

Colorado Fatality Assessment and Control Evaluation (FACE) Program

SUBJECT:

Colorado FACE Investigation 94C0035

A 35-year-old painter was electrocuted when the aluminum ladder he was moving contacted a 7,620-volt power line.

SUMMARY:

On July 19, 1994 several workers were spray-painting the exterior of an industrial building. The workers were using aluminum ladders to access the upper portions of the wall on which they were working. The injured worker descended his ladder, and lifted it from the wall to move it past his coworker and continue painting. As he was moving the ladder in a vertical position, it contacted a 7,620-volt power line. Another coworker hit the injured worker with both hands, knocking him from the ladder, thus breaking the electrical contact. Immediate attempts to revive the worker at the scene were unsuccessful.

The Colorado Department of Public Health and Environment (CDPHE) investigator concluded that to prevent future similar occurrences, employers should:

- Never allow the use of aluminum ladders when the possibility of contact with overhead power lines exists.
- Ensure that employees request that the appropriate power company cover electrical power lines with insulating hoses or blankets if the potential for contact with lines exists.
- Conduct a work-site survey to assess the potential safety hazards. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced.

INVESTIGATIVE AUTHORITY:

The Colorado Department of Public Health and Environment (CDPHE) performs investigations of occupational fatalities under the authority of the Colorado Revised Statutes and Board of Health Regulations. CDPHE is authorized to establish and operate a program to monitor and investigate those conditions that 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:

This investigation was prompted by a report to CDPHE from the Occupational Safety and Health Administration (OSHA). The investigation included interviews with the company owner and co-workers. The incident site and equipment were photographed. The company employs one hundred people. The company has a designated safety representative and a written safety program. The safety program did not specifically address the task being performed by the deceased. The company has been in business for twelve years. The deceased had worked for the company for eight years and had been at the incident site six days.

CAUSE OF DEATH:

The cause of death as determined by autopsy and listed on the death certificate was electrocution.

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: Aluminum ladders should never be used when the possibility of contact with overhead power lines exists.

Discussion: In this incident, the use of aluminum ladders directly contributed to the fatal injury. OSHA Regulation 29 CFR 1926.951(c)(10) prohibits the use of conductive ladders when the possibility of contact with power lines is present.

Recommendation #2: Employers should ensure that employees request that the appropriate power company cover electrical power lines with insulating hoses or blankets if the potential for contact with lines exists.

Discussion: Energized power lines in proximity to a work area constitute a significant safety hazard. Extra caution must be exercised when working in the vicinity of energized power lines. The power company should be contacted and requested to place insulating hoses or blankets on any power lines in close proximity to a work area. This protects workers who are working near power lines from making inadvertent contact.

Recommendation #3: The employer should conduct a work-site survey to assess the potential safety hazards. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced.

Discussion: According to the General Duty Clause of the Occupational Safety and Health Act (Section 5 (a) 1), employers are required to provide a safe and healthy workplace for employees. To do so, employers must regularly survey the workplace to identify hazards. All identified hazards must be adequately addressed through engineering control measures or changes in workpractices. Employers should also instruct each employee in the recognition and avoidance of unsafe conditions. In this and similar situations, the employer may need to provide additional training to ensure that employees understand the hazard and how to properly use equipment.

Lyle E. McKenzie
Chief Investigator/Industrial Hygienist
Environmental Epidemiology Division
Occupational Epidemiology Program

Jane B. McCammon, M.S., CIH
Manager
Occupational Epidemiology Program

Richard E. Hoffman, M.D., MPH
State Epidemiologist
Colorado Department of Health

Date _____

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