MASSACHUSETTS DPH/DLI/NIOSH
FACE MA-92-08
DATE: MAY 07, 1992

TO: Director, Massachusetts Department of Public Health, Occupational Health Surveillance Program

FROM: Massachusetts Fatal Accident Circumstances and Epidemiology (MA FACE) Project Field Investigator

SUBJECT: Truck Driver Dies in Fall From Flat Bed Trailer in Massachusetts

---

SUMMARY

A 33 year old male interstate truck driver from Massachusetts died as the result of injuries sustained in a 10 foot fall from on top of his load while securing it to his flatbed trailer. On the day of the incident the victim was routinely assisted by a co-worker using strapping to secure a load of rolled chain link fencing to his flatbed trailer for delivery to an out-of-state client on the following day. While on top of the load, and during the course of securing it to the flatbed, the co-worker claimed that the victim lost his balance, hollered, and slid down unsecured rolls of fencing falling approximately 10 feet to the parking lot below. Remaining fully conscious throughout this ordeal, the victim complained only of back pain and a minor laceration on his mouth. Emergency response personnel were routinely summoned and the victim was transported to the regional hospital and subsequently to yet another area medical center were he died eight days later. The Massachusetts FACE Investigator concluded that in order to prevent future similar occurrences, employers should:

* develop, implement, and enforce a comprehensive safety program that includes analysis and discussion of transport vehicle loading and unloading procedures

* consider purchase and use of transport vehicles that are fully enclosed to eliminate the need of mounting the load to secure it from movement

* consider loading and/or unloading flatbed transport vehicles in an area of the yard or facility where unprotected sides of transport vehicle could be temporarily protected, or use alternative methods not requiring an unsecured employee to be on the load, thus eliminating a fall from atop the load and/or collapse of the load itself

INTRODUCTION

On March 27, 1992 the Massachusetts FACE Investigator was notified by the Massachusetts Department of Public Health that a routine screening of death certificates identified a targeted FACE Project fatality. The death certificate indicated that a 33 year old male truck driver died on December 10, 1991 as a result of injuries sustained in a fall on December 02, 1991. An immediate investigation was initiated. On April 07, 1992 the MA FACE Investigator traveled to the incident site and interviewed the company president. The municipal police chief, a police department detective, and the municipal fire chief were also interviewed. The police department report, fire department dispatch log, employer's first report of injury, emergency medical services report, and the death certificate were all obtained during the course of the investigation.

The employer in this incident was a wire manufacturer of chain link fence and a distributor of fence products. In business for 100 years, it employed 43 workers in various clerical, manufacturing, and truck driving capacities. The company did have a written safety program and designated safety officer. There were however, no safety rules and/or procedures specific for the type of fatality that occurred. The victim in this incident was a load prep and interstate truck driver with all types of training and six years on the job experience with this employer.

INVESTIGATION

The employer was a manufacturer of wire for chain link fence and a distributor of fence products. The victim in this incident was a full time 33 year old male employee who had 6 years of on-the-job experience as a load prep/interstate truck driver. On the day of the incident, the victim and a co-worker were strapping down a load of rolled chain link fence on a flat bed trailer truck for transport to an out of state client. The victim had performed this task hundreds of times over the course of his employment without incident. The routine task simply included the securing of the load to the truck to ensure it's integrity while being transported over the road. Once situated on top of the load, and in the course of preparing to secure it, the victim lost his balance, hollered, and slid approximately 10 feet down the load and onto the parking lot below. Emergency medical services were summoned by an employer representative and routinely dispatched to the incident site. The EMS report documented that upon arrival at the site, the victim's eye movement was spontaneous, he was oriented, skin temperature/color/and moisture were normal, and pupils were reactive. Motor response showed flexion and extension

pain, and victim complained of middle upper back pain and a minor laceration of the mouth. He was then transported to the local hospital and subsequently moved to a greater metropolitan area medical center where he became unresponsive and eventually died eight days later.

CAUSE OF DEATH

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

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should develop, implement, and enforce a comprehensive safety program that includes analysis and discussion of transport vehicle loading and unloading procedures.

* Discussion: Identifying hazards associated with vehicle loading and unloading procedures and remaining fully aware of the potential effects of collapsing loads and/or the hazards associated with securing loads should be made a vital part of a comprehensive safety program. While task specific safety measures were followed in this employers manufacturing processes, there were no task specific measures for driver/delivery personnel to follow. Identifying hazards associated with ALL job-related processes and implementing the means of preventing an incident, must be made part of virtually any task no matter how repetitive or insignificant.

Recommendation #2: Employers should consider purchase and use of transport vehicles that are fully enclosed to eliminate the need of mounting the load to secure it from movement.

* Discussion: While flatbed transport vehicles remain an integral part of the nations transportation system, special consideration should be given to those loads that are manually secured in place and/or manually unloaded. Fully enclosed box type trailers such as those commonly seen on America's highways would not only eliminate the need to scale and mount the load thus eliminating potential fall hazards, but could also play a vital role in minimizing the collapse and/or shifting of loads on flatbed trailers that commonly cause over the road traffic accidents.

Recommendation #3: Employers should consider loading and/or

unloading flatbed transport vehicles in an area of the yard or facility where unprotected sides of the transport vehicle could be temporarily protected during loading and/or unloading operations, or use alternative methods not requiring an unsecured employee to be on the load, thus eliminating the fall hazard from atop the load and/or collapse of the load itself.

* While not commonplace, there exists loading/unloading docks fully equipped to specifically prevent loads from shifting or collapsing during such operations. While typically not constructed to minimize or prevent fall hazards, they are simply constructed rigid walls of approximately 15 feet in height spaced apart in a manner thus barely permitting the trailer to fit between. Had a system such as this been in place at the time of the incident, the topload being only 10 feet from parking lot level would have provided the victim with an additional 5 feet of adjacent wall to prevent his fall. This recommendation of course, would realistically have to be in place at the point of delivery as well as the point of origin. Employers must continue to identify task specific hazards and employ some suitable means of intervention to eliminate or minimize the hazards.