

Indiana State Department of Health

Indiana FACE 95IN05901

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TO: Charles L. Barrett, M.D., M.S.P.H., Medical Epidemiologist  
Epidemiology Resource Center

FROM: Richard L. Warren, Indiana FACE Investigator

SUBJECT: Laborer dies following a 13- foot fall from roof of city garage

**SUMMARY:**

A 36-year-old male roofer (the decedent) died 10 days after sustaining severe injuries from a 13-foot fall from the roof of a city garage. The decedent and one co-worker neither of whom were using fall protection equipment, were installing a new sheet metal roof on the garage. Gusty winds caught a piece of sheet metal roofing they were carrying and swept the decedent off the edge of the roof. As the decedent fell from the roof, he struck a dumpster with his head and torso before striking the asphalt pavement below. He sustained severe head injuries and other internal injuries. The decedent was transported to a large area hospital where he died 10 days later. The FACE investigator concluded that in order to prevent similar occurrences, employers should:

1. Provide fall protection equipment and ensure that it is worn by all employees working at elevations when the potential for a serious fall exists.
  - a)
2. Ensure that employees work at elevations only when the weather conditions are suitable for the work task at hand.
  - a)
3. Encourage workers to actively participate in work place safety including the recognition and avoidance of unsafe work conditions.

**INTRODUCTION:**

On April 18, 1995, a 36-year-old male roofer sustained fatal injuries after falling 13 feet from the roof of a city garage to the asphalt pavement below. The FACE investigator was notified by IOSHA on May 5, 1995. The fatality was reviewed with the IOSHA compliance officer and it was agreed the FACE investigator would conduct an on site investigation. Photographs and measurements were taken, and a witness was interviewed.

The employer is a construction company that was contracted to install a new sheet metal roof on a city garage. The company has been in business for 25 years and employs 14 workers. The decedent was employed by this company for 12 years.

#### **INVESTIGATION:**

The construction company was contracted to remove the old roofing and install a new sheet metal roof on a city garage. On the day of the incident the decedent and co-worker were the only construction workers on the job and city garage workers were absent. The old roofing had been removed and the decedent and co-worker were proceeding to install sheet metal roofing (20' x 2' sheets) on a roof 13 feet 4 inches high at the eaves with a slope of 1:12 (1 foot of vertical rise to 12 feet of horizontal width). They were not using fall protection equipment.

The Midwest Climate Control Center verified that on the day of the incident 0.06 inch of rain fell and the high temperature was 73 degrees. The wind between 12:00 p.m. and 2:30 p.m. was out of the southwest at 18 to 20 knots (27 to 30 mph). The decedent and co-worker were laying new sheet metal roofing around 1:30 p.m. Evidence suggests high winds caught a section of sheet metal roofing the decedent and co-worker were carrying causing the decedent to be swept off his feet in a backward motion.

A dumpster 6'3" high was located five feet from the building. As he fell, the decedent's head and torso struck this dumpster before he came to rest on the asphalt pavement below. A city street worker returning to the garage heard the decedent yell as he was falling from the roof. The city worker found the decedent unconscious on the pavement and called 911. The EMS ambulance arrived a few minutes later and transported the decedent to the local hospital from which he was transferred by helicopter to a large area hospital where he died 10 days later.

#### **CAUSE OF DEATH:**

The cause of death as listed on the official certificate of death was craniocerebral blunt force injury.

#### **RECOMMENDATIONS AND DISCUSSION**

##### **RECOMMENDATION # 1:**

When the potential for a serious fall exists, the employer should provide fall protection equipment and ensure that it is worn by all employees working at elevations.

##### **DISCUSSION:**

The decedent was working 13 feet above ground level in an area where the potential for a fall existed. According to OSHA regulation (29) CFR 1926.28(a) the employer is responsible for requiring the wearing of appropriate personal

protective equipment in all operations where there is an exposure to hazardous conditions or where the OSHA regulation indicates the need for using such equipment to reduce the hazards to the employees. Evidence indicates that if the employer had provided and required the use of fall protection this incident may have been prevented.

**RECOMMENDATION # 2:**

Employers should ensure that employees work at elevation only when weather conditions are suitable for the work task at hand.

**DISCUSSION:**

Evidence suggests the effect of sudden gusts of wind upon 20' x 2' sections of sheet metal roofing may not have been considered by the decedent and co-worker. Employers should be cognizant of the hazardous conditions at jobsites and take an active role to eliminate them. Additionally, scheduled and unscheduled safety inspections should be conducted by a competent person; that is, one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate them. Wind conditions should always be considered when outdoor work is to be performed. Postponing the work task until the gusting had subsided might have been prevented this incident.

**RECOMMENDATION #3:**

Employers should encourage workers to actively participate in work place safety.

**DISCUSSION:**

Employers should encourage all workers to actively participate in work place safety and should ensure that all workers understand the role they play in preventing injuries at the job site. In this incident the decedent and co-worker were working 13 feet above ground level without benefit of fall protection and in strong gusty winds. Workers should look out for each other's safety and remind each other of the proper way to perform their tasks. Employers should instruct workers of their responsibility to participate in making the workplace safer.

**REFERENCE:**

29 CFR 1926.28(a) code of federal regulations, Washington D.C.: U.S. Government printing office, Office of the Federal Registrar.

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**What is the FACE Program?**

FACE is one of many prevention programs conducted by the Indiana State Department of Health (ISDH). FACE stands for "Fatality Assessment and Control Evaluation." The purpose of FACE is to identify factors that increase the risk of work-related fatal injury. Identification of risk factors will enable more effective interventions to be developed and implemented. The FACE Program does not just count fatalities. It uses information gained from each fatality investigation to develop programs and recommendations aimed at preventing future occupational fatalities.

**Who can you contact for additional information?**

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