



## **ELECTRICAL SAFETY AWARENESS**

Contact with electricity remains a leading cause of workplace deaths in the United States, with an average of 150 occurring each year. According to OSHA, 74% of electrical fatalities happen in jobs not directly related to electrical work. The number of deaths by electrocution clearly show that exposure to electricity is a major hazard to workers. To ensure all employees understand the hazards of working with or near electrical equipment, workers must be trained to recognize electrical hazards and understand how to stay safe when working near electrical equipment.

### Employee Classifications and Training

1. Unqualified worker, according to OSHA, is someone who lacks the training and skills to identify electrical hazards and work safely around energized electrical equipment. They are prohibited from performing tasks that require specialized knowledge of electrical systems and safety procedures. Even though they are unqualified for certain tasks, they still need training to understand electrical hazards, safe work practices, and how to protect themselves when working around electrical equipment.
2. Qualified workers have the necessary training, experience, and knowledge to perform specific electrical tasks safely. They are authorized to perform tasks that involve exposed live parts, testing circuits, and electrical maintenance and repairs.

Employees exposed to electrical hazards must receive training on electrical safety, specifically focusing on recognizing and avoiding hazards, understanding electrical safety principles and safe work practices. The employer is responsible for providing training that matches the level of risk and job duties being performed.

### Common Hazards

- Contact with overhead powerlines, live wires and energized equipment
- Faulty wiring or damaged equipment
- Improper grounding or use of extension cords
- Failure to use Ground Fault Circuit Interrupters (GFCIs)
- Lack of PPE or improper PPE use
- Working near energized panels or outlets
- Insufficient training on electrical safety

### Safe Work Practices

1. Stay Away from Live Parts
  - Only qualified personnel should perform electrical work.
  - Never touch exposed wires or open electrical panels.
  - Always assume wires are live until verified otherwise.
2. Use Equipment Safely
  - Inspect equipment, tools and cords before use.
  - Remove damaged tools or cords from service immediately.

- Use GFCIs on temporary wiring, tools, extension cords, and receptacles used for equipment in damp or wet locations.
- Keep water and conductive materials away from electrical equipment.
- 3. Follow Lockout/Tagout Signs
  - Use lockout/tagout procedures to ensure equipment remains de-energized.
  - Never remove or bypass lockout/tagout devices.
  - Respect warning signs and barriers around electrical work zones.
- 4. Know Emergency Procedures
  - Know where the emergency shutoffs are.
  - Understand what to do if someone receives an electric shock—do not touch them until the power is off.

#### Safeguards for Personnel Protection

Wear rubber-soled shoes or boots when working near electrical equipment.

Use insulated gloves, flame-resistant clothing, and non-conductive safety helmets.

Use insulated tools if required to work with live components.

Post warning signs and barricades to alert others of electrical hazards.

***Remember, three-quarters of fatal incidents involve unqualified workers not directly involved in electrical work. All workers are at risk of electrical hazards. Stay alert, follow safety rules, never take shortcuts, and get properly trained.***

#### GCSC Resources

***Safety Training:*** 6:00am – 3:00pm / Questions? [csr@mygcsc.com](mailto:csr@mygcsc.com)

Electrical Safety – A08ENQ

Electrical Safety in the Workplace (NFPA 70E) – 08ESW70E

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