# F.A.C.E. INVESTIGATION REPORT

# Fatality Assessment and Control Evaluation Project

FACE #94-NJ-011-01
Brick Mason Dies After Falling
6 Feet While Climbing Off A Scaffold



New Jersey Department of Health and Senior Services Occupational Disease and Injury Services P.O. Box 360 Trenton, New Jersey 08625-0360 (609) 984-1863 **TO:** Division of Safety Research

National Institute for Occupational Safety and Health

Morgantown, West Virginia 26505

**FROM:** Fatality Assessment and Control Evaluation (FACE) Project

New Jersey Department of Health (NJDOH)

**SUBJECT:** Face Investigation #94-NJ-011-01

Brick Mason Dies After Falling 6 Feet While Climbing Off A Scaffold

**DATE:** September 26, 1994

#### **SUMMARY**

On February 7, 1994, a 53 year-old male brick mason was fatally injured after falling while climbing down from a scaffold. The incident occurred at a construction site where the victim was laying blocks from a 6 foot 10 inch high scaffold. The victim was starting to climb down onto a 6 foot stepladder that had been leaned against the cross braces of the scaffold when he lost his balance and fell to the cement floor. He died of his injuries three days later. NJDOH FACE investigators concluded that, in order to prevent similar incidents in the future, these safety guidelines should be followed:

- o Employers should ensure that scaffolds are provided with a reliable means of access.
- o Employers should develop and implement a comprehensive written safety program.
- o Employers must insure that scaffolds are properly erected and maintained before use.
- o Employers should conduct regularly scheduled and unscheduled safety inspections at each jobsite.

#### INTRODUCTION

On February 16, 1994, NJDOH FACE personnel were notified by the OSHA area office of a work-related fatal fall at a construction site. After contacting the employer, FACE investigators conducted a site visit on May 3, 1994 to interview the employer representative and photograph the scene. Additional information on the incident was obtained from the OSHA investigation file, written witness statements, and the police and medical examiner's reports.

The employer was a small construction company acting as the general contractor at the incident site. The company employed a total of 28 workers, 10 of whom were working at the site. Most of the employees were union tradesman who were hired as needed. The company does not have a written safety program, however, they do conduct weekly safety meetings and keep written records of the meeting topics and attendees. The victim was a 53 year-old male union brick mason who had been hired out of the local union hall. He had worked for the company for 3 1/2 months.

#### INVESTIGATION

The incident occurred at the construction site of a new municipal courthouse building. The company had been working at the site since June 1993 and anticipated working at the site until July, 1994. At the rear of the building was a single-story attached garage (sallyport) that was under construction. A single tier, tubular welded frame scaffold had been assembled inside the

garage for the brick masons who were constructing a masonry block partition wall. The scaffold stretched the inside length of the garage (30 feet) and was 6 feet 10 inches high with the planking. At this stage of construction, the exterior walls and roof on the garage were complete, and a heater was used to heat the area.

The day of the incident, a Thursday, was a seasonably cold winter day. The victim and other workers arrived for work at 7:30 a.m. and were scheduled to work until 4 p.m. At about 2 p.m., the victim was working on the scaffold laying block for the partition wall that divided the garage. Two other workers, a laborer and a carpenter were also working nearby in the garage. A 6 foot high closed fiberglass step ladder had been leaned against the cross braces near the center of the scaffold. The victim asked the laborer if there were any three inch blocks, and was told no. Saying that he would cut them himself, the victim started to climb down to the top step of the unsecured ladder which was about 10 inches below the scaffold. At this time, the carpenter was entering the room to exchange the stepladder with an 8 foot ladder. Seeing that the stepladder was not secured, he called out the victim's name to stop him. The victim hesitated for a moment and was pulling his foot back when he seemed to lose his balance and fall. He fell face down, striking his head on the concrete floor.

The co-workers immediately went to his aid and removed the ladder which fell on top of him. They then turned him over to help his breathing. The victim regained consciousness after a short time, complaining that his head hurt and wanting to get up. The others told him to stay still and called 911. The police and EMS quickly responded, and the victim was airlifted to the regional trauma center where he was admitted with severe head injuries. He died of his injuries on February 10, 1994, three days after the incident.

#### **CAUSE OF DEATH**

The attending physician attributed the cause of death to massive head injuries due to a fall from a scaffold.

#### RECOMMENDATIONS AND DISCUSSION

<u>Recommendation #1</u>: Employers should ensure that scaffolds are provided with a reliable means of access.

<u>Discussion</u>: The step ladder in this incident did not fully reach the scaffold planks and was cantilevered over the scaffold's cross braces, making it unstable. The FACE program recommends that all scaffolds have a permanently installed ladder or other means of access to the scaffold. This may be a ladder designed as part of the scaffold or a separate ladder secured to the scaffold. It should be noted that the OSHA standard 29 CFR 1926.1053 requires that ladders must extend at least 42 inches above the work surface.

<u>Recommendation #2</u>: Employers should develop and implement a comprehensive written safety program.

<u>Discussion</u>: The employer did have an informal safety program which included regular safety meetings. We recommend that this program may be improved by developing and implementing a comprehensive written program designed to reduce or eliminate hazardous situations and practices. This program, which may be developed as part of a joint labor-management safety program, should include developing written safety policies and training the workers in these policies.

Recommendation #3: Employers must insure that scaffolds are properly erected and maintained

before use.

<u>Discussion</u>: The OSHA investigation found that the scaffold did not have the proper crossbracing for supporting the framework. Although not directly related to the incident, this could create a significant safety hazard. Scaffolding must be properly erected by trained personnel and maintained to insure its structural integrity. Scaffolds must also be appropriate to the job, including the load (weight) rating.

<u>Recommendation #4</u>: Employers should conduct regularly scheduled and unscheduled safety inspections at each jobsite.

<u>Discussion</u>: It is recommended that a person knowledgeable in erecting scaffolds periodically conduct a safety inspection of the scaffolds and their placement. It is also recommended that the scaffolds are inspected by the workers before each use to ensure that all ladders and supporting members are in place and in good condition.

#### **REFERENCES**

It is important that employers obtain correct information about OSHA regulations and methods of ensuring safe working conditions. Because it is often difficult for a small business to obtain this type of information, the following sources may be helpful:

## U.S. Department of Labor, OSHA

On request, OSHA will provide information on safety standards and requirements for fall protection. OSHA has several offices in New Jersey which cover the following areas:

Hunterdon, Union, Middlesex, Warren and Somerset Counties.....(908) 750-3270 Essex, Sussex, Hudson and Morris Counties......(201) 263-1003 Bergen and Passaic Counties.......(201) 288-1700 Atlantic, Gloucester, Burlington, Mercer, Camden, Monmouth, Cape May, Ocean, Cumberland and Salem Counties......(609) 757-5181

#### NJDOL OSHA Consultative Services

The New Jersey Department of Labor OSHA Consultative Service will provide free advice for business owners on methods of improving health and safety in the workplace and complying to OSHA standards. Their telephone number is (609) 292-3922.

### New Jersey State Safety Council

The NJ Safety Council provides a variety of courses on work-related safety. There is a charge for the seminars. Their address and telephone number is:

NJ State Safety Council 6 Commerce Drive Cranford, New Jersey 07016 Telephone (908) 272-7712

# Other Sources

Building trade organizations and labor unions are a good source of information on suppliers of safety equipment and training. Suppliers of building materials may be able to refer contractors to suppliers of fall protection equipment.