Charge into Fire Safety™: Lithium–Ion Batteries in Your Home





What are lithium-ion batteries?

Lithium-ion batteries are **rechargeable batteries** that can store a large amount of power in a small package. This makes them very useful – but can also be dangerous if they are not handled properly.

They are found in some of the devices we use every day, such as cell phones, tablets, and laptops, as well as headphones, toys, and e-cigarettes. Larger versions are also used in power tools, lawn equipment, scooters, e-bikes, and hoverboards. Because they are so common, almost every home has several lithium-ion batteries.

Why safety matters

If damaged, charged incorrectly, or used with unsafe equipment, lithium-ion batteries can:

Overheat
 Catch fire
 Explode

Fires caused by these batteries can spread quickly and give off toxic smoke. Fire departments are seeing more fires linked to lithium-ion batteries every year.



Did you know?

Almost every rechargeable product in your home uses a lithium-ion battery.

Buy smart

When buying lithium-ion powered devices, stick with trusted brands and avoid cheap, off-brand products that may not meet safety standards. Devices without visible safety certifications or proper labeling may pose a higher risk of overheating, fire or failure. In Canada, the most common certification marks are:



CSA



cUL



cETL



choose quality and reliability over cheap.

These marks show the product has been tested by a recognized safety laboratory and meets safety standards. Many electronics, chargers, and batteries sold online or in stores may not carry these marks.

Charge safe

The way you charge your devices can make a big difference in whether or not they become a fire risk.

- Always use the right charger. Use the charger and cord that came with your device and follow the manufacturer's instructions. If you need a replacement, buy one from the manufacturer or one they have approved.

 Unapproved or cheap off-brand chargers can overheat and cause fires.
- Charge on a hard surface. Place devices on a table, desk, or counter where air can circulate. Do not charge on a bed, couch, pillow, or under blankets. Heat needs to escape if it builds up, a fire can start.
- **Do not overcharge.** Once your device's battery is full, unplug it from the charger. **Overcharging increases the risk of overheating and battery failure.**
- · Never charge unattended.



Did you know?

Throwing batteries in the garbage can cause fires in garbage trucks and at recycling plants.



Recycle right

Lithium-ion batteries should **never go into the garbage, blue recycling bag, or green carts.** They can spark and cause fires in garbage trucks and at waste facilities.

Instead, take them to a safe recycling location. You can find drop-off sites and rules for different types of batteries at halifax.ca/recycling.

Warning signs of a problem

Stop using a battery or device immediately if you notice:

- Bulging or swelling
- · Leaking fluid
- · Change in color
- Strong or unusual odors
- Overheating during use or charging
- · Burn marks or corrosion

If the battery smokes, sparks or catches fire, leave the area right away and **call 911**. If it is safe to do so, move the device away from things that can catch fire.

Quick safety reminders



- Store spare batteries and devices with lithium-ion batteries in a cool, dry place.
- Do not leave devices in hot cars or direct sunlight heat can damage the battery and increase fire risk.
- Charge larger devices (such as eBikes/eScooters) away from your exit path and never leave it charging unattended.
- Have devices repaired only by qualified professionals.



