

## **Safety Tip of the Week**

## Safety with Lithium-ion Batteries

Many electronic devices use lithium-ion batteries. These include laptops, cellphones, tablets, cameras, and even power tools. Popular micro-mobility devices such as hover boards, E-scooters, and E-bikes have become increasingly popular and have this type of battery, as do electric vehicles.

Lithium-ion batteries contain one or multiple lithium cells connected electrically. When the battery is charged, these cells are electrically connected in an electrolyte solution. This solution is a combination of solvents with an electrolyte salt. Some of these electrolytes are flammable liquids. These types of batteries are efficient, but also less stable than single-cell batteries because they convert



chemical potential energy into electrical energy through use of lithium ions or metal. They can overheat, causing **thermal runaway**, which can lead to smoke, an explosion or a fire.

Here are some Do's and Don'ts when it comes to lithium-ion batteries:

- DO Take batteries to be recycled at a designated recycling center.
- DO Use a battery storage tray to store unused batteries or keep batteries separated
- DO Charge batteries at room temperature.
- DO Use the charging cable that came with the device or a quality replacement part from the manufacturer.
- DO Charge batteries in a well-ventilated space.
- DO Make sure products comply with UL fire safety standards.
- DO Have repairs to damaged devices done by a qualified professional.
- DON'T Put lithium-ion batteries in the trash.
- DON'T Pile up batteries.
- DON'T Store batteries near sources of heat or flame.
- DON'T Overcharge batteries or keep them plugged in overnight.
- DON'T Charge multiple devices at once.
- DON'T Keep extension cords plugged in for over 30 days.

BE AWARE...LITHIUM-ION BATTERIES CAN START FIRES!