PREPARE SAN MARINO

LITHIUM-ION BATTERY SAFETY

Lithium-ion batteries power many everyday devices, including phones, laptops, power tools, e-bikes, and scooters. While generally safe when properly used and maintained, damaged, defective, or improperly charged batteries can cause serious fires that spread quickly and produce intense heat and toxic smoke.

Many battery-related fires are preventable. Follow these simple safety practices to reduce the risk and protect your home and family.

WHAT IS THERMAL RUNAWAY?

Thermal runaway occurs when a lithium-ion battery overheats due to overcharging, physical damage, or internal defects, triggering a chain reaction that can cause the battery to ignite. These fires can spread rapidly, creating dangerous conditions.

HOW TO RECOGNIZE LITHIUM-ION BATTERIES

Check battery labels. Look for markings such as Li-ion, Li-Po, Lithium-ion, LFP, or LiFePO4.

Check the voltage. Lithium-ion cells are typically 3.6–3.7 volts, while LiFePO4 cells are typically 3.2 volts. Voltage alone is not conclusive.

Identify rechargeable devices. Common examples include cell phones, laptops, e-bikes, scooters, cordless power tools, power banks, wireless headphones, lawn equipment, and electric vehicles.

DO'S AND DON'TS OF LITHIUM-ION BATTERY SAFETY

DON'T

- ✗ Continue to use battery if you detect odor, discoloration, excessive heat, deformation, leakage, or strange sounds.
- ✗ Charge overnight or while you sleep.
- ✗ Charge in bedrooms, hallways, or near doors and windows.
- ✗ Use extension cords for charging.
- ✗ Use inexpensive, uncertified replacement batteries or chargers.
- ✗ Modify e-bikes or scooters, or leave them charging unattended.
- ✗ Throw batteries in the trash or curbside recycling.

DO

- ☑ Buy **UL-certified** manufacturer-approved batteries.
- ☑ Charge and store the device according to the manufacturer's guidelines.
- ☑ Use only the cord and adapter made for your device.
- ☑ Plug chargers directly into a wall outlet, not an extension cord.
- ☑ Charge and store at room temperature, out of direct sunlight.
- ☑ Keep batteries away from bedding, furniture, paper, and other flammable materials.
- ☑ Charge e-bikes and scooters outside, on the floor, if possible.

For more informaiton visit www.SanMarinoCA.gov/Fire

SIGN UP FOR EMERGENCY ALERTS

Text SMALERT to 77295 or visit www.sanmarinoca.gov/EmergencyAlerts to sign up for emergency alerts from the City of San Marino.