

# E-Bike and E-Scooter Safety



The popularity of electric bikes and electric scooters (e-bikes and e-scooters) has taken off over the past few years. Lithium-ion batteries are usually the source of power for both, and if not used correctly, or if damaged, those batteries can catch on fire or explode. Whether you use e-bikes or e-scooters as your main way of getting around, or just for fun, there are important safety tips to keep in mind when charging or storing these devices.

## The Problem

- Damaged or defective batteries can overheat, catch fire, or explode.
- Lithium-ion battery fires give off toxic gases and they burn extremely hot.

## Safety Tips

- Only purchase and use devices, batteries, and charging equipment that are listed by a nationally recognized testing lab and labeled accordingly.
- Always follow the instructions from the manufacturer.
- Only use the battery and the charger that were designed for, and came with, the device.
- Do not keep charging the device or device battery after it is fully charged.
- Only charge one device or device battery at a time to prevent overloading the circuit.
- Keep batteries at room temperature when possible. Do not charge them at temperatures below 32°F (0°C) or above 105°F (40°C).
- Do not store batteries in direct sunlight or inside hot vehicles, and keep them away from children and liquids.

- Store e-bikes, e-scooters, and batteries away from exit doors and anything that can get hot or catch fire.
- Only have device repairs performed by a qualified professional.
- Do not put lithium-ion batteries in the trash. Recycling is always the best option. Take the batteries to a battery recycling location or contact your local waste department for disposal instructions.

## Signs of a Problem

Stop using the e-bike or e-scooter if you notice any of these problems with the battery: unusual odor, change in color, too much heat, change in shape, leaking, smoking, or not keeping a charge.



If you see a fire ...

- ❗ Leave the building immediately.
- ❗ Don't try to fight the fire.
- ❗ Call 911.

**LEARN  
MORE**

Visit [nfpa.org/ebikes](https://nfpa.org/ebikes)



**NATIONAL FIRE  
PROTECTION ASSOCIATION**

The leading information and knowledge resource  
on fire, electrical and related hazards