

MASSACHUSETTS FACE-91-06

Sign Erector Dies in Falling 90 Feet from a Ladder Hung over a Billboard in Massachusetts

SUMMARY

A 39 year old male, owner/operator of a sign company (victim) died after falling 90 feet from a ladder suspended from a billboard on which he was working. The victim, his son (age 19) and another man (coworkers) were changing the billboard advertisement. The victim was standing on a 25-30 foot ladder which was hooked over the top of the billboard, while the others worked on the opposite side of the billboard. Witnesses from a nearby gas station and electric utility company state they saw the victim "bounce his ladder" to move it to the left and fell off the ladder, then off the platform to the ground below. The victim died from injuries sustained in falling, landing on a rail car below and then the ground. Massachusetts Department of Labor and Industries investigators concluded that, in order to prevent future similar occurrences, employers should:

- **ensure that people working over 25 feet above ground level should be protected from falls with a safety harness, life line and lanyard**
- **ensure that movable ladders are tied, blocked or otherwise secured to prevent their being displaced**
- **ensure that work off a platform more than 6 feet over ground level be guarded by a railing on all open sides**
- **develop and implement safe work procedures and training for workers exposed to fall hazards.**

INTRODUCTION

On April 3, 1991, at 10:40a.m., a 39 year old male died of injuries sustained in a 90 foot fall from a billboard. This fatality was reported to the Occupational Fatality Hotline at Massachusetts Department of Labor and Industries by the medical examiner that same day.

On April 5, 1991, investigators from the Massachusetts Department of Labor and Industries investigated the incident. They obtained the police and ambulance report including police photographs. Additional photographs of the scene were taken two days after the incident.

Information about the company's history or the victim's work experience was not obtained. The son was present at his father's death. Further investigation with the son was not pursued. Two days after the incident, no one from the sign company remained at the site of the fatality.

INVESTIGATION

The sign company contracted with the victim's company to change the advertisement on this billboard, which is visible from an interstate highway. The victim and the co-workers were working on this dry Wednesday morning off a platform at the base of the billboard 65 feet in the air. The two employees were working on the west side of the sign. The victim was working on a ladder which was suspended by hooks from the top of the billboard 25-30 feet above the platform on the east side of the sign.

Several employees of another company witnessed the fall at about 10 a.m., but the co-workers did not.

It was reported that the victim was attempting to bounce the ladder to the left while he was standing on it. The ladder may have slipped off the billboard. The victim fell to the platform but had only one hand grasping it. He subsequently fell, landing on the edge of a flatbed rail car parked on the railroad tracks below the side of the billboard, then to the ground. The total distance of the fall was about 90 feet.

Representatives of the railroad company were notified. An ambulance arrived within three minutes of the fall. Emergency medical technicians found him barely conscious with fractures of his left arm and leg and posterior skull. He was pronounced dead at the hospital at 10:40 a.m.

CAUSE OF DEATH

The medical examiner listed the cause of death as multiple blunt trauma.

RECOMMENDATION/DISCUSSION

Recommendation #1: Employers should ensure that work over 25 feet above ground level be protected from falls with a safety harness, life lines or lanyard.

Discussion: Employers should provide appropriate fall protection equipment for all workers exposed to fall hazards. The unprotected nature of this work is striking. The height of the sign (65 feet above ground), the suspension of the ladder (25-30 feet above the base of the billboard), and the need to move the work station and change panels along the length of the sign made this work extremely hazardous. Attempts to move the ladder while suspended increased the risk. A harness and life line attached to the sign would offer a fail safe mechanism against a trip, slip or fall leading to a fatal outcome. Massachusetts regulations 454 CMR 10.25 (7)(d) require such fall protection.

Recommendation #2: Employers should ensure that movable ladders are tied, blocked or otherwise secured to prevent movement.

Discussion: A ladder was hung from the top of the billboard sign by hooks at the top of the ladder. Lateral movement was possible. Bouncing a ladder to the side was a short cut to avoid climbing down the ladder and repositioning it from the bottom. Regulations requiring securing the ladder include Massachusetts 454 CMR 10.103 (1)(K) and OSHA'S 29 CFR 1926.1053

Recommendation #3: Employers should ensure that work performed on a platform more than 6 feet over ground level be guarded by a railing on all open sides.

Discussion: The need for a guardrail on this platform may be in conflict with the need for visibility for the billboard. One solution might be permanent uprights fixed to the corners of the platform from which temporary railings may be added when work is being done on the billboard. If guard rails cannot be added perhaps certain billboards, which cannot be altered safely, should not be used. Regulations pertaining to this recommendation include 454 CMR 10.111 (4)(7) and 29 CFR 1926.500(d)

Recommendation #4: Employers should develop and implement written safe work procedures and training for workers exposed to fall hazards.

Discussion: Both employers and employees must be apprised of conditions that result in fatal falls. Access to information and training may be more difficult for small employers. They frequently are owner operators, have a less stable work force, and may be less likely to be members of a trade organization. The employer must ensure safe work conditions are present and safe work practices are used. Programs that target small employers may be beneficial in improving access to and use of available health and safety information. OSHA requires such training under 29 CFR 1926.21

REFERENCES

1. 454 CMR 10.25 (7)(D), Code of Massachusetts Regulations, Boston, MA. (7/8/88)
2. 454 CMR 10.111 (4)(7), Code of Massachusetts Regulations, Boston, MA. (7/8/88)
3. 29 CFR 1926.1053, Federal Register, Vol. 55 No. 220. Pages 47689-74691. (11/4/90)
4. 454 CMR 10.103 (1)(k), Code of Massachusetts Regulations, Boston, MA. (7/8/88)
5. 29 CFR 1926.500 (d), Code of Federal Regulations, Washington, D.C.: U.S. Government Printing Office, Office of the Federal Register. Pages 186-187 (1991)
6. 29 CFR 1926.21, Code of Federal Regulations, Washington, D.C.: U.S. Government Printing Office, Office of the Federal Register. Pages 16. (1991)

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