

<b>University of Pittsburgh</b> <b>Safety Manual</b>	EH&S Guideline Number: <b>03-027</b>	
Subject: <b>LITHIUM BATTERY/CELL SHIPPING</b>	Effective Date: 10/21/2020 Review Date: 9/21/2023	Page 1 of 1

## **Lithium Battery/Cell Shipping**

1. Lithium batteries are regulated as Dangerous Goods when transported by air, ground, or vessel. Lithium batteries have been the source of fires due to overcharging, overheating, short-circuiting, arcing, mishandling, and/or manufacturing deficiencies. Lithium batteries include the following types:
  - 1.1. **Lithium Ion Batteries** – Lithium ion (Li-ion) batteries are rechargeable and are commonly found in scientific equipment, laptops, mobile/cellular telephones, fitness trackers, portable tools, and other devices. These batteries contain lithium ions along with flammable electrolytes.
  - 1.2. **Lithium Metal Batteries** – Lithium metal batteries are single-use, non-rechargeable batteries that contain combustible lithium metal. Devices such as scientific equipment and wristwatches, often contain lithium metal batteries.
2. Federal and international regulations require that anyone shipping lithium batteries be properly trained. University personnel planning to ship lithium batteries, equipment containing lithium batteries, and/or lithium batteries packed with equipment must complete training specific to lithium battery shipping.
3. EH&S offers training on Dangerous Goods Shipping found at <https://www.ehs.pitt.edu/training/overview/dangerous-goods-shipping>; however this training does not meet the requirements of lithium battery training. Please visit the sites below for information related to lithium battery training programs.
 

**FedEx Ground** – <https://www.shipsafeshipmart.com>

**Chemtrec** – <https://www.chemtrec.com/online-hazmat-training-shipping-hazardous-materials/shipping-fully-regulated-and-excepted-lithium>

**DGI** – <https://dgitraining.com/lithium-batteries/>

**Labelmaster** – <https://www.labelmaster.com/shop/training/lithium-battery-shipping-online-hazmat-training/>

**Lion Technology** – <https://www.lion.com/catalog/courses/shipping-lithium-batteries>
4. Contact EH&S at 412-624-9505 or [safety@pitt.edu](mailto:safety@pitt.edu) with any questions related to the shipment of lithium batteries.