



# U.S. Fire Administration

## Working for a fire-safe America

## How To Code Fire Incidents Involving Lithium-Ion Batteries

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This NFIRSGram explains how to code a National Fire Incident Reporting System (NFIRS) report for a fire incident in a vehicle, structure or equipment where a lithium-ion battery is present and involved.

### Where are lithium-ion batteries found?

Although not an exhaustive list, lithium-ion batteries are found in hoverboards, scooters, cars, motorcycles, bicycles, trucks, boats, motorized wheelchairs, and their chargers. These types of devices or equipment rely on a power source such as electric or hybrid (which contains both electric and another fuel source) rather than traditional internal combustion engines. Battery-powered mobile devices are defined as mobile property vehicles in the NFIRS.

Lithium-ion batteries are also found in many technology devices that are used today, such as cell phones, tablets, computers and e-cigarettes, to name a few. There are also structures that are used to store, produce, repair and dispose of lithium-ion batteries, not to mention the vehicles used to transport the batteries between these areas.

This NFIRSGram will explain how to code vehicle fires where lithium-ion batteries are the source of ignition, fires in a charging station or storage facility for lithium-ion batteries, and other incidents where lithium-ion batteries are present or involved.

## How do you code a fire incident where a lithium-ion battery is present in a vehicle and the battery is the source of ignition?

In the Fire Module, NFIRS allows completion of either the Equipment Involved in Ignition (Section F) or Mobile Property Involved (Section H), but not both. **It is recommended to complete the Mobile Property Involved (Section H) for these incidents.**

**Basic Module:** Incident Type Code (Section C) 13x

**Fire Module:** Mobile Property Involved, Mobile Property Model (Section H) — include “electric” or “hybrid” with the name of the model. **Be sure to use proper spelling!**

## How do you code a fire incident where a lithium-ion battery is present in a charging station or storage facility?

For these types of incidents, a fire in a fixed facility will be a structure fire, and the Structure Fire Module may be required. If the fire is outdoors and is not in or on a structure, it will be considered a special outside fire. Both kinds of fires will require the use of the Fire Module.

**Basic Module:** Incident Type Code 11X or 12X (Structure Fires) or 16x (Special Outside Fires)

### **Fire Module:**

- Equipment Involved in Ignition (Section F) — Battery charger (228).
- Equipment Brand and Model (Section F) — Identify the specifications of the charger manufacturer.

## How do you code an incident where a lithium-ion battery is present and involved with the incident for any incident type?

For any incident in which lithium-ion batteries are involved, you can document the presence of the battery and the extent of its involvement. You can also use this in addition to completing the Fire Module, including the Mobile Property Involved section.

**Basic Module:** Hazardous Materials Release of the Basic Module (Section H3) — Other (0)

**HazMatModule:**

- UN Number (Section B): Type in the relevant number (see Table 1 below); **do not select from the existing drop-down list.**
- Chemical Name (Section B): **Type in the name of material**, and do not include parentheses.
- Equipment Involved in Release (Section M) — Battery (229).

The U.S. Department of Transportation [Emergency Response Guidebook PDF](#) (ERG) contains several options for lithium-ion batteries and battery-powered equipment. Here are some examples, but this is not an exhaustive list:

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UN Number	Name of material
3480	Lithium-ion batteries
3481	Lithium-ion batteries contained in equipment or packed with equipment
3536	Lithium-ion batteries installed in cargo transport unit
3171	Battery-powered equipment or vehicle with lithium-ion batteries

UN Number and name of hazardous material

**HazMatModule:** Mobile Property Involved in Release (Section N) — if applicable. It can be completed in addition to the Equipment Involved in Release (Section M) of the HazMat Module and should not be done in place of the Mobile Property Involved (Section H) of the Fire Module.

## What else is important to include in the report?

A good narrative is very important. Use the Remarks field (Section L of the Basic Module) to include a detailed description of the incident. For additional assistance with Remarks, see the [NFIRSGram: Report Remarks — Telling the Story](#).



For more information about NFIRS, please contact the NFIRS Support Center:  
Monday – Friday between 8 a.m. – 4:30 p.m. ET, at 888-382-3827 or by email at  
[fema-nfirshelp@fema.dhs.gov](mailto:fema-nfirshelp@fema.dhs.gov).

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