saif
Work. Life. Oregon.

Electrical safety
for all workplaces

We often use electrical devices without considering what could happen; as a result, electrical safety can be overlooked at work and at home. Putting safe electrical practices in place can help reduce hazard risk, ensuring a safer environment for all workers.

These electrical safety points can help create and maintain a safer workplace:

Common electrical hazards:

- Exposed wiring

- Missing ground prong on extension cord

- Blocked electrical panel

- Daisy chaining extension cords

- Overloaded power strip/outlet

Identifying electrical hazards

Electrical injuries, including shocks, burns, and electrocution, can result from faulty wiring, damaged equipment, or incorrect use of electrical devices. Regular inspections and maintenance are essential to identify and address these hazards. Before plugging in or flipping a switch, remember to inspect equipment, tools, and cords for damage. Common issues to look for include exposed wiring on cords, missing ground prongs on cords, missing outlet covers, and blocked electrical panels.

Emergency response

An electrical accident often leads to a medical emergency requiring immediate attention. Train workers on emergency response procedures for electrical accidents, such as appropriate electrical shutdown procedures and first aid.

Safety precautions

Always follow the manufacturer's instructions when using electrical tools and appliances. Ensure electrical systems are properly grounded and not overloaded. Use ground fault circuit interrupters (GFCIs) (**bit.ly/3DSPJCV**) in damp or wet areas and when using extension cords on power tools to prevent electrical shocks.

Lockout/tagout (LOTO) procedures

Before entering or accessing equipment for service or maintenance, identify equipment that could start-up, re-energize unexpectedly, or release stored energy following a shutdown. Employers must establish an energy control program to ensure workers are protected from unexpected or unintended energy releases. A LOTO program consists of training, worker evaluation, written procedures, and periodic inspections. Check out Oregon OSHA's factsheet on the control of hazardous energy (lockout/tagout) (**bit.ly/43BJiyw**) for more information.

Keep your distance

Oregon OSHA rules require workers to stay away from power lines while working. How far to stay away depends on the voltage (**bit.ly/3E3COhr**) in the lines, but the minimum distance is 10 feet.

Keep your distance from buried electrical cables as well. Call 811 in Oregon before digging to identify underground hazards.

Regulations and standards

Check out the Oregon OSHA | Electrical topic page (**bit.ly/445H0aX**) to connect directly to electrical safety standards for the workplace, educational resources, publications, and more. Connecting with the resources that impact your organization can help ensure a safer workplace for everyone.

For those qualified to work on electrical equipment

Use of personal protective equipment (PPE)

Only a qualified person with appropriate training knows how to select and use appropriate PPE to work on energized circuits. Unqualified workers, or those with little or no training in this topic, are not allowed to perform tasks that expose them to electrical hazards, even if they have access to the appropriate PPE.

Summary

Practicing electrical safety is crucial to prevent severe injuries like shocks, burns, and electrocution. Regular inspections, proper grounding, and following lockout/tagout (LOTO) procedures are essential. Qualified persons must use appropriate PPE and maintain safe distances from electrical hazards. Following these practices significantly reduces the risk of accidents, creating safer environments in the workplace and at home.

ACTIVITY IDEAS

- Conduct a tour to identify potential electrical hazards in the workplace.

- Demonstrate safe equipment handling when working around electrical hazards. Discuss overhead power line contact hazards if it applies to your workplace.

- Discuss a recent electrical incident at your workplace. If there hasn't been a recent incident, select and discuss an incident from the Fatality Assessment and Control Evaluation (FACE) Program (**bit.ly/4i9oORq**).