



# Lithium-ion Battery Safety

## FACTSHEET

Lithium-ion batteries power many of our daily essentials - from smartphones and laptops to mobility aides and electric scooters. While these batteries offer convenience, they also pose a growing fire risk across Australia.

### Where you will typically find Lithium-ion batteries:

Lithium-ion batteries are used in many common devices around the home or office. They're lightweight and charge quickly, but they can catch fire or explode if they're damaged or not used properly.



Mobile phones, tablets, eReaders, Laptops.

Personal medical devices (e.g. insulin pumps, CPAP machines, hearing aids).



Electric wheelchairs, mobility scooters, e-bikes and e-scooters.

Wireless headphones and earbuds.



Smart watches and fitness trackers.

Cordless & robot vacuum cleaners.

Power tools (e.g. drills, sanders).



Rechargeable torches and lanterns.

Portable power banks (USB chargers).

### Spot the signs; avoid the risk!

**Do not use batteries or devices if they show any of these signs:**



SWELLING, LEAKING, BULGING, CRACKING.



OVERHEATING, VAPOUR, SMOKE.



SPLASHED OR BEEN IN WATER.



EXPOSED TO FIRE OR EXTREME HEAT.

This document is for general information only. For current information visit the Safework Australia website, or government Work Health Safety website for your State or jurisdiction.

### Smart and safe use of rechargeable batteries and devices:



**Always follow the manufacturer's instructions** for charging and safe use of device. And **only use the manufacturer's recommended or supplied charger.**



**Charge on a hard, non-combustible surface like concrete or tile** and away from flammable items like beds, sofas, carpet or curtains.



**If charging more than one device, keep them separate** and a good distance apart.



**Disconnect charger and device once fully charged** to avoid overcharging or overheating.



**Charge and store device in a cool, dry, well-ventilated area away from direct sunlight**, heat, moisture or combustible materials.



**Ensure charging area is protected from any building sprinkler system.**



**Allow batteries to cool down after use** and before recharging.



**Buy from reliable manufacturers** and ensure the device is from a trusted source. Do not buy, borrow or hire modified or altered products - new or used.



**Buy compliant chargers and devices only.** Look for those marked as compliant with the relevant Australian Standard showing electrical safety approval marks on the charger and device.



**Do not leave devices unattended or to charge overnight.**



**Ensure safe disposal at a recycling centre.** Lithium-ion batteries cannot be placed into home garbage or recycling bins.

### Checklist for e-Vehicles, i.e. mobility scooters, bikes

- ☐ Does the e-vehicle have a battery management system with an auto cut-off to prevent overcharging and temperature monitoring to detect overheating?
- ☐ Are regular annual inspections conducted of both the vehicle (ie, scooter, bike) and the charging device for any damage?
- ☐ If a specific charging area is provided in the building, is fire compartmentation installed? E.g. fire wall, fire doors between charging area and remaining building areas to prevent fire spread beyond area of origin.
- ☐ Are monitored, working smoke alarms installed in the charging area?
- ☐ Is the charging area protected from any automatic sprinkler system?

