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## **FOIL Update 2<sup>nd</sup> July 2026**



# **The Rising Liability Risk of Lithium-ion Battery Fires**

Fire brigades across the UK are now tackling a lithium-ion battery fire roughly once every five hours, according to research published by global insurer QBE earlier this year. Additionally, data obtained from freedom of information responses from 42 of the UK's 49 fire and rescue services shows that incidents involving lithium-ion batteries have risen by 147% since 2022, up from 713 recorded fires to 1,760 in 2025, the equivalent of 4.8 fires every day.

### **An Escalating Problem**

The scale of the data is striking given that lithium-ion batteries can be found in most rechargeable devices, including smartphones and vapes, as well as electric vehicles (EVs) and e-scooters. The single biggest contributor to fires is e-bikes, accounting for 520 fires in 2025, which is close to a third of all incidents and more than triple the number recorded in 2022.

London bore a disproportionate share of this burden, with the London Fire Brigade attending 522 lithium-ion battery fires last year, including 44% of the e-bike fires recorded nationally. Where fire services were able to record the detail, converted or retrofitted e-bikes featured more frequently than officially manufactured models, pointing to the informal aftermarket as a recurring source of risk rather than reputable retailers.

Over the same period, EV fires rose by 133%, from 120 incidents in 2022 to 279 in 2025. However, this increase trails the underlying growth in the EV parc, which nearly tripled over the same period, from around 664,000 to almost two million vehicles on UK roads. This is an

important distinction for insurance and legal professionals advising on proportionality of risk and corrects headline-driven fears between heavily regulated EVs and unregulated lithium-ion applications which pose a disproportionately higher fire risk.

The location of fires is also informative, with 46% occurring in private homes, 31% outdoors and 23% in commercial premises. In addition, a substantial number involved everyday consumer electronics, such as mobile phones, tablets, and power banks rather than transport. Research suggests the average UK household now has between 15 and 25 devices with lithium-ion batteries, so the exposure spans the full spectrum of product categories and sectors of society.

### **A Distinct Legal Complication**

A lithium-ion fire progresses in distinct stages that make it legally as well as physically distinctive; this is called thermal runaway. Once a damaged, overcharged, or otherwise compromised cell begins to fail, an internal chemical reaction can cause the temperature to spike rapidly, releasing flammable and toxic gases that ignite. These fires burn differently from conventional combustion, can require up to ten times more water to control, and often reignite hours after being extinguished.

For litigators, loss adjusters, and insurers, there is an evidential challenge in that a battery in thermal runaway frequently destroys itself and much of the surrounding evidence in seconds. There is therefore little physical material available to establish cause and origin, which, in turn, complicates the question of who should be held liable for the loss.

### **An Uncertain Liability Landscape**

Lithium-ion battery supply chains are complex and rarely involve a single, easily identifiable source, with the process of manufacturing, assembling, repackaging, and adapting cells commonly spread across multiple jurisdictions before they are sold to UK consumers through online marketplaces with limited traceability. Establishing whether liability sits with the cell manufacturer, the pack assembler, the importer, the retailer, or a third-party technician who has modified a device is far from straightforward and only made harder after any physical evidence has been destroyed by the fire itself.

That being said, English law does provide several routes of recourse. The Consumer Protection Act 1987 offers a strict liability route against those who manufacture, import, or own-brand defective products, which can be valuable precisely because it does not require proof of negligence in situations where causation evidence is limited. Consumers retain rights in negligence and, where there is a contractual relationship with a retailer, under the Consumer Rights Act 2015.

Businesses that suffer loss due to a defective battery supplied by a third party may, subject to any limitation or exclusion clauses agreed, engage the Sale of Goods Act 1979 or the Supply of Goods and Services Act 1982. Where the fire originates in a let property, landlords,

tenants, and managing agents can all, in principle, become parties to the same dispute, particularly if the offending device was charging in a communal area.

### **Regulation is Catching Up**

The Product Regulation and Metrology Act 2025, which received Royal Assent in July last year, is a clear sign that government recognises the scale of the problem and a key enabling measure. The Act grants the Secretary of State broad powers to quickly update legislation to address modern consumer, environmental, and safety risks. Included are powers expressly targeting the accountability of online marketplaces and contemporary safety threats such as lithium-ion batteries.

The Department for Business and Trade has indicated that future regulations will require marketplaces to prevent unsafe products from being listed, ensure sellers comply with existing product safety obligations, and provide consumers with clearer safety information. This will bring online platforms onto a more equal regulatory footing with bricks-and-mortar retailers and broadly in line with the EU's General Product Safety Regulation.

There is growing pressure to implement legislative changes quickly. The Office for Product Safety and Standards recorded 211 e-bike and e-scooter fires in 2024, equivalent to one every 1.7 days, with most traced to unsafe lithium-ion batteries bought through online marketplaces. The Fire Protection Association and Electrical Safety First have jointly urged the government to implement robust secondary legislation to give the Act practical effect, warning that without it illegal or unsafe items will continue to slip through the cracks and perpetuate an endless cycle of deleted listings reappearing online. A formal consultation on the UK's new product safety framework is now underway, and how the resulting regulations shape up will interest those advising manufacturers, retailers, marketplace operators, or insurers in this area.

### **A Further Layer of Complexity**

Separate from product regulation, existing fire safety law already imposes meaningful obligations on those responsible for buildings where lithium-ion devices are charged or stored. The Regulatory Reform (Fire Safety) Order 2005 places obligations on the 'responsible person' in non-domestic premises and communal areas, while the Fire Safety (England) Regulations 2022 impose stricter requirements on residential buildings with storeys over 11 metres.

In higher-risk buildings, the Building Safety Act regime carries specific duties for the Accountable Person to prevent and mitigate building safety risks, which incorporates battery storage and charging. Houses in multiple occupation bring their own regime under the 2006 management regulations, raising questions for landlords and managing agents of where and how tenants are permitted to charge relevant items to avoid compliance and liability issues.

## **Insurance Market Perspective**

The financial and operational pictures are closely aligned, with analysis from managing agents indicating the average cost of fire-related home claims rising, a trend attributed in part to the growing prevalence of lithium-ion batteries. Property and casualty insurers are responding by updating policy wordings with specific exclusions or offering endorsements that extend cover at an adjusted premium.

Underwriting guidance is increasingly focusing on high-risk items such as e-bikes, e-scooters, and battery storage units, and claims handlers are being encouraged to ask about battery-powered devices at first notification of loss to help establish liability, detect fraud, and rule out third-party negligence before evidence is lost.

## **A Prominent Risk**

Available data points to a risk that is increasing in frequency, value, and legal complexity, and the immediate future is likely to feature a steady rise in product liability claims, subrogated recovery actions, and regulatory enquiries connected to lithium-ion batteries. These are likely to be accompanied by the emergence of more detailed secondary legislation under the 2025 Act. Staying alert to the evolving regulatory framework and the practical realities of evidence and causation in battery fire claims will be essential for legal and insurance professionals seeking to advise clients effectively in the face of this growing risk

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