BATTERY SAFETY: How to Prevent Fires



Batteries are an essential part of modern life, powering everything from remote controls to smartphones to vehicles. However, improper use, storage, and disposal of batteries can lead to serious safety hazards—including fires. Understanding how to handle batteries responsibly can help mitigate these risks and make things safer for you and those around you.

Safe Use and Storage

Here are some general guidelines that can be helpful to follow when dealing with batteries:1



Avoid Physical Damage:

Never crush, puncture, or attempt to dismantle batteries. Damaged batteries can leak hazardous chemicals or catch fire.



Store Properly:

Keep batteries in a cool, dry place away from direct sunlight and extreme temperatures. High heat can cause batteries to overheat and potentially ignite.



Prevent Short Circuits:

Store loose batteries separately in their original packaging or a non-conductive container. Do not allow battery terminals to come into contact with metal objects, as this can cause a short circuit.



Check for Corrosion:

Inspect batteries for any signs of leakage or corrosion and dispose of compromised batteries properly.

Take C.H.A.R.G.E of Lithium-Ion Batteries

Found in items like phones, laptops, and power tools, lithiumion batteries are highly efficient but prone to overheating (and potentially combusting) if damaged or improperly charged. Between the period of 1995–2023, lithium-ion batteries caused 111 fatalities and 621 injuries. In fact, there's a specific acronym that exists to help you remember what to do when it comes to using these batteries safely:²



Choose certified products.

Handle with care.

Always stay alert for warning signs.

Recycle devices and batteries properly.

Get out quickly if there's a fire.

Educate others on safe practices.

Safe Disposal to Reduce Fire Hazards

Improper disposal of batteries can lead to environmental contamination and fire hazards. Here's how to safely dispose of different types of household batteries:³

- Single-Use Alkaline and Zinc-Carbon Batteries: While some jurisdictions allow these to be disposed in regular household waste, it's best to check local regulations. Recycling options may be available through designated collection centers.
- Rechargeable Batteries (Nickel-Cadmium, Lithium-Ion, Nickel-Metal Hydride): These should never be thrown in the regular trash. Take them to a certified battery recycling center or a retailer that offers battery disposal services. Additionally, cover the terminals of these batteries with non-conductive tape (such as electrical tape) to prevent inadvertent fire risks.
- Car and Lead-Acid Batteries: These are highly hazardous and must be recycled through automotive shops, battery retailers, or hazardous waste facilities.



Help Keep Your Home Safe

Proper battery safety practices are an essential aspect of household safety. By following the correct usage, storage, and disposal techniques, you can prevent fire hazards and make your home safer for everyone.



¹"HOW TO SAFELY STORE BATTERIES." *Batteries Inc.*, 2025.

 $^{^{\}rm 2}$ "TAKE CHARGE OF BATTERY SAFETY." Fire Safety Research Institute, 2023.

³ "Used Household Batteries." *United States Environmental Protection Agency*, 2025.