

Residential fires linked to electrical wiring and equipment

Based on the 2023 Ontario Electrical Safety Report (OESR), developed by the Electrical Safety Authority (ESA), a significant number of residential fires are associated with electrical wiring and equipment.

- In the past ten years, an average of 1,000 electrical fires occur in Ontario that result in structure loss, and an average of ten fatalities related to electrical fires occur each year.
- Electrical infrastructure fires in residential structures associated with electrical wiring and equipment, on average, account for 453 fires result in three fatalities, annually.*

(*) for more information and statistics, please refer to the latest Ontario Electrical Safety Report [Corporate Reports - ESA](#) Sources of electrical fires in homes include:

- electrical circuit wiring,
- damaged or improperly rated extension cords or cables,
- breaker/fuse panels,
- light fixtures (luminaires),
- receptacles and switches.

Fires are prevalent in both copper and aluminum wiring systems. Investigation of these electrical fires identified that most are attributed to incorrect or improper installation and/or procedure.

Electrical wiring is complicated and presents safety hazards if not properly installed and maintained. Homeowners are encouraged to ensure their electrical installations meet the safety standards defined in the Ontario Electrical Safety Code (OESC) by engaging a Licensed Electrical Contractor (LEC) to evaluate their electrical system if they have signs of potential electrical hazards, such as:

- circuit breakers that frequently trip or fuses that frequently blow
- lights that flicker
- signs of wiring deterioration
- concerns about the qualifications of individuals who worked on the electrical system

Persons operating an electrical contracting business are required to be licensed by ESA. Homeowners should retain the services of a LEC to ensure their electrical installations are done correctly and safely. Please refer to this link to know how to spot an unlicensed electrical contractor:

www.esasafe.com/consumers/contractorlookup/spotting-an-unlicensed-electrical-contractor

In addition, when homeowners have new electrical installations installed, they should request that their LEC provide a copy of the Certificate of Inspection confirming that the installation meets the requirements of the OESC.

When planning to do electrical work, think about the risks associated with unsafe electrical installations. Contact a licensed electrical contractor, and make sure they file a notification of work. Visit <https://findacontractor.esasafe.com/> for a list of licensed electrical contractors in Ontario.