



The National Institute for Occupational Safety and Health (NIOSH)

Promoting productive workplaces  
through safety and health research



# Mechanic Electrocuted in Tennessee

FACE 87-03

## Introduction:

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR) is currently conducting the Fatal Accident Circumstances and Epidemiology (FACE) Project, which is focusing primarily upon selected electrical-related and confined space-related fatalities. By scientifically collecting data from a sample of fatal accidents, it will be possible to identify and rank factors that influence the risk of fatal injuries for selected employees.

On June 28, 1986, a mechanic for a wrecker service was electrocuted when a 2-way radio antenna he was holding contacted a 7200 volt overhead power line. A driver for the wrecker service, who was assisting him, received minor injuries.

## Contacts/Activities:

Officials of the Occupational Safety and Health Administration for the State of Tennessee notified the National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR) of this fatality and requested technical assistance. This case will be included in the Fatal Accident Circumstances and Epidemiology (FACE) Project. On November 6, 1986, a member of the DSR research team met with the Tennessee OSHA compliance officer for this case and the owner/manager of the company. Interviews were conducted with co-workers and a surrogate for the victim. The site of the fatality was visited and photographed.

## Overview of Employer's Safety Program:

The victim was a mechanic for a company which operates a wrecker service. Additionally, the company repairs and sells used cars. The wreckers are used frequently to repossess cars sold and financed by the company.

The company has no written safety policy or safety program. Any safety training is provided "on the job."

## Synopsis of Events:

On June 28, 1986, the victim (a mechanic) and his co-worker (a wrecker driver) were asked to remove a 25 foot 2-way radio antenna from the mobile home site which had previously served as the company office. The weather was hot and humid, but the ground was dry.

The antenna was taken down from the electric pole immediately adjacent to the mobile home and laid upon the ground. The two men then began raising the antenna in order to place it on a pickup truck parked nearby. The victim was stabilizing the base of the antenna on the ground as his co-worker raised the antenna. The top of the antenna contacted a nearby high voltage line which was approximately 19 feet above ground. The victim, wearing leather shoes, received a fatal injury. His co-worker, wearing rubber-soled tennis shoes, was temporarily “knocked out” by the current and received a minor laceration under his right eye.

The victim’s step-son, who was watching, took the pickup truck and drove approximately 100 yards to the new office location and asked the secretary to call the emergency medical service. The ambulance arrived five to ten minutes after the accident and provided basic life support measures. The resuscitation efforts were unsuccessful and the victim was pronounced dead in a local emergency room.

## Cause of Death:

The coroner’s report listed the cause of death as electrocution. Exit burns were noted on the victim’s right foot, but no entrance burns were observed. No autopsy was performed.

## Recommendations/Discussion:

**Recommendation #1: Metal antennas should be located well away from electrical lines.**

**Discussion:** This antenna should not have been mounted on the pole which provided electrical service to the mobile home. The proximity to nearby high voltage lines made this location inherently dangerous.

**Recommendation #2: Employers should only assign personnel tasks that they are qualified to perform.**

**Discussion:** Apparently no one recognized the hazards involved with the task being performed. Aside from the inherent danger described above, the injured co-worker stated that he did not know the overhead power lines were uninsulated. The lack of hazard awareness was an obvious contributor to this fatality.

[Return to In-house FACE reports](#)

Last Reviewed: November 18, 2015

Was this page helpful?

Yes

Partly

No