RISK MANAGEMENT

LITHIUM-ION BATTERY FIRE SAFETY

Lithium-ion batteries used in micro-mobility devices (such as e-bikes and e-scooters) have become a growing fire concern over the last few years. The U.S. Consumer Product Safety Commission reported have reported a growing number of incidents since 2021 where these devices have caught fire or overheated — incidents that led to numerous deaths and thousands of dollars in property damage.

These fires have been seen in private residences, office buildings, apartment complexes, and universities. Here are ways to help protect life and property from lithium-ion battery fires.

SAFE STORAGE

- Store E-Bikes and E-Scooters in a secured location (not in direct sunlight) with adequate fire protection including a standard dry chemical or ABC extinguisher
- Do not allow storage of e-bikes/scooters in offices, dorms rooms, apartments or condo units
- Never block building exits or entrances with e-bikes/scooters
- E-bikes/scooters should never be stored or charged in a child's room
- Do not store large amounts of lithium-ion powered devices or batteries in the same area

PURCHASE AND OPERATE PROPER BATTERIES:

- Buy e-bikes/scooters that are certified by a qualified testing laboratory
- Read the owner's manual and adhere to manufacturer precautions and instructions for maintenance and charging
- Use only the manufacturer-supplied charger. Replacement chargers should be purchased from the original manufacturer

PHLYRMS

SAFE CHARGING

- Never leave a charging e-bike/scooter unattended
- Never leave E-bikes/scooters charging overnight
- Do not charge these devices in direct sunlight. Only charge when the device is at room temperature
- A working smoke detector should be located near where the charging operations are occurring

IF A FIRE DOES OCCUR:

- Follow manufacturer's guidance on how to extinguish small battery fires, which could include using ABC dry chemical extinguishers, Class D fire extinguishers (for lithium-metal), dirt, water or sand
- Call 911 ASAP and get as far away as possible. The heat and fumes from a burning lithium-ion battery can be deadly



LEARN MORE

Contact PHLY Risk Management Services: 833.PHLYRMS | <u>PHLYRMS@phly.com</u>

REFERENCES & RESOURCES

For more information, including sample forms and documents, please visit the <u>MyPHLY Risk Management Services Portal</u>



A Member of the Tokio Marine Group

The information presented in this document is advisory only. It is not intended to be complete or definitive in identifying specific hazards associated with your business, preventing workplace accidents, or complying with any laws or regulations. You are encouraged to alter the information to fit the specific hazards of your business and to have your legal counsel review your plans and company policies.