

MO FACE INVESTIGATION 97MO096

SUBJECT: Highway Department Supervisor Falls From Bluff In Missouri

SUMMARY:

On August 21, 1997, a 44-year-old male supervisor fell approximately 30 feet from a bluff to a state highway. Construction workers were digging several pits along the top of the bluff. Concerned that the digging may dislodge several large boulders on the bluff face, they contacted the state highway department to come to the site for an inspection. The inspector, after arriving at the site, immediately proceeded out onto the bluff. He climbed up onto a large rock and crouched down on his hands and knees overlooking the edge. He apparently lost his balance and fell to the road below.

The MO FACE investigator concluded that in order to prevent similar occurrences, all employers should:

- *ensure that all employees who are exposed to fall hazards wear fall protection equipment;*
- *provide worker training for hazard recognition and avoidance, along with safe work practices.*

INTRODUCTION:

On August 21, 1997, the MO FACE Program was notified of a fatality incident involving a highway inspector falling from a bluff. The inspector (victim) was inspecting a bluff face for loose rocks and boulders when he apparently lost his balance and fell to the highway below. On August 22, 1997, the MO FACE investigator traveled to the incident site, met with the department's safety director, and assisted in interviewing witnesses.

The employer in this incident has been in operation since the 1920's and maintains most of the state roads and highways. The victim had been employed with the highway department for 23 years at the time of the incident.

The employer has an occupational safety and health plan as well as written safety rules and procedures. The victim was a regional maintenance inspector and did not routinely make this type of inspection in the field. The employer had a fall prevention safety policy but it is not known if he had received any training that specifically addressed the hazard involved in this incident.

INVESTIGATION:

On August 21, 1997, a male state highway inspector died following a 40-foot fall from a bluff. A construction company digging pits along the top of the bluff was concerned that their jack-hammering and digging was disturbing the equilibrium of several large boulders perched on the bluff

over a major state highway. The company contacted the state highway department requesting a site inspection. The victim received notification of the request and opted to go to the site. The victim was met at the site by the construction supervisor and was directed to the area of concern. He introduced himself briefly to the other workers before walking directly toward the bluff and climbing down a small rock ledge. He then climbed out on to a large boulder overlooking the bluff edge. The boulder was mostly flat on the top and sloped towards the edge at an approximate 20 to 30 degree slope. Dressed in meeting attire of a shirt, slacks and penny-loafer type shoes, he crouched down on his hands and knees and peered over the edge. He apparently lost his balance and fell from the rock, tumbling down the incline toward the bluff face where he was able to grab hold of a small tree. He held onto the tree for just a moment before losing his grip and falling to the road ditch below. The construction workers on the bluff top climbed down to the bluff edge to see where the victim landed. A motorist witnessed the fall, stopped and was giving aid to the victim. While the construction supervisor called 911, the construction crew drove down the hill to help aid the victim. Local ambulance services arrived on the scene but the injuries sustained in the fall were massive. The local coroner was called to pronounce the victim deceased at the scene.

CAUSE OF DEATH:

Multiple Head and Chest Injuries

RECOMMENDATIONS/DISCUSSION:

The following recommendations are intended to educate all employers and employees on how similar occurrences can be avoided.

Recommendation #1: Employers should ensure that all employees who are exposed to fall hazards wear fall protection equipment;

Discussion: Employees exposed to fall hazards should be fitted with a full-body harness, lanyard and lifeline. According to OSHA standards, the lifeline shall be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,400 pounds. Lifelines used on rock-scaling operations, or in areas where the lifeline may be subjected to cutting or abrasion, shall be a minimum of 7/8-inch wire core manila rope. For all other lifeline applications, a minimum of 3/4-inch manila or equivalent, with a minimum breaking strength of 5,400 pounds, shall be used. The lanyard shall be a minimum of 1/2-inch nylon, or equivalent, with a maximum length to provide for a fall of no greater than 6 feet. The rope shall have a nominal breaking strength of 5,400 pounds.

Recommendation #2: Develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, training in hazard recognition and avoidance.

Discussion: All employers should emphasize the safety of their employees by developing, implementing, and enforcing a

comprehensive safety program. The safety program should include, but not be limited to, training workers in the proper selection and use of personal protection equipment, along with the recognition and avoidance of hazards in the work environment.

The Missouri Department of Health, in co-operation with the National Institute for Occupational Safety and Health (NIOSH), is conducting a research project on work-related fatalities in Missouri. The goal of this project, known as the Missouri Occupational Fatality Assessment and Control Evaluation Program (MO FACE), is to show a measurable reduction in traumatic occupational fatalities in the State of Missouri. This goal is being met by identifying causal and risk factors that contribute to work-related fatalities. Identifying these factors will enable more effective intervention strategies to be developed and implemented by employers and employees. This project does not determine fault or legal liability associated with a fatal incident or with current regulations. All MO FACE data will be reported to NIOSH for trend analysis on a national basis. This will help NIOSH provide employers with effective recommendations for injury prevention. All personal and company identifiers are removed from all reports sent to NIOSH to protect the confidentiality of those who voluntarily participate with the program.

SIGNATURES:

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MO FACE Dissemination List