Colorado FACE Investigation 91CO079

SUBJECT:

Tree trimmer dies after falling 12 feet when exiting the personnel bucket on an aerial bucket truck.

SUMMARY:

A 49-year old part-time employee of a tree trimming service suffered severe head injuries when he fell while exiting the personnel bucket on a aerial bucket truck. The employee died 23 days later. On the day of the incident the employee had completed trimming a tree in the parking area of a small strip mall. Two co-workers had lowered the folding boom with the employee in the bucket to its resting place on the cab of the truck with the bucket extending over the rear of the truck bed. The bucket was designed with two fiberglass steps built into the exterior of the bucket. The lower step had been damaged and was replaced with a makeshift plywood step. To exit the bucket, the employee climbed over the edge of the bucket and down the two steps on the exterior. He then had to step approximately three feet to the truck body. During this unwitnessed process the deceased fell, hit his head on a concrete parking curb and suffered a severe skull fracture.

The Colorado Department of Health (CDH) investigator concluded that to prevent future similar occurrences, employers should:

- Ensure that damaged equipment is adequately repaired.
- Ensure that personal protective equipment is utilized by all employees.
- Develop, implement, and enforce a comprehensive written safety program that includes an adequate fall protection policy.
- Conduct a job-site survey on a regular basis to identify potential hazards, implement appropriate control measures, and provide subsequent training to employees that specifically addresses all identified hazards.

INVESTIGATIVE AUTHORITY:

The Colorado Department of Health (CDH) performs investigations of occupational fatalities under the authority of the Colorado Revised Statutes and Board of Health Regulations. CDH is required to establish and operate a program to monitor and investigate those conditions which affect public health and are preventable. The goal of the workplace investigation is to prevent work-related injuries in the future by study of the working environment, the worker, the task the worker was performing, the tools the worker was using, and the role of management in controlling how these factors interact.

This report is generated and distributed to fulfill the Department's duty to provide relevant education to the community on methods to prevent severe occupational injuries.

INVESTIGATION:

The investigation of this work-related fatality was prompted by a request for assistance from the county coroner. The Occupational Safety and Health Administration (OSHA) Area Office was notified by CDH and a joint investigation was conducted. The investigation included interviews with the company owners and coworkers. The incident site and equipment were photographed and reports were obtained from the county sheriff and the responding ambulance team and medical records were obtained from the treating hospitals.

The company in this case employed four full time workers and one part-time worker (the deceased). The company did not have a safety officer or a written safety program. The company had been in business for seven years and the deceased had worked for the company part-time since the company was formed. The company did not have any type of training program and no personal protective equipment was in use by the deceased on the day of the incident.

CAUSE OF DEATH:

The cause of death as listed on the death certificate was post traumatic encephalomalacia with acute subdural and epidural hematoma as a result of a head injury.

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: Ensure that damaged equipment is adequately repaired.

Discussion: In this incident the repairs made to the damaged step were not sufficient to provide a safe replacement for the original equipment. The surface of the replacement step was not covered with a non-slip substance that could possibly have prevented the employee's foot from slipping. The addition of a platform under the bucket to step onto when exiting the bucket would eliminate

the need to step three feet to the truck body.

Recommendation #2: Ensure that personal protective equipment is utilized by all employees.

Discussion: The employee owned a hard hat but on the day of the incident had forgotten to bring it to work. The use of a hard hat by the deceased could have helped protect him when he fell and lessened the severity of injuries to his head.

Recommendation #3: Develop, implement, and enforce a comprehensive written safety program.

Discussion: This employer did not have a written comprehensive safety program. All employers should evaluate work tasks to identify potential hazards. The employer should then develop and implement a safety program addressing these hazards, provide worker training in safe work procedures, and implement appropriate control measures.

Recommendation #4: Conduct a job-site survey on a regular basis to identify potential hazards, implement appropriate control measures, and provide subsequent training to employees that specifically addresses all identified hazards.

Discussion: According to 29 CFR 1926.21(b)(2), employers are required to instruct each employee in the recognition and avoidance of unsafe conditions, and to control or eliminate any hazards or other exposure to illness or injury. In this and similar situations the employer may need to provide additional training to ensure that these employees understand the hazards and how to properly use safety equipment to protect themselves.

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