



SUBJECT: A 13-year-old construction laborer died when he fell from a scaffold board and struck a scaffold cross-brace.

SUMMARY

A 13-year-old construction laborer died on November 14, 2001, from blunt trauma to the abdomen when he fell from a scaffold board approximately five feet above the ground and struck a scaffold cross-brace. Oklahoma Fatality Assessment and Control Evaluation (OKFACE) investigators concluded that to prevent similar occurrences, employers should:

- Ensure that all subcontractors have adequately addressed all safety and health issues applicable to their operations prior to authorizing their work activities.
- Ensure that scaffolding erected on a construction site complies with regulatory requirements.
- Ensure adequate planning for response to medical emergencies.
- Develop and implement a comprehensive occupational health and safety management plan that is focused on continual improvement.

INTRODUCTION

A 13-year-old construction laborer died on November 14, 2001, from blunt trauma to the abdomen when he fell from a scaffold board approximately five feet above the ground and struck a scaffold cross-brace. The victim was one of three persons, all Mexican nationals who spoke very little English, on a bricklaying crew at a residential construction site when the incident occurred. OKFACE investigators could not determine the length of time that the crew had been on-site, but the brick veneer on the home was nearly complete. The usual crew of three adults normally completed 1½ houses per week. The bricklaying crew had been subcontracting work from a local masonry contractor for a long time. The two adult males on the crew were uncles of the decedent. OKFACE investigators reviewed the death certificate, OSHA Form 36 (Fatality/Catastrophe Report), and the investigation report from the local police department. While conducting the survey, OKFACE investigators interviewed two company representatives and a state labor standards enforcement officer.

The site at which the fatality occurred was a residential development located in a suburban area. The crew had completed laying the brick veneer except the upper third of the front of the home. The crew had set up a scaffold, consisting of a pre-fabricated metal frame five feet in height and a single scaffold board, across the front of the house.

OKFACE investigators identified no objective evidence of a safety and health program or safety and health training. State labor officials determined that the circumstances of the decedent's employment violated at least three state child labor laws, to include: 1) at thirteen years old, the child was too young to be employed, 2) the child's workday, approximately eight hours, exceed the maximum permissible, 3 hours, for a school day, and 3) a valid work permit/certificate had not been issued. Federal labor standards did not apply because interstate commerce and dollar amount criteria were not met.

INVESTIGATION

The crew arrived to continue bricklaying work at the suburban residence on November 14, 2001. The weather on the day of the incident was warm and clear with a temperature at the time of the incident, approximately 4:24 pm, of about 72°F with wind averaging 10 miles per hour out of the southwest with gusts to 20 miles per hour. The most recent significant rainfall had occurred ten days prior to the date of the incident. The employer dropped off the scaffolding equipment and the workers erected it themselves. The scaffolding was on an unstable surface. It was not level and not completely planked. The workers had not been instructed on how to correctly erect the scaffolding. The victim did not speak English well, however the primary language of other workers at the work site was Spanish. The decedent was positioned on the scaffold when he fell, striking his abdomen on a cross-brace as he fell. Following the incident, the two uncles took the victim's body to Mexico for burial and did not return to work. Because there were no witnesses available to interview, OKFACE and other investigators could not conclusively determine the task or function in which the decedent was engaged or other reason for which he had climbed onto the scaffold. However, the Medical Examiner interviewed the victim's aunt who reported that the decedent was working with his uncle brickling a new residence. The employer reported that prior to being called about the incident, he was not aware that the victim was at the job site. The employer paid one person on the crew who paid the others. Additionally, investigators could not conclusively determine the reason for his fall; however, the single scaffold board had become dislodged and came to rest with one end on the scaffold and one on the ground.

After the fall, the victim reportedly stood up and was rubbing his head. As he was walking around he began vomiting. The victim's uncles placed the victim in the back seat of a van and attracted the attention of the development's construction superintendent who was at another residence down the street. The superintendent found the victim lying unconscious in the van and used his mobile phone to call the local fire department. Fire department personnel were dispatched at 4:27 pm and arrived at the scene four minutes later. An emergency transport unit arrived and took the victim to an urban hospital approximately eighteen miles from the site of the incident. The boy was pronounced dead at 5:25 pm.

CAUSE OF DEATH

The Medical Examiner listed the immediate cause of death as blunt trauma of the abdomen.

RECOMMENDATIONS

Recommendation #1: Contractors should ensure that all subcontractors have adequately addressed all safety and health issues applicable to their operations prior to authorizing their work activities.

Discussion: OSHA policy imposes a certain amount of responsibility on contractors for the safety and health of persons that perform subcontracted work on sites under their direct control. Additionally, certain regulations specifically require communication and corroboration between contractors on multi-employer worksites. The crew with which the decedent was working when this fatal incident occurred reportedly was highly productive and consistently provided a high quality, high value service. However, critical regulations and basic employer responsibilities were not followed, as particularly evidenced by violations of state labor

standards and numerous federal health and safety requirements. This condition may be attributable to a number of factors, including their foreign origin and their limited command of the English language. Contractors can assess subcontractor comprehension of the labor regulations that apply to their type of business, determine their compliance with those requirements, and provide information or other assistance to help them achieve compliance. Such assistance would not only provide a valuable service to small employers but also would reduce the contractor's own regulatory and third party liability risks.

Recommendation #2: Employers should ensure that scaffolding erected on a construction site complies with regulatory requirements.

Discussion: OKFACE investigators could not identify any objective evidence that the employer for whom the decedent worked had any safety program in place or had an understanding of OSHA regulations that apply to the erection and use of scaffolding on construction sites. Essential requirements for the design, load capacity, construction, use and inspection of the scaffolding in use at the site had not been met. Examples of design inadequacies of this scaffolding included insufficient planking and unsecured scaffold boards. Employers should apply, at a minimum, the requirements established in OSHA's construction standards for the erection and use of scaffolds (29 CFR 1926, Subpart L).

Recommendation #3: Employers should ensure adequate planning for response to medical emergencies.

Discussion: OKFACE investigators identified no objective evidence that the employer for whom the decedent worked had made any provisions for first aid, emergency communication, or emergency medical care. Employers should apply, at a minimum, the requirements established in OSHA's construction standards for medical services and first aid (29 CFR 1926, Subpart D).

Recommendation #4: Employers should develop and implement a comprehensive occupational health and safety management plan that is focused on continual improvement.

Discussion: The dynamic nature of the contemporary workplace necessitates a management model that ensures continual improvement in virtually all aspects of the business. This principle is particularly critical with regard to the management of workplace health and safety, which must be integrated into all operational aspects of an organization's business plan. OSHA's construction regulations (29 CFR 1926, Subpart C) establish certain basic requirements for such a program. Resources for the development and implementation of an acceptable occupational safety and health program, particularly including the publication *Safety and Health Program Management Guidelines* (FR 54:3904-3916) are available through the United States Department of Labor, Occupational Health & Safety Administration.

REFERENCES

1. Title 29 Code of Federal Regulations, Part 1926 (*Occupational Safety and Health Standards*).
2. Federal Register 54: 3904-3916
3. The OSHA Internet website, www.osha.gov.



The Oklahoma Fatality Assessment and Control Evaluation (OKFACE) is an occupational fatality surveillance project to determine the epidemiology of all fatal work-related injuries and identify and recommend prevention strategies. FACE is a research program of the National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research.

These fatality investigations serve to prevent fatal work-related injuries in the future by studying the work environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in injury, and the role of management in controlling how these factors interact.

For more information on fatal work-related injuries, please contact:

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