

Homeowner Electrical Safety Handbook

OUTSIDE YOUR HOME



Electrical
Safety
Authority



ELECTRICAL SAFETY OUTSIDE YOUR HOME

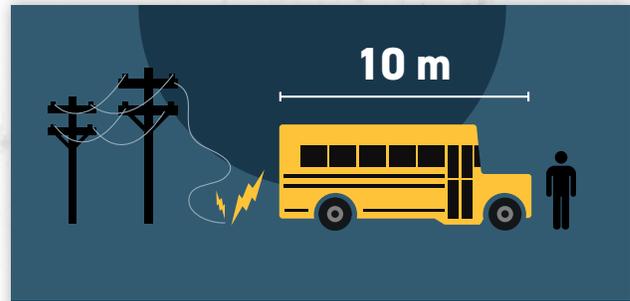
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Whether your outdoor plans include work or play, always keep safety top of mind. Electrical cords, stormy weather, and powerlines can all present serious electrical dangers outside your home. ESA's safety tips can help you avoid these hazards when spending time outdoors.

ESA'S TOP TIPS:



Stay 3 metres away from overhead powerlines.



Keep a schoolbus length (10 m) between you and a downed powerline. Indirect contact with powerlines can still result in a fatality or severe injury.



If you're hiring someone to do electrical work, they need to be licensed.

Ask your electrical contractor for their ECRA/ESA licence number.



Only purchase electrical products with a certification mark.

For a full list of recognized certification marks (some examples above), visit esasafe.com/approvalmarks.



Teach your kids that utility equipment is not a playground.

GENERAL OUTDOOR ELECTRICAL SAFETY

Extension Cords

Stay safe and follow the principle of “right cord, right place, right use” when using extension cords outside.

RIGHT CORD

- Only use extension cords rated for outdoor use.
- Check the power capacity of your cord – it should be the same or greater than the item you’re planning to plug in.
- Use a heavy-duty extension cord for electric power tools.
- Never string multiple extension cords together.
- Always use grounded (three-pronged) cords and never remove the grounding pin from the plug. If grounding pin is broken, replace the cord.



RIGHT PLACE

- Plug your grounded outdoor extension cord into an electrical outlet that has a Ground Fault Circuit Interrupter (GFCI).
- Never run extension cords under rugs, through doors or windows as this can damage the cords.



RIGHT USE

- Do not use outdoor extension cords as long-term power sources. [Hire a Licensed Electrical Contractor](#) if you need permanent outdoor wiring and outlets.
- Never bury extension cords or electrical conductors in the ground.
- Never staple extension cords or run them over nails as this can damage the cord.
- Use only electrical appliances and tools rated for outdoor use.

Whether your outdoor plans include work or play, always keep safety top of mind. Get more tips at: [esasafe.com/outdoorsafety](https://www.esasafe.com/outdoorsafety)



Pool & Hot Tub Safety

Always Remember: Water and electricity do not mix!

POOLSIDE IS NO PLACE FOR ELECTRICAL EQUIPMENT.

- Keep all electronics well back from the water.
- Existing electrical equipment must be three metres away from the pool or hot tub unless suitably cut off by fences, walls or permanent barriers.
- Make sure the electrical source that powers your pool equipment or comes within 1.5 metres of any metal objects such as a pool ladder, is properly grounded and bonded.
- All outdoor outlets should have Ground Fault Circuit Interrupters (GFCIs). This is especially important around the pool. The outlets should also have weatherproof in-use covers to prevent moisture from getting in.

ARE YOU THINKING ABOUT INSTALLING A POOL OR HOT TUB?

Before placing a hot tub or installing a pool in your backyard, it's important to consider its placement.

The first step is to ensure the pool or hot tub meet the minimum clearances from overhead powerlines and communication lines. Your local utility will advise their clearance rules based on the voltage of the lines. Some local utilities will not permit placing a pool under an overhead powerline.

Get advice on keeping pools and hot tubs up to the Ontario Electrical Safety Code. Check out our Grounded in Ontario podcast episode on Pools and Hot Tubs: esasafe.com/podcast



LANDSCAPING, TREE PRUNING & PLANTING

Powerlines are a silent and deadly hazard right outside your home. Overgrown trees can cover the powerlines making hard to see the hazard. Follow these precautions when doing landscaping maintenance around your home.



General Safety

- Before you start any yard work or outdoor home maintenance, locate powerlines, especially powerlines that may be hidden by trees.
- Remember to carry your ladder sideways to avoid contact with powerlines, and
- Check for overhead powerlines before standing a ladder up.



Utility Equipment

What is that green box on your property?

- It is padmounted equipment and contains electrical cables that run underground.
- Never dig near one.
- Don't plant anything within one metre of the box or three metres on the access side of the box, which is identified with a padlock.

Make sure you know what's in the ground on your property. Contact [Ontario One Call](#) before you dig.





Trees & Powerlines

During tree pruning and maintenance activity, branches, people and equipment in close proximity to the overhead powerlines can conduct electricity. You don't even need to touch a powerline to receive a potentially deadly shock. Electricity can arc (jump) to you and your tools if you get too close.

- Keep yourself and any tools or equipment at least **three metres** back from overhead powerlines.
- Keep at least **10 metres back** from a downed or low hanging powerline wire.
- Plant new trees far enough away from powerlines so the matured tree won't get too close. Contact your utility/Local Distribution Company for their requirements.
- If trees have already grown into the powerlines, contact your local utility or a utility arborist.
- **Do not prune trees around powerlines yourself.**

8 ESSENTIAL POWERLINE SAFETY TIPS

- 1 Locate Powerlines before starting any outdoor work
- 2 Stay back 3 metres from overhead powerlines
- 3 Carry ladders sideways
- 4 Stay away from dangerous areas like electrical transmission and distribution lines
- 5 Contact [Ontario One Call](#) to locate underground infrastructure before you dig
- 6 Plant trees away from overhead powerlines
- 7 Stay back 10 metres/33 feet from downed powerlines
- 8 Talk to your kids about powerline safety

Get more powerline safety tips at esasafe.com/powerlinesafety



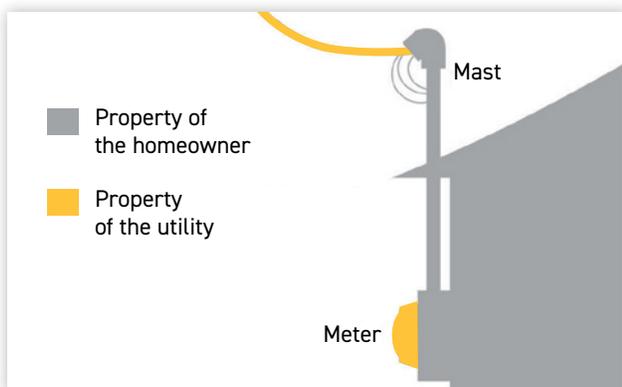
STORM SAFETY

Stormy weather happens often in Ontario, no matter what the season. Sometimes the weather can present serious electrical dangers both inside (like flooding and lost power) and outside your home (broken trees, downed powerlines and flooding). These tips can help you weather the storm safely.

Power Outages & Restoring Power

Power outages are often caused by freezing rain, sleet storms and/or high winds, which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system. Storms can also damage the equipment that connects your home to the electricity grid.

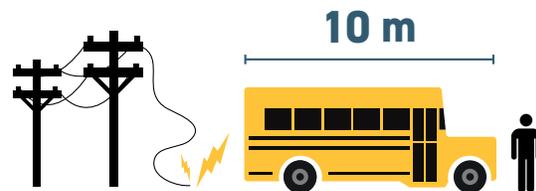
- If you have serious damage to your home's electrical system, the utility will not reconnect your power until you make repairs.
- Do not try to repair this equipment yourself.
- Stay back to avoid the risk of shock, electrocution or fire.
- Hire a [Licensed Electrical Contracting business](#) to do residential electrical repairs. Verify your contractor's ECRA/ESA licence number. Your contractor should file a notification with ESA, an official record of the work. Ask for a copy of the [ESA Certificate of Acceptance](#) once complete for your records.
- Hiring anyone other than a [Licensed Electrical Contractor](#) will delay having your power restored.



Downed Powerlines

High winds and heavy accumulation of snow and ice can bring down trees, branches and powerlines, which can cause hazards and pose life-threatening dangers to people and pets.

Always treat downed powerlines as live and extremely dangerous!



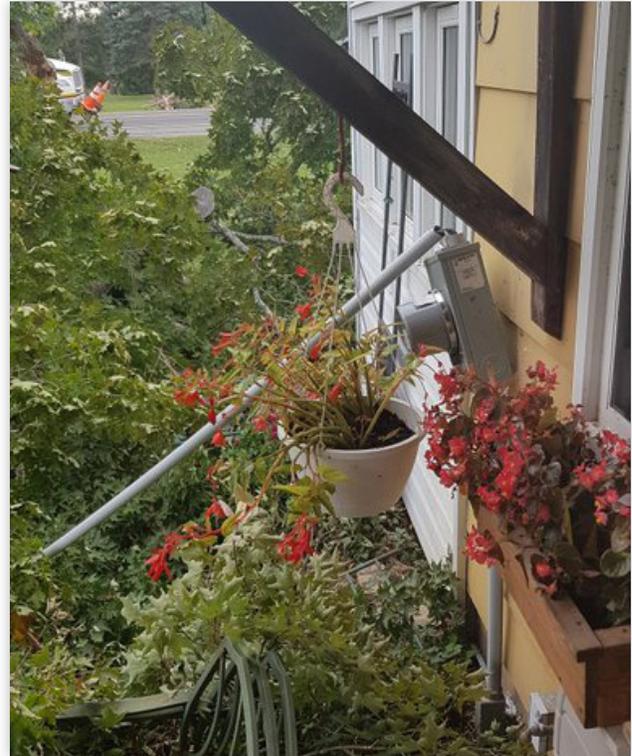
- 1 Stay back about the length of a school bus (10 metres) from downed or low hanging wires.
- 2 Call 9-1-1 and the local electricity distribution company to report any downed or low hanging lines.
- 3 Remain well back! Electricity can travel through water and the ground around powerlines.



Storm Clean-up

When clearing away snow, ice, tree limbs or other debris from around your home, make sure you stay away from electrical wires.

- Do not attempt to clear tree limbs that are leaning on or caught in powerlines. Report them to your local utility.
- Be careful when digging through snow or chipping ice. Make sure that snow or ice hasn't buried downed powerlines.
- Use caution when moving ladders. Electricity can jump from the wires to ladders, so you don't even have to make physical contact to risk shock or injury.
- Visually check (do not touch!) for damage to stand pipes/masts. These are the pipes typically attached to the side of a house, connecting incoming hydro wires to the electrical meter. If it's damaged in any way, contact a [Licensed Electrical Contracting business](#) to arrange repairs.



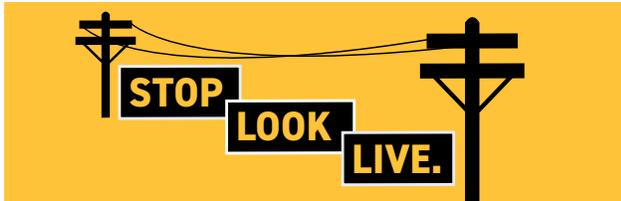
Make sure you're prepared for stormy weather. Visit esasafe.com/safety



SEASONAL DÉCOR

Here are some tips and guidelines to help keep you safe from electrical hazards when buying and installing outdoor lighting and décor for special occasions.

Stop. Look. Live.



- Always be aware of your surroundings.
- Check for overhead power lines before using a ladder to put up decorations, or when hanging lights or decorations on your home and surrounding trees.
- Always carry ladders horizontally.
- Keep all high reach tools 3 metres away from overhead powerlines. You do not have to make direct contact to receive a shock or injury. Electricity can jump “arc” across to you and your tools.

Cords & Plugs



- Don't overload extension cords or circuits by plugging in too many decorations. This can create overheating and may result in a fire.
- Never remove the third prong on cords. This “grounding pin” prevents shock in case of electrical equipment failure. Do not use cord if the grounding pin is broken or missing.
- Plug outdoor electrical decorations into Ground Fault (GFCI) protected outlets.



Electrical Products



This is just a sample of the marks.

Visit [esasafe.com/approvalmarks](https://www.esasafe.com/approvalmarks) for the full list.

- When buying outdoor lighting or electrical decorations, look for the approval mark of an accredited certification agency; the mark will be on the product label or in the description. This mark shows that the product has been tested and meets safety standards. See the marks at [esasafe.com/approvalmarks](https://www.esasafe.com/approvalmarks).
- Examine electrical décor and replace damaged electrical products like cords, plugs, light sets, etc.
- Choose the right light for the job. Light strings and other decorations are rated for indoor or outdoor use; make sure you use the right one.
- Read the package instructions, and never exceed the recommended wattage.



DON'T FORGET...

- 1 Never let children play with or put electrical decorations or cords in their mouths.
- 2 Keep an eye on pets – they might chew or damage electrical cords.
- 3 Never remove the third-prong from any electrical product. This “grounding pin” prevents electric shock.
- 4 Turn off holiday lights and decorations when you leave the house or go to bed.

Visit [esasafe.com/holidaysafety](https://www.esasafe.com/holidaysafety) for more safety tips



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