



UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
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**AT CPSC’S LITHIUM-ION BATTERY FIRE FORUM, EXPERTS CALL ON THE
AGENCY TO IMPLEMENT A STRONG MANDATORY SAFETY STANDARD**

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CPSC recently gathered experts to discuss the growing threat of destructive and deadly fires from lithium-ion batteries in e-bikes. The experts represented a wide range of stakeholders, including members of industry, voluntary standards bodies, the country’s largest fire department, and consumer advocates.

One takeaway was clear: all of the experts asked CPSC to set the rules of the road by implementing a strong mandatory safety standard governing lithium-ion batteries in e-bikes. FDNY Commissioner Laura Kavanagh testified that: “We definitely believe we should proceed to a mandatory standard.” Even a representative from Underwriters Laboratories (UL), a group that writes voluntary safety standards, testified to the need for a mandatory standard from CPSC.

Experts at the forum encouraged CPSC to consider the following safety concepts on top of those already represented in UL voluntary standards:

- **“Check battery” indicators.** Like the “check engine” light in a car, a “check battery” light on the bike itself could act as an early warning system to indicate when a battery or any of its cells is unstable and at risk of failure.¹
- **Automatic shut-offs in both the batteries and the chargers.** Some batteries automatically shut off while charging when there is a fire risk. But not all consumers use the original charger or battery that came with their e-bike. Experts testified that adding an auto shut-off in both batteries and chargers is another valuable layer of protection. FDNY Commissioner Kavanagh described such redundancies as “critical.”

¹Timestamp 1:54:00, CPSC’s Forum on Lithium-Ion Battery Safety (July 2023), available at: <https://www.cpsc.gov/node/55549> (entire panel supports the implementation of a check battery indicator light)

- **Tamper-proof battery containers.** We heard testimony that fly-by-night repair shops can create hazards by opening battery compartments and mixing and matching battery cells. Once the battery is put back together, it looks the same but may pose a higher fire risk. Experts voiced their support for tamper resistant solutions and making battery packs inaccessible to the average consumer.² Experts also supported solutions to make tampering visibly apparent just by looking at the outside of the battery.
- **Focus on the state of battery health.** To prevent thermal runaway (when a lithium-ion cell enters a dangerous self-heating state) some batteries already track conditions like voltage and temperature. Experts testified that it would be valuable if they also tracked state of health of the battery, including degradation and damage, as another means to alert consumers of possible danger before it is too late.

It was encouraging to hear such broad support for mandatory standards and for pursuing novel means of protecting against the hazard.

Testimony at the hearing underscored how serious the lithium-ion battery fire problem has become. We heard that lithium-ion batteries are a leading cause of fatal fires in New York City. Just this year, these batteries have led to 87 injuries and 13 deaths in NYC alone.³

The New York City Fire Department and Commissioner Laura Kavanagh have shown tremendous frontline leadership to combat this growing danger. But the problem is not isolated to New York City. Consumers deserve a solution at the national level.

I am proud that the Commission is putting in the work to create forward-looking regulations that keep pace with the evolution of lithium-ion battery technology and hope that we move quickly to implement solutions discussed at the forum.

We owe the American people the peace of mind that a strong, federal e-bike safety standard would provide.

²Timestamp 1:56:00, CPSC’s Forum on Lithium-Ion Battery Safety (July 2023), available at: <https://www.cpsc.gov/node/55549> (entire panel agrees that battery packs should be inaccessible to the average consumer)

³Timestamp 0:09:28, Testimony of FDNY Commissioner Laura Kavanagh, CPSC’s Forum on Lithium-Ion Battery Safety (July 2023), available at: <https://www.cpsc.gov/node/55549>