Charging Ahead Safety Considerations for Electric Equipment & Vehicles Meeting Kit

WHAT’S AT STAKE

Electric equipment and vehicles are becoming more common at work, from forklifts to service vehicles, and they bring new risks that are easy to underestimate. Charging systems, high voltage components, and quiet operation can create hazards that are not always obvious. A small mistake around charging, handling, or operation can lead to electrical shock, fire, or serious injury.

WHAT’S THE DANGER

Electric equipment and vehicles introduce hazards that are not always visible, and when something goes wrong, the consequences can be serious. Batteries, charging systems, and internal components carry high voltage. Contact with damaged cables, exposed parts, or improper handling can result in electrical shock, burns, or cardiac injury.

Fire and Thermal Runaway Risks

Lithium-ion batteries can overheat, become damaged, or fail during charging or use. This can lead to fires, explosions, and toxic smoke that spreads quickly and is difficult to control.

Charging Area Hazards

Charging stations can create risks if not properly managed

- Damaged cords or improper connections increasing shock risk
- Overheating during charging leading to fire hazards
- Poor ventilation allowing heat or gases to build up

Quiet Operation and Movement Risks

Electric vehicles operate quietly, making them harder to detect. Workers may not hear them approaching, increasing the risk of struck by incidents or collisions.

Note: Using incorrect chargers, bypassing safety systems, or performing maintenance without proper procedures can lead to equipment failure, electrical hazards, or unexpected startup.

HOW TO PROTECT YOURSELF

Electric equipment and vehicles are safe when they’re used and charged the right way. The key is to respect the power behind them, stay alert, and follow consistent practices every time.

Follow Safe Charging Practices – Charging is one of the highest risk moments. Take your time and do it correctly.

- Use only approved chargers and connections
- Check cables and plugs for damage before use
- Keep the charging area clear, dry, and well ventilated

Keep Your Distance from High Voltage

Do not touch or open electrical components unless you are trained and authorized. Treat all systems as energized and avoid damaged or exposed parts. Electric vehicles are quiet, so don’t rely on sound. Always look, stay out of travel paths, and make eye contact with operators when possible.

Inspect Before You Use

Before operating equipment, do a quick check. Look for damage, leaks, warning lights, or anything unusual. If something doesn’t look right, don’t use it.

Handle and Store Batteries Safely

Batteries should be protected from impact, heat, and improper handling. Never drop, crush, or use damaged batteries, and report issues immediately.

Be Ready to Respond to Emergencies

Know what to do if something goes wrong. Fires involving batteries behave differently, so follow site procedures and never try to handle a situation beyond your training.

What to Do If Something Feels Unsafe

If you notice overheating, strange smells, damaged equipment, or unusual behavior, stop immediately. Move away, report the issue, and do not attempt to fix it unless you are trained.

FINAL WORD

Electric equipment brings efficiency, but it also brings new risks that you can’t always see or hear. When you follow proper charging practices, stay aware, and respect high voltage systems, you stay in control of those risks. One careful decision around electric equipment can prevent a serious incident.