Electrical safety toolbox talk

29 CFR 1910.333, 1910.334, 1926.404, 1910.332, 1926.416

Date _____ Trainer _____ Location _____

Opening question

If the cord on your saw had a nick in the jacket, would you still use it to finish the cut?

Why it matters

A live wire looks exactly like a dead one, and your body can become part of the circuit. Electrical contact can cause shock, burns and electrocution, and even a small shock can make you fall from a ladder. How badly you are hurt depends on how much current flows, the path it takes through your body and how long the contact lasts.

Key points

1. **Treat every circuit as live until it is proven dead**
   In general industry, live parts you may be exposed to must be deenergized before you work on or near them, unless the employer can show that deenergizing adds hazards or is not feasible because of equipment design or operational limits. Never assume a circuit is off because a switch is down or a light is out. If you are not trained and qualified for electrical work, stay out of panels and boxes.
   29 CFR 1910.333(a)(1)

2. **Lock it and tag it before work starts**
   In general industry, a lock and a tag go on each disconnecting means used to shut off the equipment, with a few exceptions in the rule. The lock keeps anyone from operating the switch, and the tag prohibits operating the switch or removing the tag without authorization. Each lock and tag is removed by the person who put it on, or under that person's direct supervision (29 CFR 1910.333(b)(2)(v)(C)). Nobody works on the equipment until a qualified person has tested it and verified it is deenergized (29 CFR 1910.333(b)(2)(iv)(B)).
   29 CFR 1910.333(b)(2)(iii)(A)

3. **Check cords and tools every shift**
   OSHA's general industry rule requires a visual check of extension cords and corded tools before use on any shift, and it is a good habit on every job. Look for cuts or cracks in the jacket, missing or bent prongs, loose plugs and crushed spots. If you find damage, stop, take the item out of service, tag it and tell your supervisor. Never tape over a damaged cord or cut off the ground pin to make a plug fit.
   29 CFR 1910.334(a)(2)(i)

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4 Use GFCI protection on site

On construction sites, the employer must protect workers with ground-fault circuit interrupters (GFCIs) or an assured equipment grounding conductor program. A GFCI cuts the power fast when current leaks to ground, including through a person. Test GFCIs before use, and if one keeps tripping, find out why instead of bypassing it.

29 CFR 1926.404(b)(1)(i)

5 Look up for overhead lines

Look up before you raise a ladder, pole, scaffold section or long tool. If you are not qualified, the general industry rule says you and any conductive object you handle must stay at least 10 feet from unguarded, energized overhead lines of 50kV or below to ground. Higher-voltage lines need even more room. Treat every overhead line as live.

29 CFR 1910.333(c)(3)(i)(A)

6 Keep water and metal away from live parts

Do not plug in or unplug energized equipment with wet hands. Keep cords and connections out of puddles, and use cords and tools approved for wet locations when the work is wet. Take off rings, watches and metal chains when you could contact exposed live parts.

29 CFR 1910.334(a)(5)(i)

Scenario

Picture this: it rained overnight and the crew is setting up in a basement with water on the floor. The only extension cord long enough has electrical tape wrapped around a cut in the jacket. The GFCI on the temporary power keeps tripping, so someone suggests plugging into an old outlet that does not have one. Everyone wants to get started. What should happen before anyone plugs in?

Crew discussion

1. Where are we using temporary power on this job, and is every outlet we use GFCI protected?
2. What do you look for on a cord or tool before you plug it in?
3. Where are the overhead lines near our work, and what equipment or materials could reach them?
4. Who on this crew is qualified to work on electrical equipment, and who do we call when something needs repair?

Bottom line **Treat every circuit as live, check your cords and tools before you use them, and leave electrical work to qualified people.**

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Sign-in sheet / Hoja de asistencia

Topic / Tema Electrical safety / Seguridad eléctrica

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Trainer / Instructor _____ Location / Lugar _____ Company / Empresa _____

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