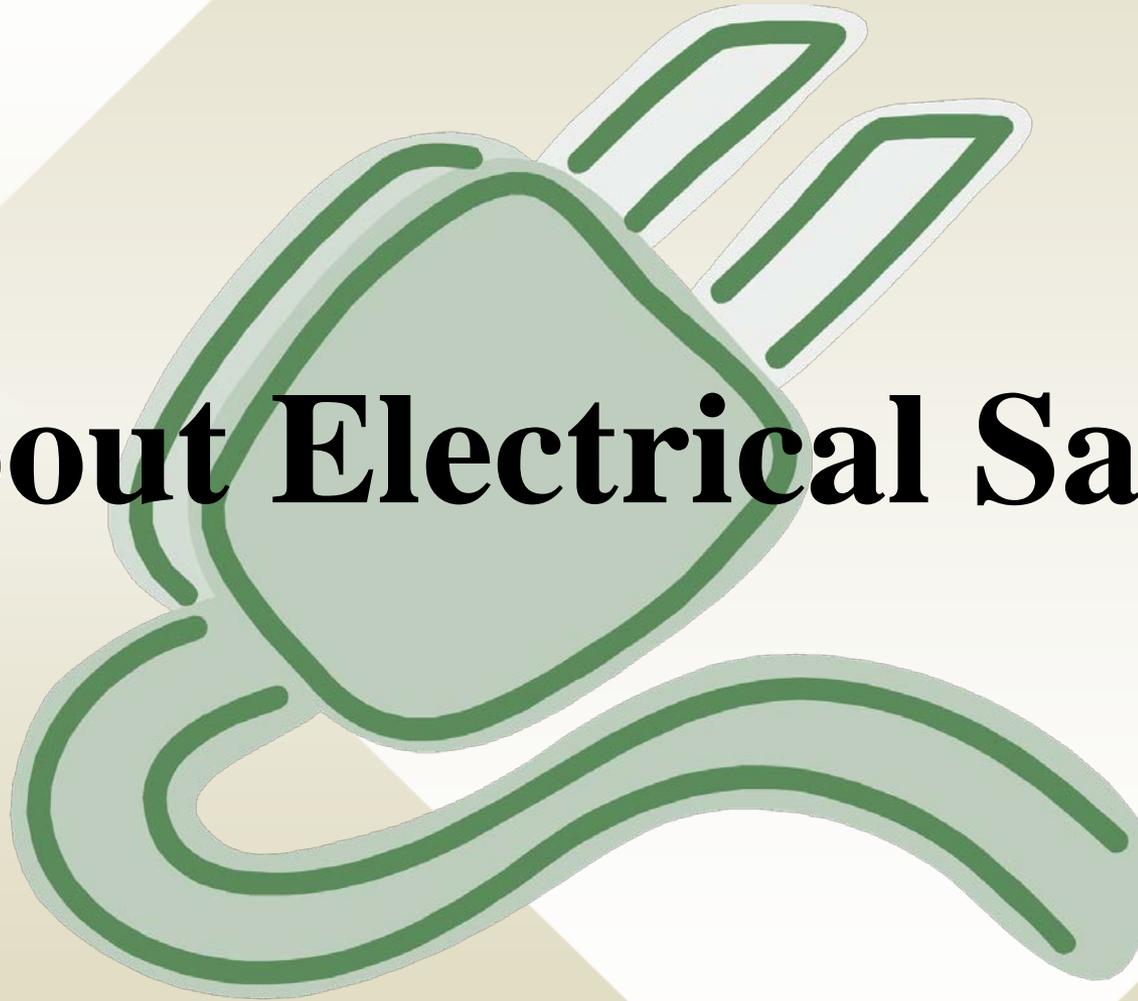




# About Electrical Safety

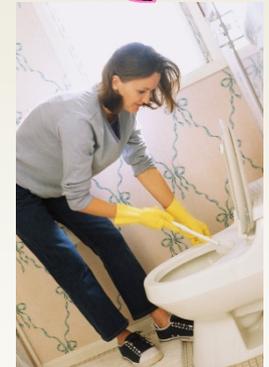
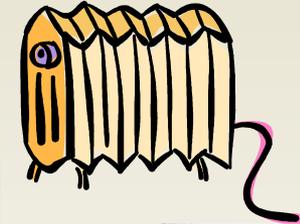




# Electricity is our #1 Energy Servant in the home!

We use it for:

- Cooking
- Cleaning
- Cooling
- Freezing
- Heating
- Lighting
- Entertaining



Electricity helps make living and working around the home easy, safe and fun – every day!





# Why Should I Know About Electrical Safety?

Because using electricity properly can help you avoid:

## Injury

- due to the careless use of electric appliances or tools.



## Shock

- caused by contact with electric current passing through wires, appliances or tools.



## Fire

- resulting from overheated wires, appliances or electric fixtures.



Your attention to safety is the key to preventing these dangers. Learn more...





# Check Your Home's Wiring, and have it upgraded by an electrician, if necessary.

## All Wiring

should be installed and inspected by a qualified electrician in order to meet national and local regulations.

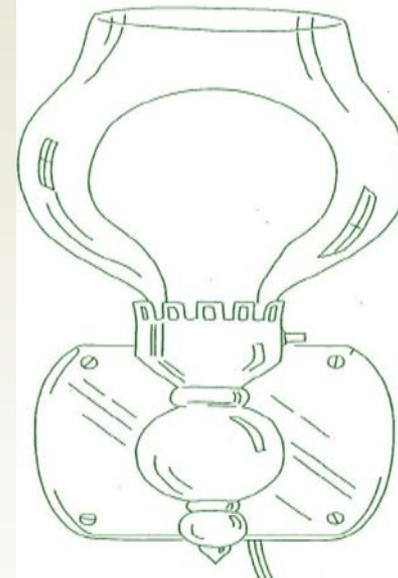
## All Appliances

should be listed by a testing laboratory—including those wired directly into your home's electric system (water heater, furnace, etc.)

## Signs of Inadequate Wiring

include:

- lights that dim or flicker.
- motors that change speed when an appliance goes on.
- circuit breakers that trip or fuses that blow frequently.
- heat-producing appliances (toaster, iron, etc.) that are slow to warm.
- a picture on the TV screen that shrinks.
- a lack of outlets.



## Warning on Aluminum Wiring

Homes wired between 1965 and 1973 may have dangerous aluminum wiring. If you know or suspect that your home was wired during these years, have it checked.





# Safe Wiring

includes the following features:

## Ample Power

The metal box for circuit breakers or fuses should be rated for at least 100 amps. If it isn't clearly labeled, or if your home's power is delivered through ungrounded outlets designed for 2-prong plugs, have the wiring inspected and upgraded, if necessary.

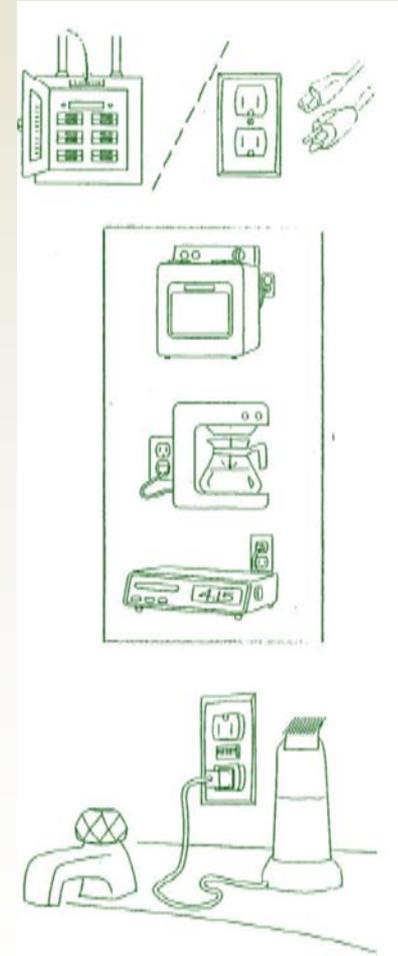
## 3 Kinds of Circuits

Your home needs:

- fixed-equipment circuits for each high-wattage appliance (stove, dryer, etc.)
- kitchen, laundry and dining-area circuits (usually 20 amps) for portable, medium-wattage appliances (toaster, iron, coffee maker, etc.)
- general-purpose circuits (usually 15 amps) for lights and low-wattage appliances (radio, TV, floor lamp, etc.)

## Ground-Fault Circuit Interrupters (GFCIs)

These devices quickly shut off power when problems occur, minimizing electrical shock hazards. Outlets in bathrooms, kitchens, unfinished basements, garages, outdoors and in any other potentially wet location should be protected by a GFCI. If they aren't or if you're unsure, have the wiring checked.





# Fuses and Circuit Breakers

automatically shut off electric currents to help prevent fires and injuries caused by:

## Short Circuits

These can occur whenever a bare wire allows electricity to take a shortcut.

## Overloading

This is caused by using too many lights or appliances on one circuit.

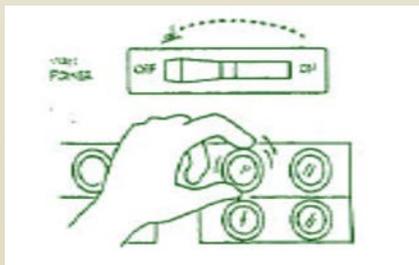
## Defective Parts

They can cause a fire or shock hazard.

## What To Do If:

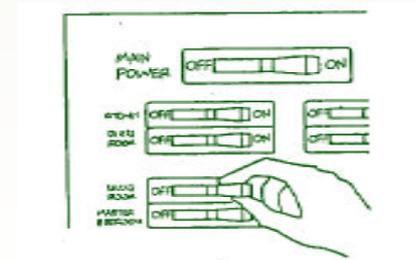
### A Fuse Blows

1. Unplug the appliance causing the problem.
2. Shut off the main power switch on the fuse box.
3. Replace the burned fuse with a new one of the proper rating.
4. Turn on the main power switch.



### A Circuit Breaker is Tripped

1. Unplug the appliance.
2. Reset the circuit breaker according to instructions. Call an electrician if you need help.



If you can't find the problem and the circuit breaker or fuse keeps shutting off the power, call an electrician. **Note:** Always keep a flashlight and extra fuses handy. Stand on a dry surface when touching the fuse/breaker box. Never use a penny or aluminum foil to replace a fuse.





# Use and Maintain Cords

properly.

## Choose The Right Type

Use an appropriate extension cord that's approved by a testing laboratory. For example:

- a heavy-duty cord for power tools.
- a weather-resistant cord when working outdoors
- a 3-wire cord with a 3-prong plug for tools and appliances that require grounding. (Avoid using an adapter and never remove the 3<sup>rd</sup> prong to create a 2-prong plug.)

## Handle With Care

- Avoid kinking. Twisting or crushing the cord while it's being used or stored.
- Pull the plug, **not** the cord, to disconnect it.

## Pick A Safe Location

- Don't place a cord where it's likely to be walked on or damaged in any way.
- Keep cords away from heat and water.
- Never use an extension cord as a permanent substitute for inadequate wiring.

## Inspect Frequently

- Check cords for signs of wear, especially around plugs and receptacles, before and after each use.
- Never wrap a cord around a metal pipe or an appliance.
- Replace damaged cords promptly.

**Remember – worn cords can cause shorts, shocks and sometimes fires!**





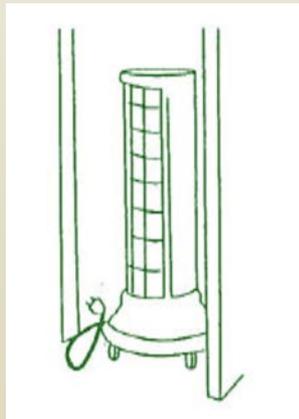
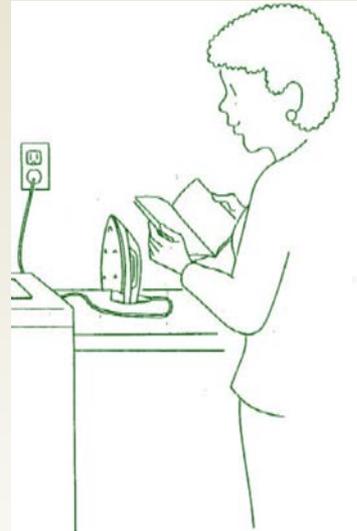
# Some Safety Tips for Using Appliances

## **Small Appliances,**

like large appliances, should have a label from a testing laboratory. Use appliances according to the manufacturer's instructions.

## **Large Appliances,**

require circuits of varying sizes and types. If you have any questions about proper wiring, consult your owner's manual, a service person or an electrician.



## **Heat-Producing Appliances,**

such as space heaters, toasters and stoves, require extra care – they are fire hazards.

- Never place combustibles, such as paper, drapes or furniture, on or near them.
- Keep them clean, in proper operating condition and out of high-traffic areas.
- Unplug irons and space heaters after each use. Let them cool, and then store them in a safe place.





# General Safety Rules

## **Never Operate An Electric Appliance**

while touching a metal object (especially plumbing), standing on a wet surface or taking a bath or shower.

## **Always Unplug Appliances**

before cleaning, removing parts, etc. Unplug small electrical appliances, such as hair dryers and irons, when they're not in use.

## **Keep Motors Clean**

--free from lint, dust and dirt.

## **Never Insert Metal Objects**

into an appliance or outlet. Consult a service person if an appliance needs repair.

## **Teach Young Children**

not to play with cords and wall outlets. Cover unused outlets with plastic safety caps.

## **Avoid Using Extension Cords**

whenever possible. If you must use one, don't exceed its recommended rating or plug it into another extension cord. Unplug it from the outlet after use.



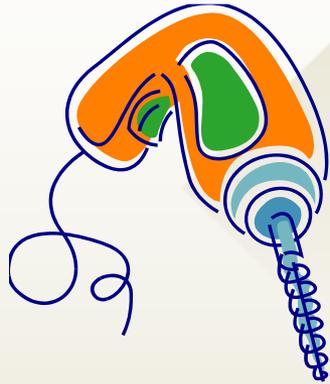
**If an appliance smokes, sparks or gives a shock at any time, unplug it. Call a service person to repair it before using it again.**





# Use Power Tools Safely

to prevent fires and injuries.



## Maintain Tools

by keeping them clean, oiled and in good condition. Store (and use) them in a safe, dry place.

## Regularly Inspect

Your tools, cords and accessories. Repair or replace worn or defective equipment immediately.



## Check Circuits

In your work area. Wiring should provide plenty of grounded outlets (protected by a GFCI) on circuits of the right size for the tools you use. Contact an electrician if you have questions.

## Use Safety Features

Such as a 3-prong plugs (when tools aren't double-insulated) and safety switches (to prevent accidental starting).

## Dress Properly

--never wear clothing that could become caught in power tools.

## Never Use Power Tools When Your Hands Are Wet

Or while you're standing on a damp or wet floor.

## Protect Cords

From heat, chemicals, oil, etc. Store them in a dry place, coiled loosely.

## Clean Up

Your work area regularly. Sawdust, shavings, paper and rags can create a fire hazard and damage tools. Make sure the work area is dry, too.





# Outdoor Electrical Safety

## **Check Outdoor Wiring**

and be sure lighting fixtures and bulbs are designed for outdoor use. Outlets should be weatherproof and protected by a GFCI.

## **Teach Children**

to stay way from power lines, substations and transformers.

## **Keep Away From Power Lines,**

especially when handling a ladder or outdoor TV antenna.

## **Do Not Cut or Trim Branches**

that are in contact with power lines.

## **Never Use Electric Tools**

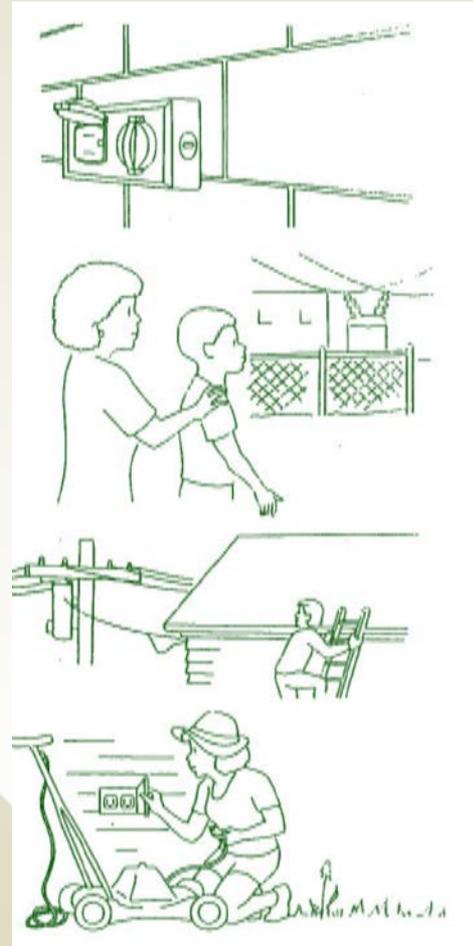
or electric lawnmowers outdoors in wet weather or on wet surfaces.

## **Make Sure Antennas Are Grounded**

properly and wired to lightning arresters. Consider having a professional install lightning rods, too.

## **Turn Off Circuits or Unplug Cords**

before adjusting outdoor lighting or replacing bulbs.



**Locate  
underground wires  
before digging.  
Contact your  
electric company  
for help and  
information.**





# In Case of an Emergency,

know what steps to take.

## Electrical Fire

In general, you should:

- Make sure everyone leaves the house.
- Call the fire department right away.

## If the fire is small and confined to an appliance:

- Unplug the appliance or turn off the electricity. Don't touch the appliance.
- Use a multipurpose or class C fire extinguisher for electrical fires.

**Never use water on an electrical fire! It can cause an electrical shock.**



## Downed Wires

In general, you should:

- Never touch them.
- Call the electric company and/or police.
- Warn others to stay away.

## If you're in a car:

- Drive away, if possible.
- If you can't drive away, stay in the car until help arrives. Don't touch the wires!
- Jump out only if it's a matter of life and death. Avoid having contact with the car and the ground at the same time.





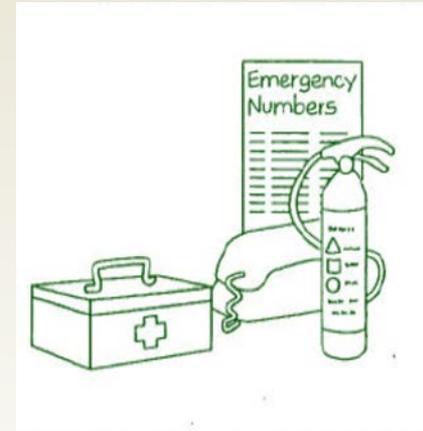
# In Case of an Emergency

continued.

## Electrical Shock

When a victim is in contact with live, indoor electricity:

- Don't touch the victim or the appliance, wire, etc., causing the shock.
- Shut off the power, if possible, by turning off the circuit breaker or unplugging the fuse.
- If this isn't possible, call the power company.



## Be Prepared!

Keep a multipurpose fire extinguisher and a first aid kit in your home at all times.

Keep emergency numbers posted near the telephone.

**In all cases of electrical shock, get medical help as soon as possible. Call 9-1-1 (or the emergency number in your area).**



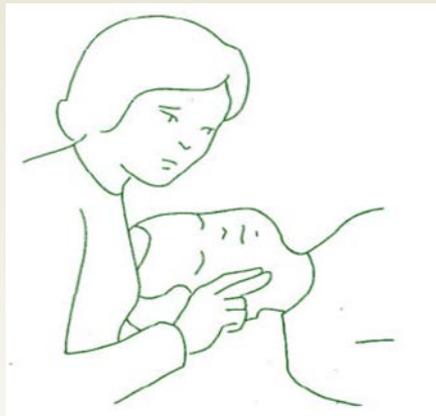


# First Aid

After the victim is free from contact with electric current, you may need to provide first aid until medical help arrives. Know how to:

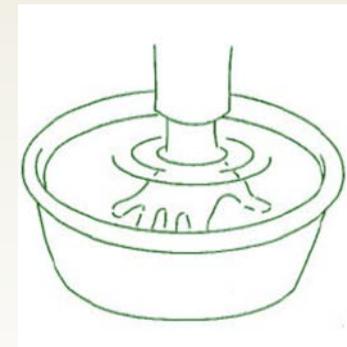
## Restore Breathing/Heartbeat

Give artificial respiration or CPR, if necessary and only if you've been properly trained.



## Treat Burns

- Immerse the burn in cool water until the burned area feels cool.
- Cover the burn with a dry, sterile dressing.
- Never put butter or grease on a burn.



## Protect Yourself and Your Family

By taking first-aid and CPR courses. Contact the Red Cross or your local fire department for more information.



**Seek medical help promptly for all emergencies.**





# Treat Electricity With Respect!

- ✓ **Learn All You Can**  
about using electricity safely at home.
- ✓ **Inspect Your Home**  
for electrical safety hazards.
- ✓ **Know What To Do**  
in case of an emergency.



**Think electrical safety every day, and live better—electrically!**

