

DATE: November 25, 1992

FROM: Fatality Assessment and Control Evaluation (FACE) Project
Minnesota Department of Health (MN FACE)

SUBJECT: MN FACE Investigation MN9211
Resident Caretaker Dies from Electrocution

SUMMARY

A 27-year-old resident caretaker (victim) of an apartment building was electrocuted along with two juvenile helpers when a mobile scaffold he was moving made contact with an overhead 7200V power line. He was moving the scaffold to a location where he planned to repair a portion of the building's soffit. According to an employer representative, this job was not part of usual resident caretaker responsibilities. Caretakers who possessed applicable skills could bid to do other jobs around the apartment buildings, such as repair work or painting, when they became available. The victim had bid and been awarded this particular job. MN FACE investigators concluded that, in order to prevent similar occurrences, the following guidelines should be followed:

- > employers should initiate a safety policy that addresses specific tasks performed by employees, identifies safety hazards, and stresses safety training; and
- > formal training regarding the hazards posed by overhead power lines should be given to all employees who work near these lines.

INTRODUCTION

MN FACE personnel learned of a July 30, 1992, work-related electrocution through a local news broadcast that same evening. On August 3, 1992, the MN OSHA compliance officer assigned to this incident was contacted and releasable information was taken. A representative of the company owning the property where the incident took place was interviewed via telephone. City police and county coroner reports were requested. A site investigation was not conducted due to lack of cooperation from the victim's employer.

The victim had worked as the resident caretaker for a 26-unit apartment building for four months. The company owning the apartment building employed 40 other caretakers at its various properties. The majority of resident caretaker training included renter forms completion

and other administrative activities. Caretakers with related work experience could submit written bids to do repair work and other jobs around the apartment buildings. The victim had worked in the construction industry previous to this caretaker position. The company did not provide safety training or instructions related to these jobs; contractors were expected to be knowledgeable about proper safety training and equipment use.

INVESTIGATION

The incident occurred in the afternoon on a clear summer day. The resident caretaker had contracted with his employer to repair a portion of the apartment building's soffit and intended to use a three-story mobile scaffold for this purpose. The caretaker began moving the scaffold away from the building when three juveniles who also lived in the apartment complex began helping him. The caretaker was pulling the scaffold by its hitch. The juveniles, all on one side of the scaffold, were pushing. The juveniles were not employed to assist with this repair job.

The scaffold stood 22.8 feet high, including the guard rail. It was 12.8 feet long and 6.4 feet wide. As the scaffold was being moved, it made contact with an overhead 7200V power line, which ran parallel to, and approximately 17 feet from, the building wall. All four individuals were thrown away from the scaffold and fell to the ground after it made contact with the power line.

Residents in the building called 911 for emergency help. CPR was initiated within minutes of the incident on the caretaker and two of the three juveniles. Two rescue workers received electrical shocks while performing CPR on the caretaker before power to the overhead line was shut off. One of these rescue workers was treated at a hospital for burns to his knee and elbow; the other did not require medical treatment. The three individuals requiring CPR at the incident site were pronounced dead at local hospitals approximately one hour after the incident. The remaining juvenile suffered burns to one hand and one foot.

CAUSE OF DEATH

The cause of death as listed on the death certificate was cardiac arrest due to or as a consequence of electrocution.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should initiate a safety policy that addresses specific tasks performed by the employees, identifies safety hazards, and stresses safety training.

Discussion: The company did not have a safety policy that addressed safety training and procedures specific to the tasks some of the caretakers performed. Employers should develop written procedures, which detail the tasks to be performed and identify the safety hazards associated with these tasks. Training which addresses proper work procedures should be developed and implemented by employers. The employer should also assure that safety policies are enforced. Prior to the performance of a given task, supervisors should perform a job site survey which would identify any safety hazards present at a given job site (i.e., overhead power lines), then plan the methods to be used to accomplish the task. Workers should then be made aware of the hazards they might encounter at a given job site.

Recommendation #2: Formal training regarding the hazards posed by overhead power lines should be given to all employees who work near these lines.

Discussion: Work-related fatalities from contact with overhead power lines is a problem for workers in many trades, including construction, painting, and tree service. Employers should not assume that workers have received proper safety training from previous work experience. Employers should ensure that employees needing to possibly perform any tasks near overhead power lines are fully trained in electrical safety, are aware of the associated hazards, and given instruction on how to protect themselves.

REFERENCES

1. NIOSH-Division of Safety Research, FACE Report 86-30-II, Morgantown, West Virginia, June 23, 1986.
2. NIOSH-Division of Safety Research, FACE Report 87-65-II, Morgantown, West Virginia, October 8, 1987.