



Lithium battery related ADF's

Methodology:

- A custom question set was added to IRS in June 2023 to aid the identification of lithium battery related product fires: (8f.1) Emerging tech.

- 8f.1 Was Emerging Technology the cause of the fire?
- 8f.2 What type of Emerging Technology was involved?
- 8f.3 Hazardous Material Environment Protection Officer (HMEPO) involvement?

-- Select an item --
Hover Board or Segway
E-Cigarette
E-Bike
E-Scooter
E-Vehicle
E-Vehicle Charging Points
Solar Panels
Lithium Ion Batteries
Robotic Vacuum
Domestic Energy Storage System DESS
E-Appliance Charger
Battery Energy Storage System BESS

- Additionally, the identification of products associated with a lithium battery product is enhanced via a keyword search of free-text fields used to describe the incident. This is to account for the period prior to June 2023 and to ensure products which may be known by multiple names are captured. E.g. E-Cigarette and their derivatives are also known as:
 - Vapes
 - E-cigs
 - Electronic cigarettes
 - Hookah's etc.



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Activity:

- There have been 93 lithium product related fires over the latest three-year period.
- with activity remaining static each year, averaging 31 incidents annually.
- Over the same three-year period, there were 2,123 accidental dwelling fires, equating to lithium fires accounting for 4.4% of all ADF's.

	2023	2024	2025	Total
ADF's	739	660	724	2,123
Lithium related	31	32	30	93
% of ADF's	4.2%	4.8%	4.1%	4.4%



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Product type:

- Where a product category/description isn't stated, the item is recorded as Lithium-Ion Batteries. These account for 54 of the 93 incidents (58%).

	2023	2024	2025	Total	% of Total
Lithium-Ion Batteries	17	22	15	54	58.1%
E-Bike	7	3	3	13	14.0%
E-Appliance charger	-	4	7	11	11.8%
E-Scooter	2	3	3	8	8.6%
E-Cigarette	2	-	1	3	3.2%
Hover Board or Segway	2	-	-	2	2.2%
Laptop	1	-	1	2	2.2%



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Location lithium fire start:

- 23.7% (22) of incidents originated in the bedroom, followed by the living room 19.4% (18), and kitchen 16.1% (15).

	2023	2024	2025	Total	% of Total
Bedroom	7	9	6	22	23.7%
Living room	7	7	4	18	19.4%
Kitchen	5	4	6	15	16.1%
Garage	1	1	9	11	11.8%
Corridor/Hall	6	2	-	8	8.6%
Dining room	3	3	1	7	7.5%
Other	-	1	2	3	3.2%
External fittings	1	1	1	3	3.2%
Open plan area	1	-	-	1	1.1%
Not known	-	1	-	1	1.1%
Utility room	-	1	-	1	1.1%
Conservatory	-	-	1	1	1.1%
Bathroom/Toilet	-	1	-	1	1.1%
External Structures	-	1	-	1	1.1%



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Location district:

- The top three districts account for a combined 45.2% of lithium related ADF's.

	2023	2024	2025	Total	% of Total
Preston	6	8	3	17	18.3%
Blackpool	6	4	5	15	16.1%
Lancaster	4	4	2	10	10.8%
West Lancashire	2	3	3	8	8.6%
Burnley	1	3	4	8	8.6%
South Ribble	1	1	3	5	5.4%
Wyre	2	2	1	5	5.4%
Blackburn with Darwen	1	2	2	5	5.4%
Hyndburn	1	1	2	4	4.3%
Ribble Valley	2	1	1	4	4.3%
Fylde	2	1	-	3	3.2%
Rosendale	1	-	2	3	3.2%
Pendle	1	1	1	3	3.2%
Chorley	1	1	-	2	2.2%
Out of area	-	-	1	1	1.1%



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Casualties:

- There were 13 recorded casualties from 8 incidents.
- 61.5% (8) recorded a slight injury, 23.1% (3) serious, and 15.4% (2) fatal.

	2023	2024	2025	Total	% of Total
Victim went to hospital; injuries appear to be Slight	1	4	3	8	61.5%
Victim went to hospital; injuries appear to be Serious	2	1	-	3	23.1%
Fatality	-	2	-	2	15.4%
Total	3	7	3	13	-



Lancashire Fire
and Rescue Service

Questions