

# FACE THE FACTS HAZ ALERT

To prevent worker electrocutions while working near overhead power lines:

- Employers should implement and enforce a formal written electrical safety training program that includes work around overhead lines.
- An observer should be designated by the employer to perform an electrical hazard evaluation prior to commencing new work activities.
- A hazard assessment of the job-site and route of travel, including aerial and ground hazards and obstacles, within the job site should be performed by a competent person before work commences.

## WORKERS ELECTROCUTED WHILE WORKING IN ELEVATED BUCKETS

In 2008, three workers died while working in elevated buckets that came into contact with power lines. Following are the case descriptions for the three worker deaths in Kentucky:

**Case 1:** A 28-year-old male lineman who worked for an out-of-state electrical contractor died while trying to restore electrical power to a neighborhood in the late evening. The lineman was working from a bucket truck when he came into contact with a 110 volt power line. The lineman was transported to the nearest hospital where he was pronounced dead.

**Case 2:** A 59-year-old male welder, employed by an out-of-state contractor, was hired to weld a tank at a company work-site. The welder died after his elevated man-lift came into con-



tact with a 161kv power line in mid-afternoon. The worker was declared dead at the scene by the coroner.

**Case 3:** A 31-year-old male company foreman, who worked for a Kentucky tree-trimming contractor, died after he came into contact with a 7200 volt transformer. The foreman was working from a bucket truck around noon to remove limbs from power lines after a storm. After the incident, the coroner declared the foreman dead at the scene. The toxicology report revealed multi-drug intoxication.

ALWAYS PERFORM A WORKSITE HAZARD ASSESSMENT BEFORE COMMENCING ANY NEW JOB ACTIVITY.

**EMPLOYERS SHOULD IMPLEMENT AND ENFORCE A FORMAL WRITTEN ELECTRICAL SAFETY TRAINING PROGRAM THAT INCLUDES WORK AROUND OVERHEAD LINES.**

A comprehensive worker safety program should be developed, implemented, and enforced that includes the recognition of electrical hazards. All work site employees should be trained in working around electric utilities.

**AN OBSERVER SHOULD BE DESIGNATED BY THE EMPLOYER TO PERFORM AN ELECTRICAL HAZARD EVALUATION PRIOR TO COMMENCING NEW WORK ACTIVITIES.**

An observer (designated employee) should be assigned to monitor the distance between the high-reaching equipment and the power lines. If the equipment nears a power line's minimum clearance distance, the designated employee needs to warn the equipment operator. The designated employee must be able to accurately judge the distance between an energized power line and the high-reaching equipment and be able to warn the employee in the bucket. (29 CFR 1926.955 (b)(8)). When working from cranes, workers should always stay at least 10 feet from any power line. (29 CFR 1926.550(a)(15)(i)).

For lines rated over 50 kV, the minimum clearance between the power lines and any part of the crane or load shall be 10 feet plus 0.4 inch for each 1kV over 50 kV, or twice the length of the power line insulator, but never less than 10 feet (29CFR 1926.550(a)(15)(ii)). When working from scaffolding, consult 29 CFR 1926.4511(f)(6).

**A HAZARD ASSESSMENT OF THE JOB-SITE AND ROUTE OF TRAVEL, INCLUDING AERIAL AND GROUND HAZARDS AND OBSTACLES, WITHIN THE JOB SITE SHOULD BE PERFORMED BY A COMPETENT PERSON BEFORE WORK COMMENCES.**

A competent person should be designated to perform a hazard assessment of the job site before work commences including hazard awareness and appropriate control measures.

**References:**

1. **Nebraska FACE Investigation #04NE002 entitled "Worker Electrocuted In Bucket Truck".**
2. **NIOSH In-House FACE Report 2005-02 entitled "Hispanic laborer electrocuted after boom truck contacts overhead power line– North Carolina**

**For more information, contact:**

**KY Fatality Assessment & Control Evaluation (FACE) Program, Kentucky Injury Prevention and Research Center (KIPRC)**  
**333 Waller Ave., Suite 206**  
**Lexington, KY 40504**  
**1-800-204-3223 (toll-free)**  
**[www.kiprc.uky.edu](http://www.kiprc.uky.edu)**

The KY FACE program is an occupational fatality program at KIPRC funded by the National Institute for Occupational Safety and Health (NIOSH) (Cooperative Agreement No.: 5 U60 OH008483-05.