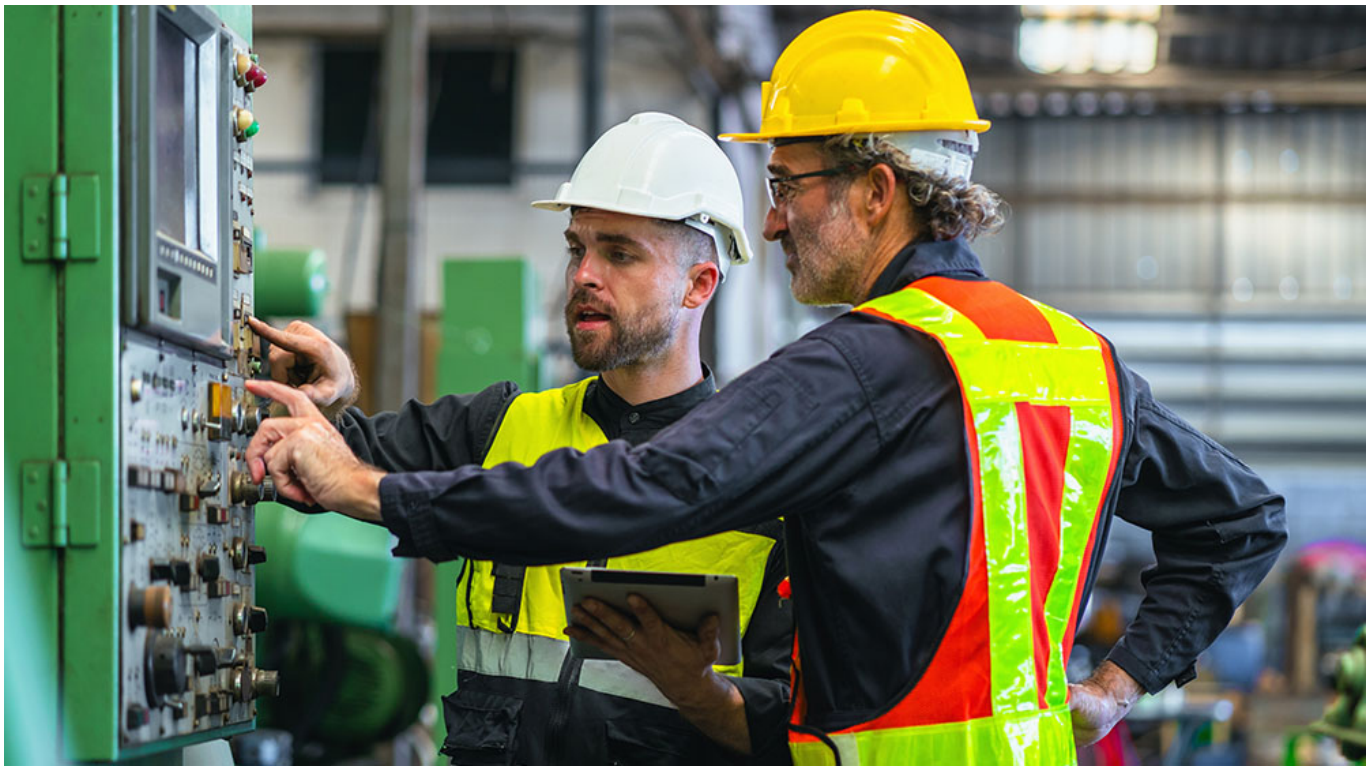
Avoiding OSHA’s Fatal Four: 7 tips to prevent electrocution on the jobsite.



To help reduce the risk of accidents, injuries, and fatalities on the jobsite, the Occupational Safety and Health Administration (OSHA) identified the top construction hazards: The Fatal Four. This post tackles another one of the Fatal Four risks in construction: Electrocution. Wondering how to prevent electrocution at work and put safety first? These seven tips are critical.

1. **Use the right equipment.** Double-insulated tools are designed for environments with a high risk of electric shock. The safer tools have a layer of electricity-resistant material, like rubber or plastic, along with a layer of conductive material, like metal. The combination adds protection between live wires and operators. OSHA also upholds ground-fault circuit-interrupter (GFCI) standards. GFCI devices compare the amount of current going into electrical equipment to the amount of electrical current returning. If a safety limit is exceeded, the device helps break the circuit in a matter of milliseconds to reduce the risk of electric shock.

2. **Know the location of nearby power lines.** Before breaking ground on a project, learn where both the overhead and underground power lines are located. If there are power lines near your project, work with the local utility company to de-energize hazardous lines. If this is not possible, work with nonconductive tools to help keep your crew safe.

3. **Inspect tools before use.** Equipment wear and tear is natural, but it can become dangerous if you don’t look at items prior to using them. Always check things like power cords for exposed, frayed, or damaged sections. Encourage your team to make a habit of proactively inspecting equipment. If you spot signs of wear and tear, do not plug the equipment in for use, as it can lead to serious injury or death.

4. **Use personal protective equipment (PPE).** Add another layer of protection for your team

with PPE. Shock-resistant gear, like rubber gloves and insulated clothing, can decrease the risk of electric shock. Ensure that the PPE matches the level of voltage your crew is working with, and encourage team members to inspect their PPE before use, just as they do with equipment.

5. **Add lockout/tagout procedures.** Lockout/tagout protocol protects your crew from the release of hazardous energy from energy sources, like electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other sources in machines and equipment. OSHA's lockout/tagout protocol helps team members disable machinery or equipment to stop any hazardous energy release.

6. **Train extensively.** Safety training is always important, but it can be lifesaving during dangerous tasks like working with electricity. Whenever new team members join — and before they get to work — conduct extensive safety training and demonstrations. Take safety one step further by hosting annual or semi-annual refresher courses for your entire crew and by conducting first aid/CPR trainings. Everyone can benefit from safety reminders, especially when they can save someone's life.

7. **Watch the weather.** Because severe weather and electrical equipment don't mix, implement a protocol for when the forecast turns. Consider padding project timelines to account for weather delays and ensure your crew knows what to do when inclement weather rolls in.

Now that you have a better understanding of how to prevent electrocution on the jobsite, learn how you can protect your crew from the other Fatal Four risks: Falls, being struck by an object, and caught-in or -between accidents. Talk to a local, independent agent for insurance expertise and peace of mind.