricity fatal to a human is thousands of times less than the amount that will 'trip' a regular circuit breaker.



### **ELECTRIC POWER LINES**

#### **Always Remember**

Power lines carry electric current strong enough to cause serious injury or even death. Electricity wants to move from a high voltage zone to a low voltage zone, which can happen through your body.

- Never touch a person or object that is touching a downed line. The ground around power lines, up to 35 feet away, may be energized.
- Do not drive over downed power lines. If your car comes in contact with a downed power line, stay in the car until help arrives.
- Be careful not to touch or step in water near a downed power line.

Report downed power lines! Call 911, then your cooperative.

