KIPRC
KENTUCKY INJURY PREVENTION AND RESEARCH CENTER

HAZARD ALERT

Kentucky Occupational Safety and Health Surveillance—July 2026

WORKERS KILLED WHILE INSTALLING LIGHT FIXTURES

What is the hazard?

Workers installing or repairing light fixtures face serious risks, especially electrocution from contact with live wires. According to the Electrical Safety Foundation International, more than 20,000 workers nationwide have been injured in workplace electrical accidents in the past 10 years. A lack of training or onsite safety protocols and proper equipment can further increase the danger. Without strict safety protocols and proper equipment, routine lighting tasks can become fatal. [1]

The following are cases of Kentucky workers who were killed while installing or repairing light fixtures:

Case 1: A 23-year-old electrician trainee was attempting to connect wire he had just installed to light fixtures in a commercial building renovation project. The light fixtures and wiring were both de-energized. The victim, in error, accessed an energized lighting whip that was connected to existing lights. The lighting whip had wire nuts installed, covering the exposed energized wire, but no other energy isolation device was present. According to the company, the victim removed the insulating wire nuts without testing for voltage, touched the wires, and was electrocuted by the 277-volt energized wire. The victim fell from his ladder approximately 3 feet to the concrete surface below. (2025) (Read the full report)

Case 2: A 57-year-old maintenance worker was replacing an emergency light when he contacted a live wire and was electrocuted. CPR was administered, an Automatic External Defibrillator was used, and a call was made to 911. (2025)

Recommendations for Employers:[2,3]

- **Implement a Written Electrical Safety Program:** Establish and enforce lockout/tagout (LOTO) procedures for all electrical work and ensure that circuits are fully de-energized and tested before any repair or replacement begins.
- **Train Workers Thoroughly:** Provide training on LOTO, safe wiring practices, personal protective equipment (PPE) use, and identifying circuits with a multimeter or voltage tester. Ensure that workers understand how to inspect and use insulated tools safely.
- **Ensure Proper PPE and Tools:** Require use of PPE appropriate to the work environment and inspect or replace any damaged tools immediately.
- **Evaluate the Worksite:** Assign a competent onsite individual authorized to identify hazards and stop work if unsafe conditions arise. Do not allow electrical work in wet environments unless proper precautions are taken.
- **Maintain Ladder Safety:** Train workers on ladder inspection, positioning, stability, and safe use.

RESOURCES

Name of Resource	Resource Description	Resource Link
OSHA Quick Card - Electrical Safety	Simple printable handout that outlines core safety practices when working with electricity. Emphasizes the importance of de-energizing equipment, using insulated tools, and wearing proper PPE to prevent shocks, burns, and electrocution.	https://www.osha.gov/sites/default/files/publications/OSHA3294.pdf
CDC/NIOSH Electrical Safety Topic	Provides in-depth information on electrical hazards. Includes fatality case reports, recommendations, research findings, and training resources to help reduce work-related electrical injuries and deaths.	https://www.cdc.gov/niosh/electrical-safety/about/?CDC_AAref_Val=https://www.cdc.gov/niosh/topics/electrical/
OSHA Quick Card - Ladder Safety	Covers safer ladder practices, including proper placement, climbing techniques, and maintenance tips.	https://www.osha.gov/sites/default/files/publications/portable_ladder_qc.pdf
Electrical Safety Foundation International (ESFI)	Provides educational materials on workplace electrical safety, including videos, infographics, and checklists. Emphasizes preventing incidents through awareness, planning, and proper equipment use.	https://www.esfi.org/workplace-safety/

Sources

1. Electrical Safety Foundation International Workplace Safety. https://www.esfi.org/workplace-safety/
2. Worker Electrocuted while Replacing Damaged Light Fixture. https://lni.wa.gov/safety-health/preventing-injuries-illnesses/hazardalerts/WorkerElectrocutedReplacingDamagedLightFixture.pdf
3. Newly Hired Lighting Technician Electrocuted While Working Night Shift. https://stacks.cdc.gov/view/cdc/164873

KOSHS
KENTUCKY OCCUPATIONAL SAFETY AND HEALTH SURVEILLANCE

CONTACT KOSHS

Kentucky Occupational Safety & Health Surveillance Program
2365 Harrodsburg Road, Suite B475
Lexington, Kentucky 40504
(859) 323-4750 office
(859) 218-8924 fax
kyfaceprogram@uky.edu

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Acknowledgments

Produced by the Kentucky Occupational Safety and Health Surveillance (KOSHS) Program of the Kentucky Injury Prevention and Research Center (KIPRC) as bona fide agent for the Kentucky Department for Public Health.

This work was supported by the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS), as part of cooperative agreement 5 U60OH008483 totaling $1,601,266 with 0% financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, NIOSH, CDC, HHS, or the U.S. government.

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