PLUG INTO Home Safety



BASEMENT

Electrical safety in your home should start from the

ground up. From an entertainment and family center to a utility area that serves as a hub for your home's major appliances, your basement offers many uses and has some special electrical safety concerns to keep in mind.

Vent all fuel-burning equipment, such as furnaces, stoves and fireplaces, to the outside to avoid carbon monoxide poisoning.

Install smoke detectors and carbon monoxide detectors.

Set temperature on the water heater to 120 degrees or less.

Clean and have the furnace inspected annually by a licensed professional.



Label circuit breaker box with the date of the last electrical inspection.

This should be done once a year. If the date has passed or is approaching, contact a licensed, qualified electrician to schedule an inspection.

Label circuit breakers or fuses with the amperage and corresponding rooms, circuits or outlets.

Inspect standard circuit breakers and talk with your licensed electrician about replacing them with arc fault circuit interrupters (AFCIs).

Always keep the breaker panel door closed and secured. Do not place anything in front of the door.

Never open and touch the panel while standing in water or on a wet or damp floor. If the basement is flooded, turn off power to the house before entering the basement.

When resetting a circuit or replacing a fuse, use one hand and turn your head away as a simple safety precaution.

BEDROOM

Electrical devices and lighting fixtures are potential

safety hazards in our bedrooms, the place where we spend almost a third of each day. Reduce the risk of fires and electrocution in bedrooms by performing routine electrical safety checks of lighting fixtures, computers, space heaters, TVs and ceiling fans.



Plug window unit air conditioners into their own dedicated circuits.

Place space heaters at least three feet from any wall, furniture or fabric.

Avoid resting electrical cords under rugs or furniture.

Inspect cords to be sure they are not being pinched by heavy furniture, such as beds or dressers, which can damage the cord's insulation.

Replace the cords of all electronic devices, including TVs, computers and mobile device chargers if frayed or cracked.

Call an electrician to inspect your home's wiring if your home is more than 20 years old or if you are using power strips or extension cords for more than a temporary use. Your home may not be able to safely handle the demands of modern electronic devices and the wiring may need to be replaced.

Purchase devices with automatic shut-off features as an extra safety precaution.

BATHROOM

The tags on hairdryers, heaters and other appliances warn of the risk of electrocution if the appliance falls in water. **That's because water and electricity don't mix.** Not following proper rules regarding electricity can lead to serious injury or even death.

Use central heating instead of an electric heater to keep bathrooms warm.

If your home doesn't already have them, install at least one ground fault circuit interrupter – a receptacle that acts like a circuit breaker to stop the flow of electricity in water.

Turn off the circuit and use tools with insulated handles when installing a GFCI outlet.

Call an electrician if you have questions regarding installation.

Unplug small electrical appliances when not in use.

Dry your hands before using small electrical appliances (hairdryers, electric razors, etc.).

Check that all lighting in your shower area is vapor-tight.

Replace light switches that show signs of wear.

If your home doesn't already have tamper-resistant receptacles, install safety caps on unused outlets, especially when children are in the home.

Use all electrical appliances away from the sink, tub, toilet and/or shower.

KITCHEN

Your kitchen is probably the activity center of your home. It's where everyone congregates for family time and where guests hang out when you entertain. **Make sure everyone in your family not only knows how to use kitchen appliances safely, but knows what to do when something goes wrong.**

Keep all appliances clean from grease buildup.

Dry your hands before using appliances or switches.

Invest in a portable fire extinguisher to put out small fires or to help contain them until the fire department arrives. Only use your fire extinguisher if the fire is confined to a small area and is not growing.

Multi-purpose extinguishers are for Class A-B-C fires (ordinary combustibles like cloth, wood and paper; flammable liquids like motor oil, gasoline and oil; and electrical appliances and tools) and can be used throughout the home.

For an extinguisher to use solely in the kitchen, consider one for Class K fires (fires caused by vegetable or animal oils or fats in cooking appliances).



Use correctly-sized bulbs in your fixtures to ensure sockets and wiring don't overheat and burn.

Place and use electrical appliances away from the sink.

Plug appliances into GFCI outlets, and test and reset the GFCIs monthly.

Install a working smoke detector in the kitchen.

Look to see that the back of the refrigerator has room for air circulation and that its coils are free of dirt and buildup.

Inspect all electrical cords for cracks, frays or damages in any way.

Check that appliance cords are not hanging from tables or counters and are unplugged when not in use.

LIVING ROOM

Because families enjoy spending time together and relaxing in the living room, it's important to make sure it's safe for people of all ages. **Fires often start in living rooms because of the high number of electronics and flammable objects.**

Install bulbs that are the appropriate wattage for the fixture.

Check that light switch and outlet covers are not cracked or broken.

Use all electrical equipment (lamps, electronics, etc.) without the aid of extension cords.

> Ask an electrician to inspect outlets and tighten any loose connections.



Use extension cords for temporary reasons, not for permanent use.

Place cords for electronics out of the way so no one can trip on them.

Examine all electronics plugged into the wall to see that they have room for air circulation.

Avoid overloading power outlets, power strips and surge protectors.

If your home doesn't already have tamper-resistant receptacles, install safety caps on all unused outlets, especially when children are in the home.

Check that portable heaters have a seal from a nationallyrecognized testing laboratory and are placed at least 3 feet away from any flammable materials such as furniture and curtains.

LAUNDRY ROOM

Laundry is a necessary chore for each and every household. But, while you're making your whites whiter and your colors brighter, **are you making sure that you and your family are safe?**

Install a GFCI outlet if an outlet/ receptacle is within six feet of the outside edge of utility sinks.

Avoid stepping into the laundry room if water may be in contact with electrical outlets, appliances or cords after a flood.

Call a professional to inspect all electrical appliances that have come into contact with water to determine if they can be repaired or should be replaced.



Connect the washer and dryer correctly to the home's electrical system.

Check the washer and dryer for excessive wobbling while running. They should have room for air circulation, and dryer lint should be removed after each use.

Clean the dryer's lint trap after each load.

Inspect and clean the dryer vents every six months and the ductwork at the back of your dryer every three to five years to make sure lint has not collected there.

Turn off washers and dryers when not at home.

Inspect the washer's hot and cold water hoses for cracks or other damage to prevent flooding.

Childproof the laundry area by installing locks on front-loading washers and dryers, and place detergents and other harmful products out of reach.

HOME OFFICE

It's not uncommon to find an office area in many homes today, whether it's a section of another room or a specially-designated area in the house. Advances in technology, along with an ever-changing work culture have made the home office an important part of our lives and our homes.

Turn off office electrical equipment when not in use.

Keep office equipment (computers, printers, etc.) out of the reach of children and secure them from falling.

Clean the work area of hazards and clutter.

Connect office equipment to a surge protector.



Keep small office equipment (scissors, letter openers, paper cutters, etc.) out of reach of children.

Inspect all electrical plugs, cords, outlets and panels for damaged or exposed wiring. Make sure electrical outlets are grounded with three-pronged plugs.

Move cords from high-traffic areas.

Avoid nailing or stapling cords into place.

Ask a licensed electrician to install additional outlets where needed rather than relying on extension cords and power strips. Extension cords should be considered temporary.

GARAGE

If your house has an attached garage, it's likely the main entry to your home. More often than not, the garage is the tool shed, workshop, recycling center and a temporary storage area. It's also a likely spot for the electrical panel, water heater and heating system. All of this can often make your garage wet and dirty, cluttered, and a general haven for hazards.

Place storage boxes away from wiring and plugs.

Check to see that garage-stored appliances, like refrigerators and freezers, have dedicated 20-amp appliance circuits.

> Ask a licensed professional to clean and inspect the furnace annually.

Keep the area around the furnace and water heater free of clutter, and store flammable liquids away from that area.



Label circuit breakers or fuses correctly with their amperage and their corresponding rooms, circuits or outlets.

Have a professional routinely inspect the electric garage door opener and the door itself.

Plug all appliances into GFCIprotected outlets, and test and reset the GFCIs monthly.

Inspect electrical cords for cracks, frays or damages in any way. Extension cords should not be used on a permanent basis.

Avoid operating a portable generator in the garage, home or basement. Even with the garage door open, generators very quickly produce high levels of deadly carbon monoxide.

Install a generator using a ULlisted and approved transfer switch in accordance with the National Electrical Code if connected to the home's electrical system.



Before planting, ask 811, the underground utility locator service, to come out and mark the locations of underground utilities so that nothing is planted near them.

YARD

Make sure there are no overhead power lines before raising a ladder to prune trees, clean out your gutters, paint, etc.

Carry ladders and other long items, like pool cleaning tools, horizontally whenever possible to avoid overhead power lines.

Keep shrubs and structures at least 12 feet from the "door" of the padmount transformer box, and at least 3 feet from the sides.





Avoid approaching power lines knocked down by a storm, or trying to move broken tree limbs or branches that might be entangled in power lines.

Check that the meter on the house is visible and accessible.

Wear proper eye protection, gloves and clothing when using electric power tools – no loose items that could get caught.

Avoid carrying tools by their cords.

Plug garden tools into a ground fault circuit interrupter (GFCI) that has been tested and is working properly.

Only use electric power tools in dry conditions, unless the tool is specifically approved for wet or damp conditions. Store tools in a dry place when not being used.

GENERATOR

Generators are useful as a backup power source during emergencies or as the primary power source where electricity is not available. Though they serve an important purpose, generators can also be dangerous and deadly.



Unplug/turn off devices and all of the equipment powered by the generator before refueling the generator.

Only use it to power a limited number of appliances or equipment; do not overload the generator.

Always use the cords supplied by the manufacturer or grounded, three-pronged extension cords when plugging appliances directly into the generator.

Install a battery-operated carbon monoxide detector in the house so residents know if carbon monoxide levels are dangerous.

Ground the generator properly to avoid electrical shocks.

Place the generator outside where exhaust fumes will not enter enclosed spaces. Make sure it is in a well-ventilated dry area away from rain and snow. If you want to install a whole-house generator, learn what kind you should purchase based on your powering needs. A licensed electrician can advise you on the proper size. It is important to note that installing a whole-house backup generator is not a do-it-yourself project. For you and your home's safety, they should be installed by a licensed electrician. Once your whole-house backup generator is installed, reach out to your electric cooperative to update them on your new addition.



Choose a generator that is rated for your power needs. Review the labels on the lighting, appliances and equipment you plan to connect to the generator.

Avoid using generators indoors or in an attached garage. Generators are internal combustion engines that emit carbon monoxide, an odorless, colorless poisonous gas that can lead to death.

Turn off the generator before going to sleep or leaving the house.

Check that the generator is not directly connected to the home's wiring. If it is, it can "back feed" into the power lines connected to the home and could kill linemen who may be working to repair outages many miles away.

Watt's What? Electrical Terms Every Homeowner Should Know

AFCI – Also known as an arc fault circuit Interrupter; this is a circuit breaker that breaks the circuit when it detects an electric arc in the circuit it protects to prevent electrical fires.

Amperage – Measurement of the flow rate of electricity. If you think in terms of water through a hose, amperage would be a measure of water volume flowing through the hose.

Back feed – When power flows in the opposite direction from its usual flow or when voltage is present on a conductor or associated equipment after it has been disconnected from its normal source.

CFL – Abbreviation for compact fluorescent lamp. It is a lightbulb that uses 70 percent less energy than incandescent bulbs.

Current – The rate of flow of electrical energy through a conductor or wire, comparable to the amount of water flowing in a pipe. Electric current is measured in amperes or "amps."

GFCI – Also known as ground fault circuit interrupter or ground fault interrupter; this type of receptacle protects people from electrical shock by monitoring the current flowing into or out of a plugged-in device. Should this receptacle detect a current exceeding five milliamps, it will shut off the flow of electricity in as little as .025 seconds.

Grounding wire – It is a safety wire that has intentionally been connected to earth. The grounding wire does not carry electricity under normal circuit operations. Its purpose is to carry electric current only under short circuit or other conditions that would be potentially dangerous. Grounding wires serve as an alternate path for the current to flow back to the source, rather than go through anyone touching a dangerous appliance or electrical box.

LED – Abbreviation for light-emitting diode, they are an energy-efficient lightbulb and have a long lifespan (often more than 100,000 hours). They have begun to replace traditional lightbulbs in several areas.

Lumen – A unit of measurement that describes the brightness of a bulb.

NMB – Also known as non-metallic, high temperature wire; NMB is in simple terms the wire that carries the current from your panel to the electrical devices you are using. It is also known simply as "wire" or "wiring." In homes it is common to see 14/2 or 12/2 NMB.

Panel (electrical panel) – An electrical panel is what provides the power to your home. It is the "power plant" of your home.

Receptacle – A receptacle is also known as an outlet. These are the devices we use to "plug" our appliances in. Receptacles commonly are placed along walls, in bathrooms, garages and elsewhere. A receptacle can become "overloaded" when too many appliances are connected to the same circuit.

UL – Underwriters Laboratories, an independent, non-profit product safety and certification organization.

Voltage – The force or "push" driving electrical energy through a conductor or wire that can be compared to the pressure of water in a pipe.

Watt – A unit of measurement indicating how much electricity is being used in one second.

