# **F**atality **A**ssessment and **C**ontrol **E**valuation Project

Public Health

KY FACE #97KY071

6 November 1997

TO: Carl Spurlock, Ph.D., Director, Kentucky Injury Prevention and Research Center, and Epidemiologist, Kentucky Department for Public Health

FROM: Ellyn Moon, M.A., Field Investigator, Kentucky Fatality Assessment and Control Evaluation (KY FACE) Project

SUBJECT: Professional Roofer Dies in Fall

## SUMMARY

A 48-year-old roofing company manager ("the victim") died after falling 25-30 feet to the concrete floor of a packing company garage. The victim and the job foreman ("the witness") were on the roof preparing for the day's work prior to the arrival of the rest of the crew. The victim had inspected and approved the work completed the day before, and was going to retrieve two rope grabs, which had been left in a pile. There were a total of five retractable lines with which workers were required to tie off whenever they went outside the caution lines along the roof peak. The victim was involved in a conversation with the witness when he stepped under a caution line to pick up two of the rope grabs, onto a weakened section of roof that collapsed under his weight. The witness later realized that he also had stepped beyond the caution line without noticing, but had apparently stepped onto a stronger section of the original roof. The other crew members were just arriving, and they ran to the guard booth to call 911. Emergency Medical Service (EMS) personnel arrived and transported the victim to a hospital, where he was pronounced dead at 6:50 am. In order to prevent similar occurrences, the KY FACE investigator recommends that employers should:

- *ensure that appropriate fall protection equipment is available and correctly used when working from elevations where there is a danger of falling.*
- *ensure that, when equipment must be left on the job site, it is stored in an area where it can be retrieved safely.*

## INTRODUCTION

On July 26, 1997, a 48-year-old roofing company manager was killed when he fell 25-30 feet onto a concrete floor. On July 29 the KY FACE field investigator was notified of this fatality and began an investigation. On August 1, 1997, in conjunction with a Kentucky Occupational Safety and Health (KY OSH) Compliance Officer, a visit was made to the company's office to conduct an investigation. The investigators interviewed the witness, the employer's Operations Manager, and its Safety Representative. Photographs of the incident site were reviewed.

The employer in this incident was a roofing company with offices located in various cities around the country. It had been in business for almost ten years, and employed approximately 1,400 workers. The company had a written safety program, as well as videotapes, which were used in a two-hour safety orientation for new employees. Weekly safety meetings were held for all employees, and foremen were required to go over safety rules daily when giving out personal protective equipment (PPE) to their crews prior to beginning work.

The victim had worked in the roofing business for 23 years prior to coming to this company three years earlier. He was the Operations Manager, and as such was the company's designated safety officer. Part of his job was to follow up on roofing sales by inspecting new job sites to determine what safety equipment would be required. He was also responsible for ensuring that the necessary equipment was provided and maintained at each job site, and for inspecting the work as completed at each site.

## INVESTIGATION

The job site where this incident occurred was a packing company's 60' x 120' garage roof. The old roofing material, which consisted of paper- and tar-covered tectum, was to be covered by the crew with 12'2" x 37" sheets of corrugated steel decking. The roof had a 3:12 pitch. Two days prior to the incident, before initial work began, the victim had inspected the site to determine what safety precautions should be taken, where to store materials, etc. The roofing work was begun on Friday, the day prior to the incident. The crew of six men had completed about one-quarter of the job on the first day. On Saturday morning, the victim and the witness had arrived prior to the other five crew members (usual start time for the crew was 6:30-7:00 am) in order to inspect the previous day's work and to assemble the safety equipment to be used that day. As Operations Manager, it was the victim's usual practice to inspect all jobs in process on a daily or almost-daily basis. As had been directed by the victim on Thursday, caution lines made of yellow rope had been placed approximately one foot to each side of, and parallel to, the beam of the roof peak, and workers were not required to tie off with their retractable lifelines if they remained within that lined-off area. In addition, the workers had installed a steel cable along the beam of the roof peak to which the retractable lifelines could be hooked. The victim had just finished inspecting and approving the completed work and was involved in a discussion with the witness as they attempted to retrieve two rope grabs which were lying outside the caution line. According to the witness, because of their conversation, neither he nor the victim was paying sufficient attention and when the victim reached to pick up the robe grabs, he stepped too far beyond the caution line onto an old section of roof that was not strong enough to hold his weight. The roof gave way, and he fell through it to the concrete floor 25-30 feet below.

The other crew members were just beginning to arrive. They ran to the guard booth to call 911. EMS workers arrived and transported the victim to a hospital, where he was pronounced dead at 6:50 am.

## CAUSE OF DEATH

The cause of death was listed as head injuries, pending the results of autopsy.

## RECOMMENDATIONS/DISCUSSION

***Recommendation #1:*** *Employers should ensure that appropriate fall protection equipment is available and correctly used when working from elevations where there is a danger of falling.*

***Discussion #1:*** *In this case, appropriate fall protection equipment was available at the job site, but a determination had been made by the victim that workers would be safe without it if they stayed within the caution lines. Unfortunately, even the victim, who was the company's designated safety officer, forgot to tie off prior to stepping outside the caution line to retrieve two rope grabs. This incident illustrates the importance of using fall protection equipment whenever working from elevations where there is a danger of falling, without exceptions for "safe" areas. The proper use of fall protection equipment must be continually emphasized, even to experienced employees.*

***Recommendation #2:*** *When equipment must be left on the job site, it should be stored in an area where it can be retrieved safely.*

***Discussion #2:*** *It is not known why the rope grabs were located outside the caution line. Although it is not unusual for such equipment to remain on the job site overnight while work is in progress, it normally is stored in a more accessible place. The worker who left it the day before was probably unaware of the danger of that particular section of the roof.*