Indiana State Department of Health
Indiana FACE 93IN10301
Date: November 17, 1993

TO: Charles L. Barrett, M.D., M.S.P.H., Medical Epidemiologist
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FROM: Richard L. Warren, Indiana FACE Investigator

SUBJECT: Iron Worker Dies in Fall from a Roof Support to the Concrete Floor of a Framed Structural Steel Building

SUMMARY:

A 37-year old male iron worker (the decedent), died from injuries sustained in a fall from a roof support to the concrete floor of a framed structural steel building. The decedent was the foreman of five co-workers staging material for the next days work. The decedent sent his co-workers down when the wind became gusty about the time of the incident while remaining to secure materials. Witnesses on the ground as reported by the company safety director stated the decedent was standing on a roof support holding a piece of ridge-pan flashing when they saw the ridge-pan flashing bend around the victim due to the gusty wind conditions before he fell. The victim was not wearing fall protection equipment.

Face investigators concluded, to prevent future similar occurrences, employers should:

1. Ensure that appropriate fall protection equipment is available and correctly used when working from elevations where there is danger of falling..

a)

2. Ensure employees are instructed in the recognition , avoidance and applicable regulations concerning the hazards associated with falls..

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3. should encourage workers to actively participate in workplace safety.

INTRODUCTION:

On October 26, 1993, a 37-year old male iron worker (the decedent) died from injuries sustained in a fall from a roof support 31-feet 10-inches to a concrete floor. On October 29, 1993, the Department of Labor (IOSHA/CFOI) was notified, and the INFACE program was notified subsequently.

The fatal injury was discussed with the company safety director and he agreed to let FACE investigators and representative from NIOSH (National Institute for Occupational Safety and Health) to do an onsite investigation for training purposes. FACE

investigators and the representative from NIOSH met with the company safety director. The construction company has been in business for several years and employs 80 employees and the victim was employed fifteen years in the same job capacity. The company safety director stated the president did not want his employees interviewed because they have already been interviewed by IOSHA. The safety director said we could take pictures and measurements of the incident site and he would answer any and all questions. It was stated monthly safety training sessions were held for each job task and weekly jobs site talks were conducted. The company had a written safety policy.

INVESTIGATION:

The victim was a foreman of a five man work crew, staging roofing materials for the next days work (about 10,000 square feet). Seventeen co-workers were on the roof about the same time of the incident. Work commenced about 7:30 a.m., erecting “RED IRON” (structural steel) for most of the day. The structure was 380 feet long, 160 feet wide and 31 feet, 10 inches high.

The decedent and crew started staging roof sheeting (23” x 35’) and (23” x 40’) two hours prior to the fatal injury for the next days work. About the time of the incident the decedent sent his crew down when the wind became gusty, while remaining to secure

materials. The safety director stated the decedent was standing on a roof support holding a piece of ridge-pan flashing (2'x10'x18 gauge), when witnesses on the ground saw the ridge-pan flashing wrap around the decedent and he fell 31 feet 10 inches to the concrete floor.

The fatal injury occurred about 14:55 (EMS record of call in). The EMS response time was within six minutes. Co-workers attempted CPR but were not able to revive the decedent.. The decedent was life lined to an out of state hospital where he was pronounced dead.

The Midwest Climate Control Agency was contacted for the days weather.The weather report for the day of the incident injury is as follows: no precipitation (dry), the high was 73, low of 46, no snow fall and the winds were light and variable from noon till 11:00 p.m.

Under normal circumstances, a 5/8" braided nylon safety line is secured after the first section of roof decking has been laid. This would keep the safety line out of the way of the staged deck materials. The company safety director stated this is not possible on the first stage, because the safety line would be in front of the worker and in the way.

CAUSE OF DEATH:

The attending physician listed cause of death as multiple injuries sustained from a fall.

RECOMMENDATION #1:

Ensure that appropriate fall protection equipment is available and correctly used when working from elevations where there is danger of falling.

DISCUSSION:

The company had provided appropriate fall protection but the decedent was not wearing the safety equipment while he was on the roof supports. Employers should ensure that workers follow established procedures for wearing fall protection equipment. Use of fall protection equipment may not have prevented the victim from falling but it could have prevented his falling to the concrete floor.

RECOMMENDATION #2:

Ensure employees are instructed in the recognition, avoidance and applicable regulations concerning the hazards associated with falls.

DISCUSSION:

The decedent attended company safety meetings and signed off that he attended. In this case training programs were routinely offered, a structured , organized series of safety programs offered was evident. Training , even with long term employees should focus on a variety of hazards including PPE, fall prevention , first aid and safe work

practices. Training in the recognition and avoidance of unsafe work conditions may have prevented this incident.

RECOMMENDATION #3

should encourage workers to actively participate in workkplace safety.

DISCUSSION:

Employers should encourage all workers to actively participate in workplace safety and should ensure that all workers understand the role they play in the prevention of occupational injury. In this incident the decedent was on the roof support with out donning a safety belt and lanyard and securing it to any kind of support. Workers and co-workers should look out for one another`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. Increased worker participation will aid in the prevention of occupational injury.

According to the “General Duty Clause” of the Occupational Safety and Health Act [(Section 5 (a) (1)] employers are required to provide a safe and healthy work place for employees. To do so, employers must regularly survey the work place to identify hazards. All identified hazards must be adequately addressed through engineering control measures or changes in work procedure.

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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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