MIFACE INVESTIGATION #05MI088

SUBJECT: 69-Year-Old Male Construction Contractor Dies After Falling From Open Folding Chair He Was Standing On

Summary:

On August 19, 2005, a 69-year-old male construction contractor died from complications of a fall that occurred on July 27, 2005. The victim was standing on the seat of a steel folding chair and fell, striking his head on a tile floor. The victim was performing "punch-list" tasks (tasks that needed to be completed to get the renovation into the condition agreed to in the contract) for a recently renovated building. One of the tasks was to install light bulbs in a range hood. He could not reach the light bulb socket while standing on the floor. He looked for something to elevate him so he could reach the socket. He had not brought a ladder with him. Finding a folding chair nearby, he moved it to the incident site (See Figure 1 NOTE: The folding chair in Figure 1 is the type of folding chair used by the victim, but the picture of the chair was taken in a different location from where the victim fell.) Holding a light bulb that was protected by a globe in one hand, he stood on



Figure 1. Similar folding chair to type victim was standing on

the open folding chair. Before he could screw in the light bulb, he fell from the chair seat. The event was unwitnessed. A building employee working inside the building heard a crash, and investigated, but did not see the victim. Approximately 10 minutes later, he heard someone yelling for help (the victim), and he again went to investigate. The victim had moved to a nearby wall and was found sitting against the wall by the building employee. This employee called to an employee outside, and asked for assistance. One of the building's employees called 911. The victim was taken by ambulance to a nearby hospital, and then airlifted to another hospital, where he died approximately three weeks after the injury.

RECOMMENDATIONS

- Construction employers should develop, implement and maintain an accident prevention program (health and safety program) that includes evaluation and elimination of hazards associated with "punch-list" work.
- Employers should provide appropriate training to employees to reinforce safe work practices and procedures both in the workplace and at home.

Key Words: Construction, Fall, Folding Chair

INTRODUCTION

On August 19, 2005, a 69-year-old male construction contractor died from complications sustained in a fall that occurred on July 27, 2005. He fell from a folding chair he was standing on while performing "punch-list" work at a recently renovated building. On August 24, 2005, the Michigan Occupational Safety and Health Administration personnel who had received a report on their 24-hour-a-day hotline that a work related injury leading to a fatality occurred on July 27, 2005, notified MIFACE investigators of the fatality. On February 23, 2006, the MIFACE researcher interviewed the company owner (victim's son) and several employees who worked in the building at the location of the incident. The building employees permitted MIFACE to take pictures of the incident site and a folding chair similar to the one used by the victim. MIFACE removed the building identifiers from the seat of the folding chair. During the course of writing this report, MIFACE reviewed the death certificate, the medical examiner death scene investigation report, emergency medical service ambulance log, and MIOSHA citations.

The company had a total of eight employees. It has been in business since 1988, performing general commercial construction activities. The victim had 43 years of experience in the commercial construction business. He worked full-time as a construction manager at the company that was owned by his son. The victim's workday began at approximately 8:00 a.m. The company had been performing remodeling at the building for approximately 8 months. The firm's owner stated that the company had a written health and safety program, but did not conduct "formal" health and safety training. According to the company owner, employee safety and health training consisted of on-the-job training. Employees were "trained as they go". If an employee did not perform work safely and conform to the firm's policies, then they were fired. Safety meetings were held as necessary.

The MIOSHA investigation resulted in one citation classified as "other" being issued to the company for not reporting, orally, work-related fatalities or hospitalization of three or more employees as described in rule 408.2110 within eight hours to the Michigan Department of Labor and Economic Growth, Bureau of Michigan Occupational Safety & Health Administration (Admin Rule 2139, Recording and Reporting of Occupational Injuries and Illnesses, Rule 1139(1)).

INVESTIGATION

The victim arrived at the worksite in a pickup truck at approximately 9:00 a.m. to perform "punch-list" work for the building the company had recently renovated. The victim, among other "punch-list" work activities, was to install four light bulbs in a range hood that was approximately eight feet long and seven feet above the clay tile floor (See Figure 2). The victim could not



Figure 2. Lights in range hood

install the lights while standing on the floor. No ladder was nearby, and he did not have one on the pickup truck. In an adjacent room, he found a metal folding chair to stand on to raise him to a sufficient height to install the bulbs.

The unwitnessed: event was however evidence suggests that after opening the folding chair, he held the light bulb in one hand, and climbed onto the open folding chair to install the first of four light bulbs in the socket closest to the wall. When open, the folding chair seat was approximately 20" above the ground. Prior to installing the light bulb and at some point during this process, he fell from the chair, striking his head against the tile floor. After falling, he "dragged" himself to a nearby wall, and sat up against the wall. (See Figure 3) His glasses were found on the



Figure 3. Work area of victim

other side of the room. The chair was found folded up, and the intact light bulb was located on the floor near the chair. A building employee heard the crash and went to investigate. He did not see the victim. Approximately 10 minutes later, the same building employee walked in the general area of the incident and heard the victim yelling for help. This employee called for assistance to a second building employee who was working outside. One of the building employees called 911. The victim was found sitting against a wall, bleeding from the back of his head. The victim told the employee who found him that he fell off of the chair.

The victim was treated at the scene by emergency response personnel and taken to a nearby hospital by ambulance. Several hours later, after evaluation by hospital personnel, the victim was airlifted to another hospital with more suitable facilities to treat head injuries. He died three weeks later at the second hospital due to complications from the injury sustained at the time of the fall.

CAUSE OF DEATH

The cause of death as stated on the death certificate was subdural bleeding due to closed head trauma due to a fall. Neither an autopsy nor toxicological tests were performed.

RECOMMENDATIONS

• Construction employers should develop, implement and maintain an accident prevention program (health and safety program) that includes evaluation and elimination of hazards associated with "punch-list" work.

Under most construction work-site scenarios, the proper equipment, such as a ladder, is available to workers so they can safely perform the work activity. Most new construction or remodeling projects have tasks that need completion, correction, repair, or that require review at of the project and/or at the time of final walkthrough. "Punch-list" items, such as installing missing or back-ordered items and completing repairs and touch-ups, may require the same equipment and tools as the actual construction or remodel process. When performing "punch-list" work the equipment required to perform the work may not be on-site because the contractor has finished the primary work and has taken the equipment to another site. MIFACE recommends that employers review "punch-list" work tasks to identify potential hazards, the equipment required to permit the employee to safely perform the work, and ensure that the equipment is present at the work site.

• Employers should provide appropriate training to employees to reinforce safe work practices and procedures both in the workplace and at home.

MIOSHA Construction Safety Standard, Part 1, General Rules, Rule 114(2)(d) requires employers to instruct each employee in the recognition and avoidance of hazards and the regulations applicable to his or her work environment to control or eliminate any hazards or other exposure to illness or injury.¹ The victim had been working in the construction industry for many years. Less experienced workers are often the focus of employer health and safety training. Experienced workers may not receive the same health and safety training attention by employers because of their work experience in the field. For experienced workers, periodic review of the specific hazards of construction tasks, especially the varied tasks that "punch-list" work can provide, reinforces the importance of safe work practices and procedures.

People, whether at work or at home, may not perceive the safety risk that standing on a chair entails, especially when there is no ladder or stepstool readily available. Most people, at one time or another, have stood on a chair to reach an object overhead. Because there was no negative consequence (they did not fall and hurt themselves), the behavior may be repeated. This tragic incident demonstrates that this common risk behavior can result in death.

RESOURCES

MIOSHA Standards cited in this report can be directly accessed from the Michigan Department of Labor and Economic Growth, MIOSHA website <u>www.michigan.gov/mioshastandards</u>. The Standards may also be obtained for a fee by writing to the following address: Michigan Department of Labor and Economic Growth, MIOSHA, MIOSHA Standards Section, P.O. Box 30643, Lansing, Michigan, 48909-8143. MIOSHA Standard Section phone number is (517) 322-1845.

¹ MIOSHA Construction Safety Standard, Part 1, General Rules.

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