

TO: Director, National Institute for Occupational Safety and Health

FROM: California Fatality Assessment and Control Evaluation (FACE) Program

SUBJECT: Tree Trimmer Falls from Tree and Dies in California

SUMMARY

**California FACE Report #93CA007
November 15, 1994**

A 37-year-old Hispanic male tree trimmer (the victim) fell approximately 40 feet from a palm tree and died. The victim had been hired by an apartment complex manager to trim the palm trees around the apartment complex. According to co-workers the victim was using safety devices (lanyard and rope) to secure himself to the palm tree before beginning to trim the branches. Inspection of the body immediately after the fall revealed a broken safety latch and an unsecured secondary safety rope. Paramedics were summoned to the scene by the victim's son who was also working at the incident site. The victim was transported to a local hospital where he was pronounced dead. The CA/FACE investigator concluded that, in order to prevent similar future occurrences, employers should:

- implement a safety and accident prevention plan so that all employees are aware of the hazards involved in their specific jobs.
- provide first aid and cardiopulmonary (CPR) training for all employees.
- only allow employees to use approved safety rope so that they are properly secured.

INTRODUCTION

On August 5, 1993, a 37-year-old male tree trimmer fell approximately 40 feet from a palm tree where he was trimming branches. The CA/FACE investigator was informed of this incident by a California Occupational Safety & Health Administration (Cal/OSHA) safety engineer. The FACE investigator went to the scene that afternoon, met with the Cal/OSHA engineer and took pictures of the incident site. A copy of the Cal/OSHA Report and Coroner's Autopsy Report were obtained by the FACE investigator.

The victim had worked on and off for his employer for the past eight years. The employer operated a landscape/gardening service which also included tree trimming services. He had been in business as a contractor for eight years. If a job required more men than just himself, the employer would contact acquaintances and friends to help with the job. According to the supervisor the victim was an experienced tree trimmer. On the day of the incident, there were 5 employees at work including the employer. Safety equipment was provided for employees by the employer if they did not have their own equipment.

INVESTIGATION

The employer had been hired to trim the palm trees around an apartment complex. The job was estimated by the employer to take 3 to 4 days to complete. The incident occurred on the first day of the job. Shortly after lunch the victim climbed the palm tree and began cutting branches. According to the victim's supervisor, at approximately 3:30 pm, he (supervisor) was cleaning up the cut palm fronds when the victim fell approximately 40 feet from a palm tree. He (victim's supervisor) stated that the victim had not tied off with the rope and that the spring-loaded latch that connected the chain to the D-ring of his safety belt had broken.

The victim was wearing a safety belt at the time of the incident. The safety equipment provided to the victim consisted of a safety belt with 2 side D-rings and 2 front D-rings, one chain with an O-ring at one end and a spring loaded brass latch on the other, and a long line of rope. The supervisor explained that the proper method of climbing a palm tree is to wrap the chain around the trunk of the tree, adjusting for its diameter as you go up. For additional security, one loops the rope with a knot that will automatically let the rope adjust for the diameter of the tree. The chain is then fastened onto the 2 side D-rings and the rope is fastened onto the 2 front D-rings. The worker then uses gaffs or spikes on his boots to dig into the tree as he goes up. Co-workers stated that they heard a scream and saw the victim lying on the ground. The supervisor instructed the victim's son to call 911. The victim's son ran to a pay phone and called paramedics to the scene. Paramedics arrived a short time later and the victim was transported to the hospital where he was pronounced dead at 4:20 pm.

CAUSE OF DEATH

The Coroner's Autopsy Report stated that the cause of death was multiple traumatic injuries due to blunt force trauma

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should implement an accident prevention plan so that all employees are aware of the hazards involved in their specific jobs.

Discussion: Under Title 8 of the California Code of Regulations (CCRs) section 3203 an Injury and Illness Prevention Plan (IIPP) must be in effect for all companies. This plan has a seven point system designed to protect and inform employees about unsafe conditions in the workplace. The plan must include the following:

1. identified persons with responsibility for implementing the program;
2. a system for ensuring that employees comply with safe and healthy work practices;
3. a system for communicating with employees on matters relating to occupational safety and health;
4. procedures for identifying and evaluating workplace hazards;
5. procedures for investigating occupational injuries and illnesses;
6. procedures to develop and implement the correction of unsafe working conditions based on the severity of the hazard; and
7. employee training and instruction.

Recommendation #2: Employers should provide first aid and cardiopulmonary training for all employees.

Discussion: Under Title 8 of the CCRs section 3400 (b) Medical Services and First Aid, in the absence of an infirmary, clinic, or hospital, in near proximity to the workplace, which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Training shall be equal to that of the American Red Cross or the Mining Enforcement and Safety Administration.

Recommendation #3: Employers should only allow employees to use approved safety rope so that they are properly secured.

Discussion: Under Title 8 of the CCRs section 3427 (a)(4), when working aloft, employees shall be required to wear tree workers' saddles and tie-in with an approved safety strap or rope.

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November 15, 1994

FATALITY ASSESSMENT AND CONTROL EVALUATION PROGRAM

The California Department of Health Services, in cooperation with the Public Health Institute and the National Institute for Occupational Safety and Health (NIOSH), conducts investigations of work-related fatalities. The goal of this program, known as the California Fatality Assessment and Control Evaluation (CA/FACE), is to prevent fatal work injuries in the future. CA/FACE aims to achieve this goal by studying the work environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact. NIOSH-funded, state-based FACE programs include: Alaska, California, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oklahoma, Oregon, Washington, West Virginia, and Wisconsin.

Additional information regarding the CA/FACE program is available from:

California FACE Program
California Department of Health Services
Occupational Health Branch
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