

# KENTUCKY HAZ ALERT

To prevent electrocutions, employers should:

- Provide non-conductive ladders
- Conduct a jobsite survey to identify potential hazards
- Provide electricity awareness training
- Provide onsite automated external defibrillators (AEDs)

Employees should:

- Use non-conductive ladders
- De-energize lines before beginning work
- Make sure all equipment is properly grounded
- Know how to use automated external defibrillators (AEDs)

## WORKERS KILLED AFTER BEING ELECTROCUTED

From July 2010 through November 2010, three workers were killed as a direct result of electrocution. Following are the case descriptions for the three work-related deaths:

**Case 1:** A 46-year-old male master electrician who worked for a construction company was fatally injured. The worker was in an attic, installing a drop pole for an office cubicle. The electrician was wiring the whip for the power pole while the pole was energized, at which point he was electrocuted. The worker was removed from the tight space in the attic, where CPR was attempted. The electrician was transported to a hospital, where he was pronounced dead one hour after the initial shocking.

**Case 2:** A 22-year-old male



electrical engineer, who was employed two years at a manufacturing company, died as a result of electrical shock. The employee was operating a copper aluminum jointer. At 2:30 a.m., the worker suffered an electric shock, after which he was airlifted to a hospital. The worker died in the hospital five days later as a result of complications.

**Case 3:** A 24-year-old male who worked for a construction company three days was fatally injured as a result of electrocution. The worker was in the process of repositioning an aluminum ladder. The ladder came near the overhead power lines, resulting in an arc. The 24-year-old male was killed, while another co-worker was injured and hospitalized.

ALWAYS ASSUME AN ELECTRICAL LINE IS ENERGIZED.

## USE NON-CONDUCTIVE LADDERS

Energized overhead power lines in proximity to a work area constitute a safety hazard. Extra caution must be exercised when working near energized power lines. A safe distance between power lines and ladders, tools, and work materials should be maintained at all times. Metal ladders should not be used for electrical work or where they may contact electrical conductors. Ladders made of non-conductive materials, e.g., fiberglass, should be substituted for work near energized electrical conductors.

## EMPLOYERS SHOULD PROVIDE ELECTRICITY AWARENESS TRAINING

OSHA regulations state, “Employers shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury [29 CFR 1926.21(b) (2)].” Mandatory formal training should be established internal or external to the company which provides guidance and information.

## EMPLOYERS SHOULD CONDUCT A JOBSITE SURVEY TO IDENTIFY POTENTIAL HAZARDS

Before beginning work at any site, a competent person should evaluate the site to identify any potential hazards and ensure appropriate control measures are implemented. In Case 1, a live electrical source could have been identified. In Case 2, an evaluation might have shown the copper aluminum jointer not to have been properly grounded. In Case 3, control measures may have included using non-conductive ladders made of fiberglass. All workers on each site should be made aware of potential hazards.

## EMPLOYERS SHOULD PROVIDE ON-SITE AUTOMATED EXTERNAL DEFIBRILLATORS

Employees and companies want to prevent electrocutions from taking place. If an electrical shocking does occur, however, it is critical to know what actions to take. Minutes can mean the difference between life and death. Work areas should have an automated external defibrillator (AED) readily accessible by all employees. Employers and employees should be trained in the use of an AED. The use of AEDs may be taught in basic life support (BLS) and cardiopulmonary resuscitation (CPR) classes.



## DE-ENERGIZE LINES

Employees should not work in the vicinity of live wires without taking precautions. Ideally, power to the lines are turned off. Other options include draping the line with an insulated blanket. These actions are to be left to experts in the field, such as utility workers. Never assume a line is de-energized. Ensure all circuits are de-energized before beginning work. Never test a line by quickly touching it.

### For more information, contact:

KY Fatality Assessment & Control Evaluation (FACE) Program, Kentucky Injury Prevention and Research Center (KIPRC)  
333 Waller Ave., Suite 242  
Lexington, KY 40504  
1-800-204-3223 (toll-free)  
<http://www.kiprc.uky.edu/face.html>

### References:

1. URL: <http://www.cdc.gov/niosh/>
2. OSHA Electrical Safety Topic Page: <http://www.osha.gov/SLTC/electrical/index.html>