

Electric Bike Fires and Lithium-Ion Batteries

Safety Minute



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

"To protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives."



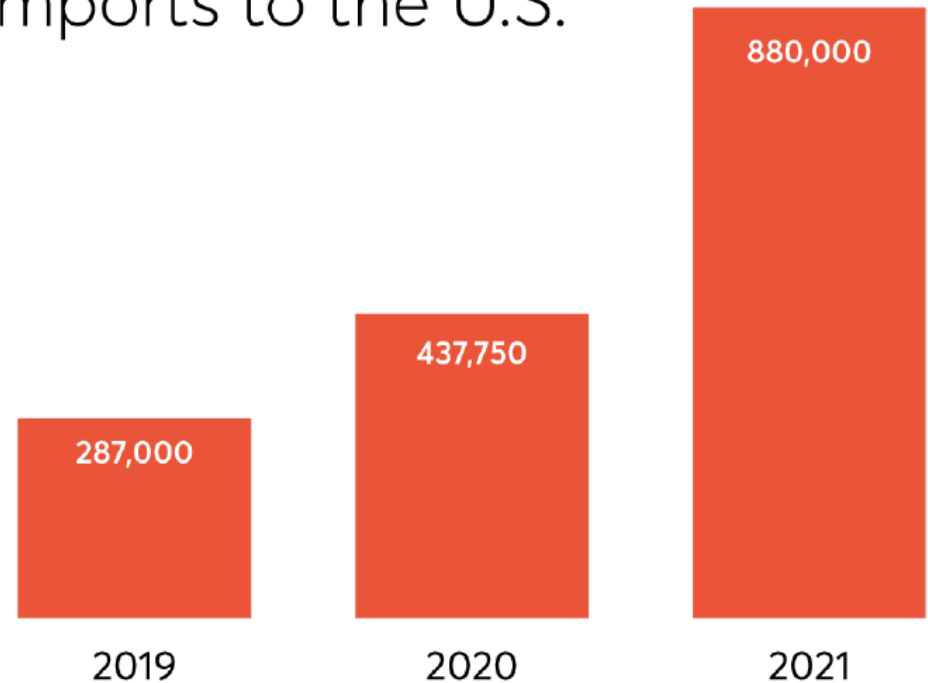
Lithium ion batteries for E-bikes



Increase in Usage

- Delivery services in cities like New York
- US Customs and Border Protection - De minimis

E-Bike Imports to the U.S.



Source: Light Electric Vehicle Association



Where is the Danger?

- Number of fires growing each year
- Difficulty for fire fighters – type and stages of fire
- Toxic Gas

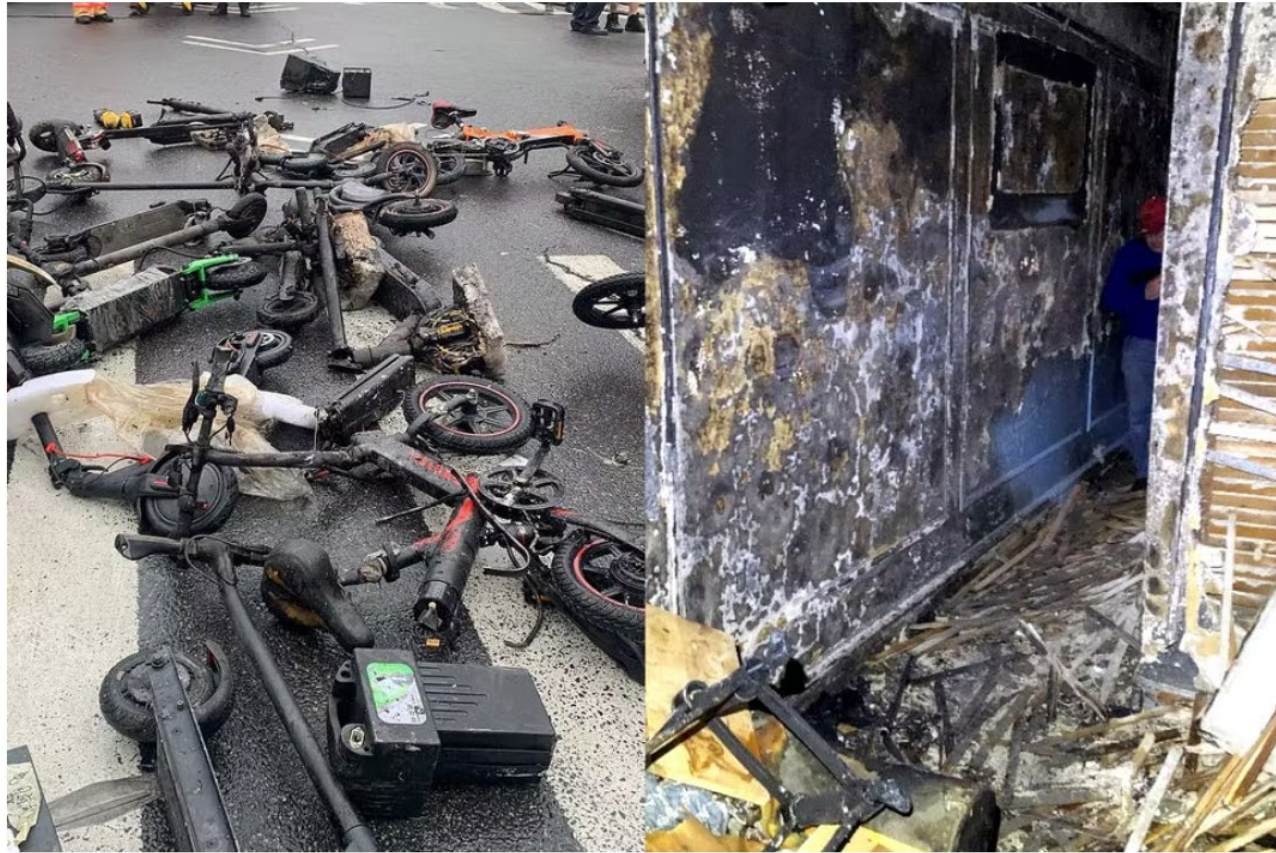


Photo illustration by Slate. Photos via [FDNY/Twitter](#).



Industry and State Regulations

- CDPC (Consumer Product Safety Commission) – Limited Authority
- New York City Council – New Law to amend the administrative code of the city of New York, in relation to the sale, lease, and rental of powered bicycles, powered mobility devices and storage batteries



UL Standard vs unregulated batteries

- Size
- Weight
- Duration
- Price
- Quality



Fire Prevention Tips

- Buy an electric bike that is certified by a qualified testing laboratory.
- Follow the manufacturer's instructions for charging and storage.
- Always use the manufacturer's cord and power adapter made specifically for the bike.
- Do not leave an electric bike unattended while it's charging, and don't leave it charging overnight.
- If a battery overheats or you notice an odor, a change in shape or color, leaking, or odd noises, stop using it immediately.



Fire Prevention Tips

- If the battery reacts in an alarming way, and it is safe to do so, move the device away from anything that can catch fire and call 911.
- Keep batteries and devices at room temperature. Do not place them in direct sunlight.
- Store batteries away from anything flammable.
- Do not use aftermarket batteries.
- Do not charge an electronic device under your pillow, on your bed, or near a couch.
- Do not block your primary way into and out of the building with an e-bike.
- Do not leave an e-bike in a child's room.



Sources

- <https://www.consumerreports.org/search/?query=lithium%20batteries%20and%20electric%20bike%20fires>
- <https://slate.com/business/2023/02/e-bike-fires-batteries-lithium-ion-explode-new-york-city-delivery-workers.html>
- <https://www.consumerreports.org/electric-bikes/how-to-prevent-e-bike-fires-a2493889574/>
- <https://slate.com/business/2023/02/e-bike-fires-batteries-lithium-ion-explode-new-york-city-delivery-workers.html>

