

Open Letter from Fire Safety Professionals: E-Mobility Fires Can and Must Be Reduced With Safety Standards and Smart Policies

As fire safety professionals, we want to alert you to an emerging threat: the growth in deadly e-mobility battery fires. In the interest of public safety, we ask that policymakers take action to protect consumers and that riders take steps to understand and mitigate the risks.

The e-mobility landscape in the United States — comprised primarily of e-bikes and e-scooters — is undergoing a significant expansion, fueled by advances in rechargeable lithium-ion batteries.

Many Americans rely on these devices for their livelihoods. A UL Standards & Engagement report found that more than half of current e-bike and e-scooter owners purchased their vehicle to support work-related tasks such as delivery gigs. For cities, e-bikes and e-scooters reduce cars on the road and play a critical role in achieving sustainability goals.

But e-mobility riders often do not understand their power source — or its risks. A recent report by UL Standards & Engagement found that more than half of e-bike owners (53%) and e-scooter owners (54%) are unaware that their vehicles are powered by lithium-ion batteries. Public misconceptions and awareness gaps as well as environmental conditions increase the risk of thermal runaway, an uncontrollable state of heat that can result in fire or explosion if the battery is damaged, defective, counterfeit, or substandard.

Lithium-ion battery fires are complicated to extinguish, often involve costly HAZMAT services, and put the fire personnel and communities at greater risk of exposure to toxic gas. They are also fast and fierce. Testing from the Fire Safety Research Institute shows an e-bike fire can fully engulf a room in flames in less than 20 seconds, compared to three minutes with a traditional fire. In densely populated cities, the fast spread of fire from apartment to apartment or building to building poses a threat not only to the e-mobility device owner, but also to neighbors who may find themselves without homes.

The New York City Fire Department reported a dramatic rise in e-mobility fires in 2023, with 268 incidents — more than five incidents per week. It prompted the city to pass legislation requiring all e-mobility devices, batteries, and related equipment sold or leased in the city to be certified to meet safety standards published by UL Standards & Engagement. Since the legislation took effect in September, the number of deaths related to e-mobility fires fell from a record-high 18 in 2023 to one so far this year.

Battery fires are not, however, a New York City problem. They are happening everywhere. Solutions must be in place to mitigate these fires wherever they occur.

We are on the front lines of these fires and believe that standards will meaningfully lower the number of incidents. Many of these tragedies could be avoided with smart policies. We ask that leaders at the local, state, and federal levels consider legislation to protect their citizens from further tragedy.

Signed,

