

WHAT'S THE STORY?

You may have heard about fires caused by lithium-ion batteries from e-bikes.

Yes, lithium batteries can catch fire – but it is extremely rare – you're more likely to be hurt in a car accident!

But battery fires are possible, so this guide provides practical tips on how to reduce the likelihood of fire caused by your e-bike battery.

Lithium-ion batteries are incredibly useful and are used in an increasingly wide range of everyday devices including your mobile phone, laptop, and power tools. These safety tips apply for all of them. So, treat your lithium-ion batteries with the care they deserve and only purchase products that meet Australian Safety Standards.

Plus, remember that batteries are hazardous waste and need to be disposed of at a battery drop off point, not in your household bin.

Find a drop off point at wasteauthority.wa.gov.au/programs/view/household-hazardous-waste or your local council.



WestCycle is the peak body for bike riding in WA, and a representative voice for all bike riders. Our vision is to get more people riding bikes more often.

We are a not-for-profit membership organisation and offer personal accident and public liability insurance for riders who want peace of mind.

Find more e-bike resources at westcycle.org.au/e-bikes

Sources:
commerce.wa.gov.au/building-and-energy/lithium-ion-battery-safety
unsw.edu.au/newsroom/news/2023/03/seven-things-you-need-to-know-about-lithium-ion-battery-safety
rac.com.au/home-life/info/lithium-battery-fires



LITHIUM-ION BATTERY SAFETY GUIDE



HOW TO REDUCE YOUR RISK OF BATTERY FIRES

1. Never use poor quality, off brand or aftermarket batteries or chargers.

Ideally, buy the battery and charger that is made for the bike.

Reputable battery manufacturers have matched battery/charger combinations which include a monitoring system that detects the state of charge so that it automatically switches off, preventing it from over charging or over-heating. Make sure your battery and charger have this feature and only use the charger supplied with the bike. Some cheap imported batteries found online do not have this essential component.

Reputable battery brands to look for are LG, Samsung, Bosch and Panasonic.

2. Don't use a battery that shows signs of swelling, overheating or damage.

If you drop, crack, open or damage your battery, make sure it's checked out immediately by a professional. Never open the battery case yourself, let the professionals address any issues or damage.

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3. Make sure your battery and charger meet Australian Safety Standards

All battery chargers undergo rigorous testing to meet Australian standards under the national Electrical Equipment Safety System (EESS).

Consumers should look for a regulatory compliance mark, such as a tick inside a triangle, or go to ees.gov.au to check whether the charger is approved for use in Australia. Chargers must bear the Regulatory Compliance Mark (RCM) where it can be clearly seen.

TOP TIPS FOR SAFE CHARGING

- Avoid charging the battery overnight, unplug when it is fully charged.
- Avoid charging on, or near flammable materials.
- Charge your battery at room temperature - avoid charging the battery when it's hot or cold to touch.
- Store your battery in a cool, dry place with adequate ventilation. Don't leave your battery in direct sunlight or near a heat source (eg. a water heater), especially while charging.
- When being stored for an extended period, leave the battery partially charged (not fully charged or empty).