

LITHIUM BATTERY SAFETY

Lithium-ion batteries supply power to many kinds of devices including smart phones, laptops, e-scooters and e-bikes, e-cigarettes, smoke alarms, toys, and even cars. If not used correctly, or if damaged, these batteries can catch on fire or explode.

Lithium batteries can overheat and catch fire, and when burning can be very challenging as the fire gives off toxic gases and they burn at high temperatures. The batteries store a large amount of energy in a small space. Like anything some can be defective. A recent incident in a Wellington apartment left a person in critical condition when their e-scooter caught fire, and this is a timely reminder for all users:

- Only use the charger that came with your device. Do not over or under charge.
- Always follow the manufacturer's instructions on charging and use.
- Don't leave the fully charged battery on charge for extended periods.
- Keep the devices at room temperature and not below 0°C or above 35°C. Keep them away from heaters, fireplaces and appliances.
- When charging keep off furnishings such as beds or couches and never allow them to be covered by a cushion, pillow or clothing.
- Do not store batteries in direct sunlight and keep them away from liquids.
- If stored loose, do not let the battery terminals short-circuit by contact with metal.
- Never tamper with or attempt to repair the battery or charger yourself.
- The batteries are most vulnerable if damaged – get damaged batteries assessed by the manufacturer or agent without delay.
- Store the devices away from anything that can catch fire easily.
- Don't store scooters and bikes in the egress paths of your home. Think how you might get out if there is a fire.
- Never dispose of the batteries in the rubbish, as they are a significant fire risk in the refuse transport sector. Take them to a proper recycling depot.

Stop using your device immediately if you notice an unusual odour, if you notice the battery swelling or changing shape, or if the battery is unusually hot when charging or running. If the battery is leaking, smoking or even not keeping a charge then you may have a serious problem.

Lithium fires are very dangerous, they accelerate in intensity very quickly, they are highly toxic and extremely hot. Fire extinguishers and even water are ineffective on lithium fires, so if you have a lithium battery catch fire:

- Leave the building immediately and warn others.
- Do NOT attempt to fight the fire.
- **Call 111 for Fire Service.** Advise them you have a lithium battery fire.

