

# FACE THE FACTS

# HAZ ALERT



To prevent injuries while working in aerial lifts:

- A “pre-job safety plan” should be developed for each job site and reviewed prior to each day on the job site.
- Mechanical checks should be performed on all equipment at each job site prior to each use.
- There should be communication between the worker in the elevated lift and ground control crew.
- Ensure that appropriate fall protection equipment is available and correctly used when working from elevations.
- Employees should work within job qualifications and job limits.

## *Fatal Aerial Lift Injuries*

The major causes of injuries involving aerial lifts are falls, electrocutions, and collapses or tip-overs. Aerial devices include boom-supported aerial lift platforms, such as cherry pickers or bucket trucks, aerial ladders and vertical towers. During 2006, three workers died due to fatal injuries suffered while working from an aerial lift. One of the decedents was electrocuted, one decedent fell, and one was pinned.

Following are case descriptions for the three Kentucky aerial lift-related fatality cases:

**Case 1:** A 35-year-old male millwright was operating a mechanical lift to install piping in a floor drain above on the second floor of a plant being constructed. He was found pinned between the handrail over the platform control panel and an overhead metal cable tray. It was determined that the telescopic boom did not function properly; the control switch was determined to be defective. Also, toxicology reports showed that the victim had a methamphetamine blood level of 0.25 mg/L.

**Case 2:** A 59-year-old male equip-



ment operator was in a truck-mounted aerial lift installing signage above a highway. He became pinned between and overhead walkway and the lift when the bucket truck driver advanced forward. The worker then fell from the lift onto the ground; he was not wearing a safety harness. The victim died five days later from a closed head injury.

**Case 3:** A 47-year-old male lineman was in an aerial bucket installing electrical line. The lineman held a guy wire in his hand and made contact with the 7200-volt phase wire. The phase wire was not attached to a temporary hot arm extension. The lineman did not wait for a hand line to be retrieved for him before raising the bucket, the victim was not wearing gloves, and the truck's grounding equipment was not used.

**ALWAYS OBSERVE THE DIRECTION OF MOVEMENT, ESPECIALLY IN CLOSE AREAS.**

**A “pre-job safety plan” should be developed for each job site and reviewed prior to each day on the job. site.**

**Each company should write down work procedures for the following day’s tasks to be performed and review with employees. A job hazard analysis should be conducted to recognize unsafe work practices and hazardous work conditions. Supervisors should ensure that all employers follow all standard operating procedures (SOP) and remove workers from the site if the SOP is not followed.**

**Mechanical checks should be performed on all equipment at each job site prior to each use.**

**Equipment users/owners should have the owners manual for the piece of equipment to develop a pre-operation safety inspection checklist. Checklists should document the required inspection points and identify the equipment make and model. The checklist should also have a section for required corrective actions when there’s a defect. Remove any malfunctioning equipment from service immediately.**

**There should be communication between the worker in the elevated lift and ground control crew.**

**Communication between workers should be clear and precise when interacting with other workers on the job site. Radio or signal communication should be established between the ground crew and aerial lift crew to perform work tasks and to prevent miscommunications. Supervisors should establish a communication protocol.**

**Ensure that appropriate fall protection equipment is available and correctly used when working from elevations, and safety training should be provided.**

**Employers have a responsibility to provide a safe working environment for all their employees. Employees have a responsibility to themselves, their fellow employees, and to their employer to use all applicable personal fall protection equipment provided by the employer. A safety harness should be worn and tied off to the eyehook on the boom.**

**Employees should work within job qualifications and job limits.**

**The employee should receive training specific to the operation of and job tasks associated with aerial lifts. If the employee does not have the training, knowledge or experience to perform the specific job tasks, they should not be assigned to aerial lifts. Employers should ensure that the operator is trained and evaluated prior to the performance of the aerial lift job task.**

**References:**

1. FACE report #03KY028- “Traffic technician dies from fall while changing traffic signal bulb”. KY FACE program, Lexington, KY.
2. FACE report #02MI157- “Hispanic laborer dies when dump mechanism of lift truck activates and crushes him between the truck bed bulkhead and bridge beam”. MI FACE program, East Lansing, MI.
3. FACE report “03NY034- “Millwright killed when aerial work platform tipped over”. NY FACE program, Albany, NY.
4. Mining Safety and Health Administration Fatality Report, 2006, Arlington, VA.
5. OSHA standards-a) 29 CFR 1910.67 (General Industry Requirements); b) 29 CFR 1926.453 (Construction industry requirements); c) 29 CFR 1926.952 (a)-(e) (Power Transmission and Distribution Requirements); and d) American National Standards Institute– ANSI A92.2-1969 (Manufacturers design and construction requirements).

**For more information, contact:**

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