









EV Fire Safety Guide

Understanding EV Battery Fires

Electric vehicles (EVs) use **lithium-ion (Li-ion) batteries**, which offer high energy efficiency but also pose fire risks due to **thermal runaway**—a chain reaction leading to overheating and potential combustion.

Why Do EV Batteries Catch Fire?

1. **Overcharging & Faulty Charging Equipment** 
2. **Physical Damage from Accidents** 
3. **Manufacturing Defects** 
4. **Exposure to High Temperatures** 
5. **Water Ingress & Short Circuits** 
6. **Poor Maintenance & Battery Degradation** 

◆ How to Prevent EV Battery Fires?

Charging Safety

- ✓ Use only **certified chargers & cables**
- ✓ Avoid overcharging—**unplug when fully charged**
- ✓ Charge in a **well-ventilated, fire-safe area**
- ✓ Do not charge **near flammable materials**

Parking & Storage Safety

- ✓ **Avoid direct sunlight & extreme temperatures**
- ✓ Park EVs in **open or ventilated spaces**
- ✓ **Monitor battery health** using vehicle diagnostics
- ✓ Keep **fire extinguishers rated for Li-ion fires** nearby

Driving & Maintenance Safety

- ✓ **Check for warning signs** (battery swelling, overheating, smoke)
- ✓ **Regular inspections** by certified EV technicians



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- ✓ **Avoid deep discharges & high-speed charging frequently**
- ✓ **Update vehicle software** to prevent malfunctions

Emergency Response: What to Do in an EV Fire?

1. **Evacuate Immediately** 🚨 – Move away & alert others
2. **Call Emergency Services** 📞 – Provide location & details
3. **Do NOT Use Water** ❌💧 – Lithium-ion fires require **Class D or ABC fire extinguishers**
4. **Keep a Safe Distance** 📏 – Toxic fumes & re-ignition risks
5. **Follow Manufacturer's Safety Guidelines** 📖 – EV-specific fire procedures matter

Sahasendure Solutions – Your Safety Partner!

At Sahasendure Solutions, we specialize in:

- ✓ **Fire safety audits & risk assessments**
- ✓ **Emergency response planning**
- ✓ **EV charging station safety compliance**
- ✓ **Employee & driver fire safety training**

 **Need expert guidance? Contact us today!**

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