

Lithium-ion battery incident reporting

The proliferation of lithium-ion batteries and the products that run on them has resulted in an exponential increase in incidents resulting in injuries and fatalities.

12,383

842

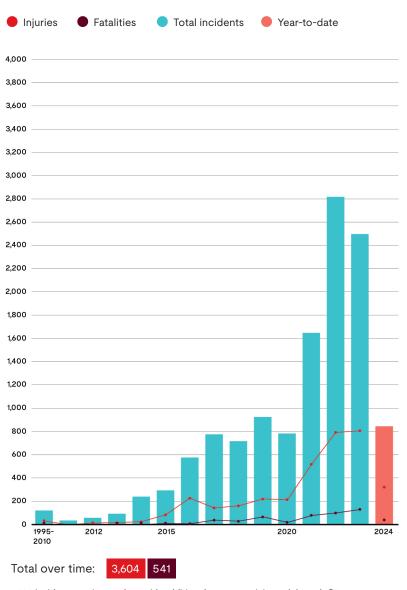
total incidents in 2024 to date



Knowledge is power

Tracking and transparent reporting of battery-related incidents — including product type, what happened and the impact — is critical to helping drive understanding of this technology and where the greatest risks exist.

Increase in total incidents over time



2023 incidents are incomplete, with additional reports anticipated through Q2.

Total incidents reported for each category

(1995-2024 YTD)



CONSUMER PRODUCTS

1,716

150

total injuries

total fatalities



ELECTRIC VEHICLES (>20MPH)

126

90

total injuries

total fatalities



MICRO-MOBILITY
DEVICES (<20MPH)

1,702

297

total injuries

total fatalities



ENERGY STORAGE SYSTEMS

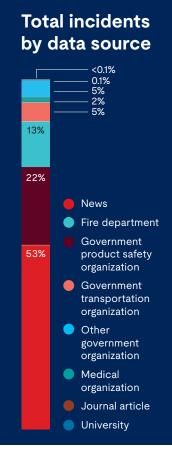
60

4

total injuries

total fatalities

Incidents reported by country Injuries Fatalities Other incidents <1% 9% Japan -91% 75% <1% 25% 64% 75% 33% Singapore 4% Incident awareness and analysis 19% Reporting is critical to understanding the depth and nature of this challenge. With limited visibility into battery incidents globally, we know this data is just the Greater All countries 67% 29% -53% 31%-50% 46% Germany China beginning — there are many more incidents occurring than are being reported. Some countries release bulk estimates rather than individual data points. Others, like Japan, provide weekly data points through the National Institute of Technology and Evaluation.



Reported incidents by type

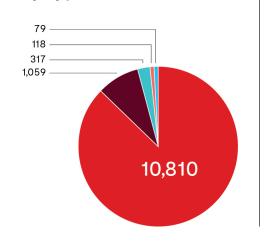


Explosion Gas released, quick ignition causing loud sound and pressure increase

Venting
 Gas released, may be hot and/or swollen

Heat Hot, no gas released

 Swelling Increased in size, may be hot, no gas released



Incidents over time by battery status

