

Fast. Fierce. Fatal.

Campaign overview for
Fire and Rescue Services



Fast. Fierce. Fatal.

Lithium-ion battery fires are one of the fastest-growing fire risks in homes today.

In November 2024, a young couple tragically died in a Coventry house fire caused by the battery on an e-bike. It had been converted from a standard pedal bike.

Such battery fires start suddenly, burn fiercely, and often leave little chance to escape. And they're on the rise.

In 2023, WMFS firefighters responded to 40 incidents involving lithium-ion batteries. The number rose to 69 in 2024. By 31 October this year it was already 65 - up 6.6 per cent on the same ten months last year, and more than twice as many as in the same period in 2023. Incidents involving e-bikes and their batteries: six in 2023, 13 in 2024. By 31 October 2025: 16.

In addition, binned batteries are fuelling waste industry fires – at a reported cost of more than $\mathfrak{L}1$ billion a year.

In response, West Midlands Fire Service's Corporate Communications team have developed a suite of graphics and messaging for colleagues across the UK to use to support their own fire safety messaging.

As Black Friday, Cyber Monday and Christmas draw near, you might choose to use the Fast. Fierce. Fatal. assets on your website or social media/community messaging channels, print them, or display on digital screens.

The campaign complements the work of fire and rescue colleagues in prevention, protection, etc:

- Safe and Well visits
- work with schools and college/uni students
- engagement with housing providers and residents
- work with retailers, the delivery sector/gig economy
- fire station open days and other events engagement with families and community members.

We hope you find the Fast. Fierce. Fatal. material useful, and look forward to seeing it shared widely to help reduce the risk of lithium-ion battery fires in people's homes.

We've included some messaging ideas on the following pages, and a link to a suite of artwork and social media assets. The campaign hashtag is **#FastFierceFatal**



Who are we trying to reach?

Our communities and our staff - raising awareness of lithium-ion fire risks at home.

E-bike and e-scooter users, including delivery people/gig economy – encouraging safe purchase, charging and storage.

People buying devices powered by lithium-ion batteries and chargers online - the dangers of unregulated products.

Landlords, property managers and housing providers – ensuring safe storage and charging practices, and guidance for residents.

Students and renters – risks to those living in multiple occupancy premises, eg charging in escape routes. overloaded sockets, in confined spaces, or in escape routes.

Which items are we talking about?

- e-bikes, e-scooters
- phones, tablets, laptops
- vapes (disposable and rechargeable)
- mobility scooters
- cordless vacuums/tools, electric toothbrushes, kitchen gadgets
- toys and gadgets, incl drones.

Core messaging

Rechargeable devices probably have a lithium-ion battery inside.

Many people don't realise they already own and use them daily, and that they could be engaging in dangerous purchase, charging and storage behaviours.

The risk of a good quality lithium-ion battery failing is very low, but even a well-maintained battery can fail unexpectedly.

The fires they can cause can be devastating:

FAST: they can start suddenly, often without warning, and spread within seconds.

FIERCE: such fires burn at extreme temperatures. They release toxic fumes and explosive vapours, and can quickly fill a home with flames.

FATAL: People have died in such fires, typically with little chance to escape.



How to spot a dangerous battery

Damaged or faulty lithium-ion batteries are a fire risk. Look out for these warning signs:

- feels unusually hot when charging or in use
- swelling, bulging, or leaking liquid
- · burning or acrid smell
- hissing sound
- device won't hold a charge properly.
- damage to the casing, such as a dent, that could have affected the battery on the inside.

Buy and charge safely

Always buy from trusted retailers and look for UK safety marks.

Avoid cheap, unbranded e-bike conversion kits that may include unregulated batteries or chargers.

Avoid buying any electricals from third-party sellers on online marketplaces.

Make sure you use the correct charger for your device (power, output).

If a deal seems too good to be true, it probably is. Buying substandard batteries and chargers puts lives at risk.

How to charge safely

Many fires involving lithium-ion batteries happen during charging. Reduce the risk:

- use the charger that came with your device. If it didn't come with one, make sure you use one that's compatible (power, output).
- charge on a hard, flat surface, away from anything that could catch fire and burn
- unplug once fully charged, don't leave on charge overnight or while you're away from home
- don't block escape routes never charge batteries in hallways, doorways or under stairs
- let batteries cool before charging
- follow manufacturer's instructions





How to store safely

Where you keep lithium-ion batteries or devices powered by them, especially when they're on charge, significantly affects fire risk.

Keep them away from anything that could catch fire and burn. Somewhere cool and dry is best.

What if I'm concerned about a battery or device?

Safe purchase, storage and charging can go a long way to ensuring you never have a fire caused by a lithium-ion battery.

Fit and test smoke alarms.

If you're worried that there's an imminent risk of fire: get out, stay out, call 999.

Don't approach or handle the battery or device.

How to get rid of old or damaged batteries

If a battery is damaged or swollen, never store it indoors. Dispose of it safely and quickly.

Safe disposal is very important. Fires at waste sites and recycling plants have increased due to improper disposal of lithium-ion batteries.

Batteries should never be thrown in general waste or household recycling bins. They could be crushed, short-circuit, and start fires – in a bin lorry, for example.

Take them to a battery recycling point – found in many supermarkets and recycling centres.

If a battery is damaged or swollen, seek specialist advice before you do anything with it or take it anywhere.





The science bit

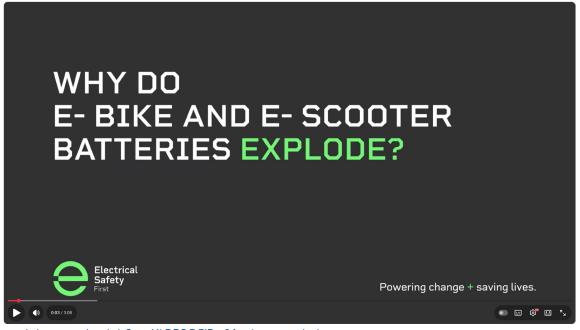
Lithium-ion batteries or packs usually contain several smaller batteries or 'cells'. Each one can store large amounts of energy.

If one overheats, nearby cells can quickly do the same. It's a chain reaction, called 'thermal runaway', and can cause a fast, fierce fire.

Temperatures inside the cells can reach hundreds of degrees. They can get way hotter than a pizza oven, and even approach lava-level heat.

They can reignite, cause explosions and release dangerous vapours.

Watch this helpful video from **Electrical Safety First**:



youtube.com/watch?v=yXtGR9Q5IPw&feature=youtu.be



Campaign artwork, social media assets and some suggested messages

To view and download the Fast. Fierce. Fatal. artwork and design files, <u>click here</u>. Please credit 'West Midlands Fire Service' and/or tag @WestMidsFire

1. Everyday devices

Lithium-ion batteries power our everyday lives. But, when things go wrong, fires can be fast, fierce and fatal. Know the risks. **#FastFierceFatal**

From phones to laptops, e-scooters to drones – the same safety rules apply. Check chargers and cables. Act fast on warning signs. Fires caused by their batteries can be #FastFierceFatal

2. Know the danger signs

Fires caused by lithium-ion batteries can be **#FastFierceFatal**. Charge them away from anything that can burn. Know the danger signs: overheating, swelling, leaking, unusual smells, hissing, damage or won't hold charge.

3. Buy safely

Buy from trusted retailers and look for recognised safety markings. Avoid cheap conversion kits and dodgy chargers. Poor quality parts can increase the risk of fires that are **#FastFierceFatal**

4. Charge safely

Use the correct charger on a hard, flat surface. Let batteries cool after use, unplug when full, never charge overnight or when you're out, and keep escape routes clear. Don't risk a #FastFierceFatal fire

5. Store safely

Store batteries in a cool, dry place away from direct sunlight and anything that can burn. Keep them away from metal objects. Don't risk a **#FastFierceFatal** fire

6. Dispose and recycle

Never bin batteries. Take them to proper recycling points. Damaged or loose batteries in general waste can cause fires in bins and waste sites. **#FastFierceFatal**

7. Thermal runaway

A damaged or failing battery can reach lava-level temperatures, causing a chain reaction and a devastating fire. The fires produce their own oxygen, and are almost impossible to extinguish. Get out, stay out, call 999.



8) E-bikes and e-scooters

Choose approved models, charge with the supplied charger, and never block escape routes with e-bikes or e-scooters. If it's damaged or performing oddly, stop using it and seek advice. Fires caused by their batteries can be **#FastFierceFatal**

9) Students and renters

In shared homes, avoid overloading sockets and trailing extension leads. Don't charge in bedrooms while you sleep, and keep hallways clear for escape. **#FastFierceFatal**



