**Safely Managing the Disposal of Lithium Batteries:**

**A Call for Public Awareness and Policy Action**

June 18th marks the start of the annual, weeklong [“Safety Stand Down 2023,”](https://www.safetystanddown.org/about/) a training initiative for fire and emergency service organizations. This year’s theme, [“Lithium-Ion Batteries: Are You Ready?,”](https://www.safetystanddown.org/resources/) sheds light on the growing concerns surrounding the dangers posed by lithium batteries, which are the standard batteries for rechargeable devices in our modern world. As these batteries become abundant in our daily lives, it is crucial to address the hazards associated with the improper disposal of lithium batteries.

Lithium batteries have gained widespread popularity due to their compact size, light weight, and high energy storage capacity, making them indispensable in our modern, on-the-go lifestyles. From cell phones, tablets and laptops to power tools to scooters and electric cars, lithium batteries power our world. However, these batteries can be dangerous, as improperly disposing of lithium batteries have been linked to numerous residential and commercial fires that have caused hundreds of severe injuries – over 220 in New York City alone between 2021 and 2022 - and in some cases, even death. Who hadn’t seen videos of lithium batteries catching on fire from hoverboards or vaping devices?

Even at the end of their life, these batteries still pose a risk. The challenge for most consumers today is how to safely dispose of lithium batteries or the products that contain the batteries. The reality is recent federal guidelines have been released that makes it more complicated to safely dispose of these batteries, leading consumers to fend for themselves on their disposal. This further drives the primary cause for the rise in fires resulting in injuries and fatalities caused by lithium batteries.

There is an increasingly dangerous lack of public awareness relating to the risks these batteries pose when they are improperly disposed.

A key cause of lithium batteries related fires is “thermal runaway,” a chain reaction within a damaged battery cell causing large amounts of heat to be produced, often in an uncontrollable, self-heating state. The battery temperature rises quickly, often reaching over 700 degrees Fahrenheit in milliseconds, causing a chemical reaction and resulting in the energy stored in that battery being released very suddenly.

The catastrophic consequences of improper disposal practices have resulted in fires and tragic loss of life across the country due to these batteries being placed in household trash. The batteries are collected by waste trucks and compacted, causing the batteries to combust, resulting in fires that damage property, cause injury and claim lives.

The question now is what can be done to limit the hazards caused by these batteries, and with it, the increasing risk to property and potential increases in loss of human life? A key component to addressing this question is developing and implementing strategies to enhance safety and proper disposal practices for these batteries. These strategies will necessitate better labeling and identification efforts for devices that contain these batteries. The past decade has experienced tremendous demand for lithium battery powered products. This demand will only grow as our dependence on these batteries increases in the coming years as more devices reliant on these batteries emerge.

Many public and private entities, including the EPA, FEMA and private recycling organizations have online resources pertaining to the proper disposing of batteries. However, to date, aside from a handful of states and Washington, D.C., there has not been a coordinated effort to push state legislatures into more formal guidelines regarding the safe disposal and recycling of these batteries. This effort result in more widespread attention and a coordinated public education effort to raise further awareness on these batteries and best practices associated with them.

Consumers are currently the front line when it comes to the proper disposal of lithium batteries, and they will continue to play a vital role in promoting safe recycling and disposal practices.

The best option for consumers today is to contact their local municipality or township to learn the best practices and local resources available for the disposal of lithium batteries. Online resources, including [www.searchearth911.com](http://www.searchearth911.com/) or [call2recycle.org](file:///C%3A/Users/CarolineHaberland-Er/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/KQ6VAKYR/call2recycle.org) provide further helpful options, with [call2recycle.com](file:///C%3A/Users/CarolineHaberland-Er/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/KQ6VAKYR/call2recycle.org) offering shipping options and [searchearth911.com](file:///C%3A/Users/CarolineHaberland-Er/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/KQ6VAKYR/searchearth911.com) offering a national database of products and listing for consumers.

As these batteries become an increasing feature of everyday life, broader public policy and education efforts are needed in the future. Planning and action should be taken to encourage lawmakers to provide more concrete guidelines and options for more accessible methods to recycle these materials. If more broad-based policy and education efforts are not implemented, fires caused by improper disposal practices will continue to result in the loss of property, injuries and human lives.