DEKRA

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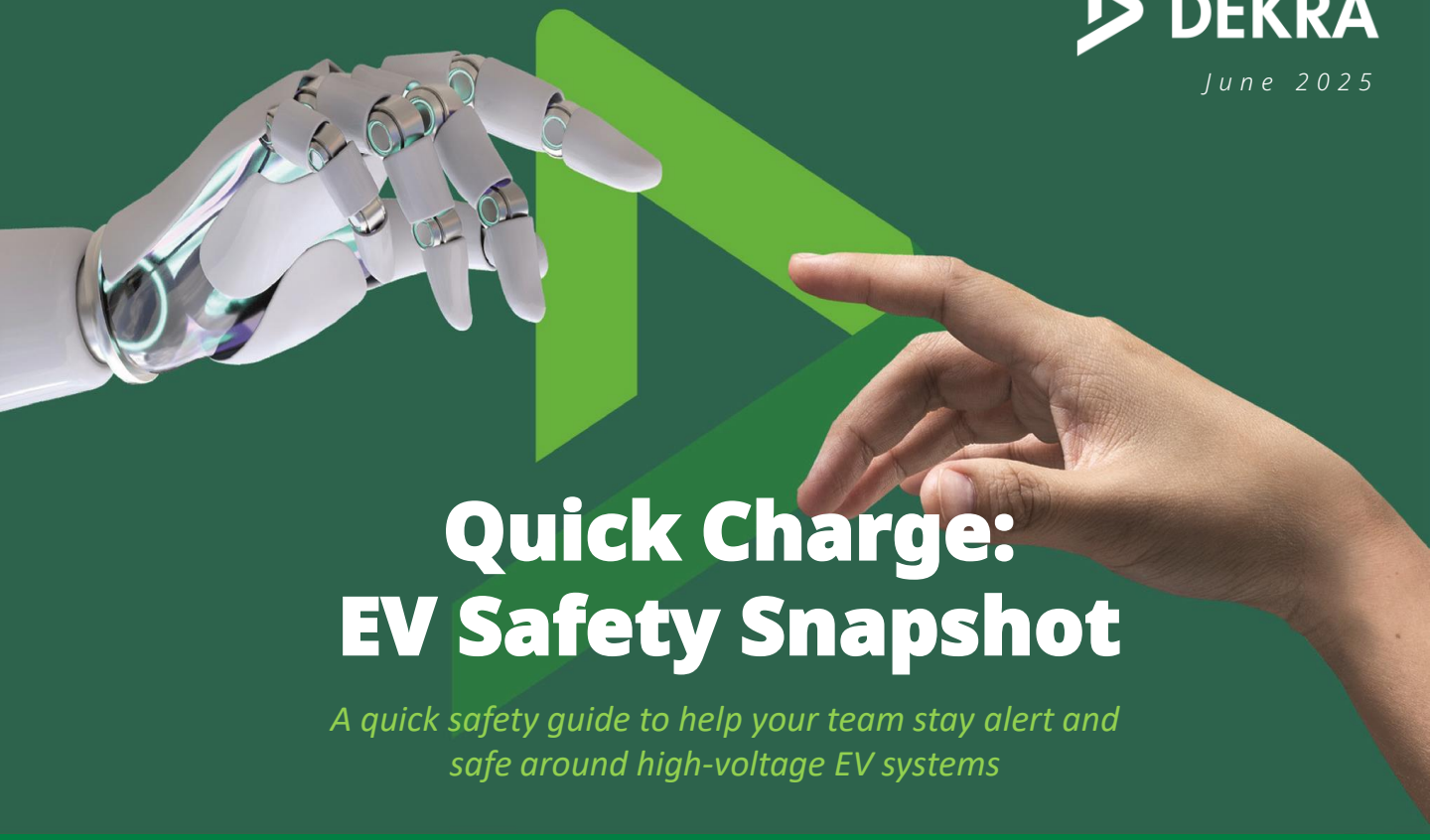

Quick Charge: EV Safety Snapshot

A quick safety guide to help your team stay alert and safe around high-voltage EV systems

Predictive EV Maintenance: The Next Frontier in Fleet Safety

Stop Waiting for Something to Break, Start Predicting What Will.

Electric vehicles (EVs) are changing fleet operations fast. But with that change comes a new challenge: how do you keep your fleet running without letting hidden high-voltage issues derail your schedule, or worse, endanger your crew?

That's where predictive maintenance comes in. It's not just about fixing problems. It's about preventing them before they ever show up.

Why Predictive Maintenance Matters for EV Fleets

- **Cost Savings:**
  Predictive maintenance can cut fleet maintenance costs by **up to 40%,** with additional savings over preventive-only plans (Frost & Sullivan, 2024).
- **Uptime Advantage:**
  Fleets using predictive tools see **25–45% more uptime** and report **60% fewer preventable breakdowns** (Fleetio & McKinsey, 2024).
- **Better Safety:**
  Early fault detection helps avoid high-voltage failures and keeps your crew protected, especially when paired with proper training.

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Safer fleets start with smarter training.

A Real-World Wake-Up Call

A regional delivery company recently transitioned to a mostly electric fleet. Everything ran smoothly until one morning, a van failed to start. A high-voltage battery cable had overheated overnight, warping the connector. The damage could've been caught early with a thermal scan. That single incident caused:

- $14,000 in repair costs
- Missed deliveries to 22 clients
- A 48-hour operations disruption

Since then, the company adopted predictive diagnostics and training and hasn't had a single EV-related delay in six months.

3 Predictive Practices to Put in Place Now

1. Battery Data Monitoring

- Track BMS (Battery Management System) data for early warnings like uneven charging rates or voltage dips.
- Use analytics to predict and schedule preventative maintenance.

2. Thermal Imaging

- Scan high-voltage components regularly to detect unseen heat risks.
- Teach techs how to interpret and act on the results.

3. Smart Charging Oversight

- Monitor for abnormal power patterns or downtime spikes.
- Let data drive when you service stations—not just time or guesswork.

Want to Stay Ahead of EV Risk?

DEKRA's High Voltage and EV Safety Training shows your team how to:

- Understand predictive maintenance tools and warning signs
- Build safer, more efficient fleet protocols
- Comply with safety codes while optimizing uptime

EV Safety Training Doesn't Just Make Teams Smarter, It Makes Them Safer

Even your best people can't predict what they haven't been shown. Most EV risks don't come from carelessness—they come from gaps in knowledge. Predictive maintenance training closes that gap before it turns into downtime, damage, or danger.

The Right Training Changes Everything

DEKRA's EV Safety Training equips teams at every level to:

- Spot when a vehicle is still energized, even if it looks off
- Set clear buffer zones with signage and barriers
- Respond confidently if something goes wrong
- Protect everyone on-site, not just the technicians

You don't need to be an EV expert to work safely around them.

But you do need the right foundation.

Questions?
We're here to help.

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dekra.us/ev-safety-training