Lithium Battery Handling Stats and Facts

FACTS

1. There are two main types of lithium batteries. One is a lithium metal, which is disposable. The other is lithium-ion, which is rechargeable. Both pose the same danger of igniting and/or exploding.
2. Lithium batteries can overheat and go into what is known as a thermal runway, which is when one lithium cell increases in temperature and causes a chain reaction of heat within the battery, potentially resulting in a fire or explosion.
3. Lithium batteries are generally safe and unlikely to fail, but only so long as there are no defects, and the batteries are not damaged. When lithium batteries fail to operate safely or are damaged, they may present a fire and/or explosion hazard. Damage from improper use, storage, or charging may also cause lithium batteries to fail.
4. Damage to lithium batteries can occur immediately or over a period of time, from physical impact, exposure to certain temperatures, and/or improper charging.
5. Damage to all types of lithium batteries can occur when temperatures are too high (e.g., above 130°F). External heat sources (e.g., open flames, heaters, etc.) can also accelerate failure in cells with defects or damage from other causes.
6. Damage to lithium-ion batteries can occur when the batteries themselves or the environment around the batteries is below freezing (32°F) during charging. Charging in temperatures below freezing can lead to permanent metallic lithium buildup (i.e., plating) on the anode, increasing the risk for failure.

STATS

- According to a variety of occupational safety and hazard organizations, nearly 2,300 people in the U.S. are injured each year while working with or around lead acid batteries.
- If swallowed or placed in the nose or ears, button batteries can cause serious injury or death, according to the National Capital Poison Center. More than 3,500 people of all ages swallow button batteries every year in the United States. Most pass through the body and are eliminated, but sometimes they get hung up in the esophagus.