

HOME ELECTRICAL Safety Checklist

Keeping You and Your Family Safe, Room-by-Room



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CPSC recommends performing the HOME ELECTRICAL Safety Checklist every 6 months.

DATE COMPLETED: _____

Next Check-up: _____

Contents

Every year, electrical products are associated with injuries, deaths, and fires in homes. Use this checklist to spot possible safety problems before they occur. This checklist is a room-by-room guide and allows you to identify and follow up on safety concerns. The U.S. Consumer Product Safety Commission staff recommends inspecting electrical products in your home every six months. Each time you move into a home or change your clocks is the perfect time to check your smoke alarms and perform this checklist!

In All Rooms

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In ALL Rooms

Check Lights

- Check each light in the room, including lamps and ceiling fixtures. Is each bulb the appropriate wattage for its fixture?

NO: Replace the bulb with the correct wattage bulb. If you aren't sure, use a bulb 60 watts or less. For unmarked ceiling fixtures with miniature bulbs, use 25 watt bulbs.

A bulb that is a higher wattage than recommended may overheat the light fixture, wiring or nearby combustible materials, leading to a fire.

Check Portable Electric Heating Equipment

- Does the heater have a seal of a **nationally-recognized testing laboratory (NRTL)**, such as UL, ETL, or CSA?

NO: Replace heater. Keep heaters far away from all combustibles and avoid touching them while plugged in and hot. Avoid using an uncertified heater.

There is less assurance that safety features are adequate for heaters not tested by a nationally-recognized lab.

- Is the heater placed **at least 3 feet** from **combustibles**, such as drapes and newspapers?

NO: Move heater at least 3 feet away from combustibles and check that nothing could fall or lean onto the heater.

Some heaters can produce enough heat to ignite nearby combustible materials.

- Is the heater **stable** and placed where it will not tip over?

NO: Place heater on a stable surface and ensure it is out of traffic.

A fire hazard can result if a heater is tipped over. Children, animals, or even blowing drapes can knock a heater over. Although some heaters have tip-over switches, it is better to be sure the heater is stable.

- Is the heater in **good working order?** (no odd smells, sparks or smoke when operating)

NO: Have the heater repaired or buy a replacement that has a seal (from a NRTL) on it.

Operating problems often indicate an unsafe electrical condition that could cause fire or electrical shock.

Check 3-Prong Adapters

- Are properly grounded **3-prong adapters** used to attach power cords with 3-prong plugs to older 2-prong outlets?

NO: Always connect the grounding wire or metal tab on the adaptor to the center screw on the outlet cover.

The grounding feature provided by a 3-prong adapter for a 2-prong outlet is a safety feature designed to lessen the risk of fire or shock in case of an appliance fault. NEVER defeat the adapter's grounding feature or break the ground pin from a 3-prong plug.



There's more for **all rooms** on the next page.



Check Electrical Cords (including those on lamps and extension cords) and Entertainment Equipment (TVs, DVD players, computers, etc.)

- Is **any** cord frayed, cracked, or otherwise **damaged**? **YES:** Replace all damaged cords or replace equipment. *Damaged cords may have exposed live wires that can be shock and fire hazards.*

- Is **any** cord placed where it might be stepped on? **YES:** Move all cords so they are out of the path of foot traffic. *Cords placed in the path of traffic are tripping hazards. Cords can be damaged when stepped on, creating a fire or shock hazard.*

- Is **any** piece of **furniture** or **rug** resting on an electrical cord? **YES:** Move cords or furniture so cords are not covered. *Heavy weights or traffic can damage cords, crushing insulation or breaking wire strands, creating a fire or shock hazard.*

- Is **any** cord tightly **wrapped** around any object? **YES:** Unwrap cords. *Wrapped cords trap heat that normally escapes loose cords, which can lead to melting or weakening of insulation.*

- Are cords attached to anything (wall, baseboard, etc) with **nails or wire staples**? **YES:** Remove any nails and/or staples and replace damaged cords. *Nails and staples can tear or crush the insulation or cut the wires inside, presenting a fire or shock hazard.*

- Are **all** extensions cords equipped with **safety covers** on the unused outlets? **NO:** Use safety covers that fill the slots of every unused outlet. *Children can be shocked or seriously burned when they play with uncovered outlets.*

- Check the electrical rating on appliances and extension cords. Is **any** extension cord carrying more than its **proper load**? **YES:** Replace cord with a higher capacity cord (16 AWG handles 1375 W, use 14 or 12 AWG for heavier loads). *Too much current will cause the wires to get hot. If the cord, plug, or outlet feels warm, it may be overloaded, and can be a fire hazard.*

- Is **any** extension cord being used on a **permanent** basis? **YES:** Have new outlets installed where needed, or move appliance closer to an outlet. *Extension cords are not as safe as permanent house wiring. Installed wiring can carry more current and is protected from accidental damage that could cause shock or fire.*

- Is **all** the entertainment equipment placed so that **air** can freely circulate around it? **NO:** Move equipment so it has room to "breathe." Avoid enclosing equipment in a cabinet without proper openings and do not store papers around equipment. *Blocking air flow to equipment can cause overheating and a possible fire hazard. (Refer to the owner's manual for guidance.)*

- Is **all** the equipment in a **dry** location, free of any source of water, including rain, leaks, and spills? **NO:** Relocate equipment away from water source such as plants and aquariums. *Mixing electricity and water can result in a serious shock or fire hazard.*



Check Electrical Outlets and Switches

- If children are present, do **all** unused outlets have **safety covers**? **NO:** Purchase safety covers for all unused outlets. *Children can suffer serious shock and burn injuries if they insert objects into outlets.*

- Are **all** outlets and switches **working** properly? **NO:** Have an electrician check the outlets and switches. *Improperly operating outlets or switches may indicate that an unsafe wiring condition exists. A loose screw holding a wire or a worn out switch can lead to electrical arcing, overheating, or a fire.*

- Are **all** outlets and switches **cool** to the touch? **NO:** Make sure appliances are not overloading the outlet. Stop using them until an electrician checks the problem. *Unusually warm outlets or switches may indicate an unsafe wiring condition exists, such as a loose electrical connection that can start a fire. (Some dimmer switches may become warm during normal use.)*

- Do **all** electrical plugs fit **snugly** into all outlets? **NO:** Have the outlet replaced. *Loose-fitting plugs can cause overheating and fires. A loose connection cannot carry much current without getting hot.*

- Do **all** outlets have **faceplates** covering all wiring? **NO:** Install faceplates. *Exposed wiring is a shock hazard. Children may stick objects into an electrical outlet that is not covered with a plate.*



Check Ground Fault Circuit Interrupter (GFCI) Protected Outlets

- Do you **test all** your GFCI outlets regularly? **NO:** Test every GFCI once a month according to the manufacturer's instructions. *GFCIs can prevent electrocutions so make sure they're working. The CPSC recommends using them in kitchens, bathrooms, and other areas where the risk of electric shock is higher.*
- Do you have GFCI outlets installed in your:

 - Kitchen
 - Unfinished Basement
 - Garage or
 - Around your laundry/ utility tub or wet bar sink

If you do not have the instructions follow this procedure:

 - 1) Plug a light into the outlet and turn it on.
 - 2) Press the test button. Did the light go out? If not, replace the GFCI.
 - 3) Press the reset button. Did the light come back on? If not, replace the GFCI.

Consider having GFCIs installed in locations required by the National Electrical Code, such as kitchens, bathrooms, garages, unfinished basements and near laundry tubs or wet bar sinks.

Once you've completed this section for every room, continue on to the next page for specific items to look for in your kitchen.

In The Kitchen

Check Counter Top Appliances

- | | | |
|--|--|--|
| <input type="checkbox"/> Are all counter top appliances unplugged when not in use? | NO: Unplug when not in use. | <i>Unattended, plugged-in appliances may create an unnecessary risk of fire.</i> |
| <input type="checkbox"/> Are all appliance cords placed so they will not come in contact with a hot surface (e.g., oven, range burner, toaster)? | NO: Relocate cords away from all heat sources. | <i>Cords can melt or burn from excess heat. This can expose wires, which could lead to an electrical shock or fire.</i> |
| <input type="checkbox"/> Are all appliances located away from the sink ? | NO: Relocate away from the sink area. If you can't relocate them, make sure the appliances are plugged into GFCI-protected outlets. | <i>Mixing electricity and water can result in an electric shock or fire hazard. Counter top appliances can be accidentally knocked into the sink or sprayed with water. Using a GFCI reduces the chance of a serious shock or electrocution.</i> |

Check Large Appliances

- | | | |
|--|---|---|
| <input type="checkbox"/> Have you ever received even a slight shock (other than one from static electricity) from any appliance? | YES: Do not touch the appliance until it has been checked by an electrician. Turn the power off to the appliance at the circuit breaker. | <i>A shock indicates an extremely hazardous wiring condition. There may be an internal electrical short or ground fault that could seriously injure someone who simply touches the appliance.</i> |
| <input type="checkbox"/> Is the top of and area above the cooking range free of combustibles (e.g., potholders, paper, plastic utensils)? | NO: Remove all possible combustibles. | <i>Using the range area for storage of combustibles may result in fires or burns.</i> |

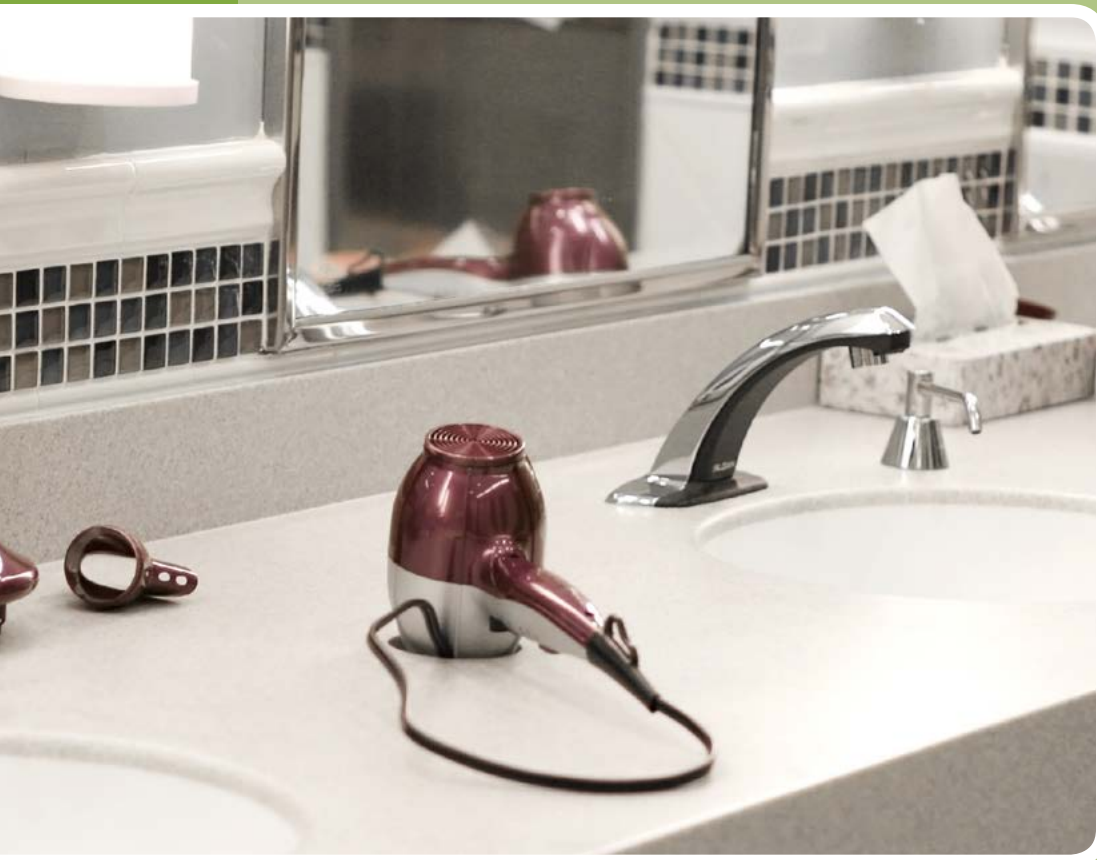


Once you've completed inspecting the kitchen, continue on to the next page for specific items to look for in your **bathrooms**.

In All Bathrooms

Check Small Electrical Appliances (hairdryers, curling irons, electric razors, etc.)

- | | | |
|---|--|---|
| <input type="checkbox"/> Are all appliances unplugged when not in use? | NO: Unplug all small appliances when not in use. | <i>Even when turned off, plugged-in electrical appliances may cause a shock hazard if they fall into water. Sometimes a worn switch may turn on with no one touching it.</i> |
| <input type="checkbox"/> Are all appliances in good condition ?
That is, are they working the same with no signs of damaged wiring or parts? (smoke, sparks, and noises, etc.) | NO: Discard or have repaired. | <i>Irregular operation is a sign of damage to electrical parts. Damaged appliances can become a shock or fire hazard.</i> |
| <input type="checkbox"/> Are portable heaters ever used in the bathroom? | YES: Consider installing a fixed heating fan. Avoid using portable heaters in the bathroom. If you use a portable heater, either plug it into a GFCI outlet or use a heater with a GFCI plug. | <i>Portable heaters can be an electrocution hazard when used in bathrooms. The many grounded surfaces and water contribute to this hazard. A GFCI can help to reduce the risk of serious injury or electrocution.</i> |



Once you've completed inspecting all your bathrooms, continue on to the next page for specific items to look for in your **bedrooms**.

In All Bedrooms

Check Electric Blankets

- | | | |
|--|--|--|
| <p><input type="checkbox"/> Are all electric blankets in good condition?</p> <p>Look for cracks or breaks in wiring, plugs, and connectors. Also look for dark, charred, or frayed spots on either side of the blanket.</p> | <p>NO: Discard blanket.</p> | <p><i>Any of these conditions indicate damage and a potential fire hazard.</i></p> |
| <p><input type="checkbox"/> Is anything covering the blanket when in use?</p> | <p>YES: Remove object. Do not allow anything on top of the blanket when it is in use.</p> | <p><i>When covered by anything, including other blankets or pets, electric blankets may overheat. If uncertain of your blanket instructions, do not put anything, even a light bedspread or blanket on top of an operating electric blanket.</i></p> |
| <p><input type="checkbox"/> Is the blanket always laid out flat?</p> | <p>NO: Unfold the blanket. Never fold electric blankets when in use.</p> | <p><i>Folded blankets may overheat.</i></p> |
| <p><input type="checkbox"/> If tucked in, are the heat producing wires bent around the corners?</p> | <p>YES: Untuck the blanket. Never pinch the heat-producing wires.</p> | <p><i>Pinching the wires may cause damage. Damaged wires may create a fire hazard.</i></p> |



Once you've completed inspecting all your bedrooms, continue on to the next page for specific items to look for in your **basement, garage, and workshops.**

In Basement, Garage, and Workshops

✓ Check Fuse Box (No fuse box? Check your Circuit Breaker box.)

Are **fuses** the correct **size** for the circuit?

NO: Install the correct size. If correct size is unknown, have an electrician identify and label the size to be used.

The wrong size fuse can allow too much current to flow and cause the wiring to overheat, creating a fire hazard.

OR

✓ Check Circuit Breaker Box

Do you periodically turn **circuit breakers** off and on?

NO: Turn off the freezer, refrigerator, and air conditioner. Flip each circuit breaker off and on three times. Do this at least once a year.

Circuit breakers must be exercised periodically to make sure they have not become stuck and to keep them in good working order.

Appliances with compressor motors can be damaged by repeated power interruptions if you don't turn them off.

If **Ground Fault Circuit Interrupter (GFCI)** breakers are installed, are they **tested** periodically?

(Note: These are similar to the GFCIs used in outlets.)

NO: Test GFCIs monthly.

To test: Push the test button. The breaker handle should go to the middle or off position.

To reset: Move the breaker handle to the off position and then to the on position.

A defective GFCI circuit breaker should be replaced by a qualified electrician.

GFCIs must be operating properly to protect against electrocution. They can fail without showing any sign of failure, so regular testing may save your life. By installing GFCIs, you are reducing your risk of electric shock.

If **Arc Fault Circuit Interrupters (AFCIs)** are installed, are they tested periodically?

NO: Test AFCIs monthly.

To test: Follow the directions in the GFCI test above.

A defective AFCI circuit breaker should be replaced by a qualified electrician.

AFCIs are special circuit breakers that detect electrical arcing that may occur if a wire or connection is damaged. Without an AFCI, this kind of arcing could cause unnoticed overheating and start a fire. AFCIs can stop working without showing signs of failure, so regular testing to identify a non-functioning AFCI may save your life.

✓ Check Electrical Power Tools

Are **all** cord connected power tools equipped with **3-prong plugs** or marked to indicate they are **double insulated**?

NO: Consider replacing older tools lacking these safety features. At the very least, make sure to plug them into a working GFCI outlet when using them.

These safety features reduce the risk of electric shock and electrocution. Metal-cased electrical tools without proper grounding become more dangerous as old internal insulation wears and cracks. Portable GFCIs are as effective as installed GFCIs.

Once you've completed inspecting all your work areas, continue on to the next page for specific items to look for **outside your home**.



Outdoors

✓ Check Electrical Outlets

- Does **each** outlet have its own **weatherproof cover**?

NO: Have weatherproof covers installed and keep them closed on unused outlets. If outlets must be used in wet weather, install a “weatherproof while in use” cover.

Moisture can get into outside outlets and cause a malfunction, which can pose a possible shock or fire hazard. Most covers don't keep water out when a cord is plugged into them, because the water drips between the plug and outlet.

- Are **all** outlets protected by a **GFCI**?

NO: Have GFCIs installed or plug in a portable GFCI when you use an outdoor outlet. GFCIs are sensitive to moisture and should be protected when used outdoors.

GFCIs protect against electrocution. Many local building codes require installing GFCIs for outside circuits when new homes are built or when existing ones are renovated.

✓ Check Electric Garden Tools (lawn mowers, hedge trimmers, weed trimmers, etc.)

- Are **all** power cords in good condition (e.g., no **cracks**, **exposed wires**, etc.)?

NO: Have damaged cords replaced by a qualified repair facility.

Damaged cords that have exposed wires are shock and fire hazards, especially outdoors when in contact with moisture and the ground.

- Are **tools** in good condition and **operating properly**? Do they function in a consistent manner and show no signs of damaged wiring or parts?

NO: Discard them, or have the tools repaired by a qualified repair facility.

If a power tool is not operating as you would expect, it is usually a sign of damage. Damaged tools can become a shock or fire hazard when wiring, motors, or other electrical parts begin to wear out or fail.

- Are **corded electric power tools** used around ponds or other wet or damp areas?

YES: Avoid using corded tools in damp or wet locations. If a tool gets wet, unplug it before touching it. Let it dry thoroughly. If the tool was immersed have it tested at a qualified repair center before trying to use it again. Or use battery powered tools if possible.

An electric tool in water is a potential electrocution hazard. No home power tools and few submersible pumps are safety-tested for use with people in the water. Even double insulated tools can become dangerous if they get wet. Using GFCI protection can reduce the risk of injury.



There's more for **outside your home** on the next page.



Check Extension Cords Used Outdoors

Are **extension cords** marked specifically for **outdoor use**?

NO: Replace with extension cords marked for outdoor use.

Cords made for indoor use will not withstand the temperature, humidity, and mechanical stresses of outdoor use. Indoor cords are more easily damaged and could become fire or shock hazards when used outdoors.

Are **3-prong extension cords** available **and being used** with the grounded (3-prong) plugs on outdoor products?

NO: Obtain 3-prong extension cords with proper grounding (3-prong plugs and three-slot outlets).

Products with 3-prong plugs are designed to lower the risk of electric shock. Using a 3-prong product with a 2-prong extension cord eliminates the protection and increases the likelihood of electrocution or fire if the tool has an internal electrical fault.



Check Pools and Spas

Is any **electrical equipment** used outdoors or around a swimming pool, spa or hot tub?

YES: Make sure all electrical equipment stays dry. Plug power cords only into working GFCI outlets. Unplug the equipment if it gets wet or immersed in the water before you try to “rescue” it.

Electrical products, even those in plastic or “double insulated” cases, can leak electrical current if they become wet from rain or splashing or have fallen into water. If they are wet, they are a serious shock or electrocution hazard.

Congratulations, you have completed the electrical checklist.

Use this checklist periodically to check your entire home.

Other safety checklists can be found at www.cpsc.gov.

Electrical Safety Publications

To order free copies of this publication “Home Electrical Safety Checklist” in English or in Spanish, email info@cpsc.gov.

All CPSC publications listed below are available to consumers to print from their computers.

Document Number	Publication	Description	Websites
016	Extension Cords Fact Sheet	Fact Sheet	http://www.cpsc.gov//PageFiles/118935/5032.pdf
099	GFCIs Fact Sheet	Fact Sheet	http://www.cpsc.gov//PageFiles/118853/099.pdf
516	Repairing Aluminum Wiring	Booklet	http://www.cpsc.gov//PageFiles/118856/516.pdf
518	Home Wiring Hazards	Booklet	http://www.cpsc.gov/pagefiles/118859/518.pdf
519	Don't Swim with Shock	Booklet	http://www.cpsc.gov/pagefiles/118887/519.pdf
5039	Install Ground-Fault Circuit-Interrupter Protection for Pools, Spas and Hot Tubs	Safety Alert	http://www.cpsc.gov//PageFiles/118868/5039.pdf
5060	Metal Ladders and Electricity Don't Mix	Safety Alert	http://www.cpsc.gov/pagefiles/137792/5060.pdf
5061	Electrocution Hazard with Do-It-Yourself Repairs of Microwave Ovens	Safety Alert	http://www.cpsc.gov//PageFiles/118874/5061.pdf
5133	Preventing Home Fires: Arc Fault Circuit Interrupters (AFCIs)	Safety Alert	http://www.cpsc.gov//PageFiles/137798/5133.pdf
NSN Poster	Power up with Safety	Neighborhood Safety Network (NSN) Poster	http://www.cpsc.gov/en/Safety-Education/Neighborhood-Safety-Network/Posters/Power-Up-With-Safety/
NSN Poster	Stay Alive! Deadly Hazards to Avoid After the Storm	Neighborhood Safety Network (NSN) Poster	http://www.cpsc.gov/en/Safety-Education/Neighborhood-Safety-Network/Posters/Stay-Alive/

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