Explosives Representative Head-On Crash in Wyoming

SUMMARY

A 31 year old male customer service representative of an explosives manufacturing firm died in a hospital emergency room approximately 2 hours after having been involved in a preventable night time left-frontal traffic crash with an unloaded dump truck on a two lane downgrade curve in a hilly rural setting. The victim was driving a late model American made company-owned pickup with the headlights in the "bright" position, when his vehicle crossed the center line and collided with a late model dump-type semi-tractor with double trailer that was west bound and travelling uphill at the posted speed limit in a remote sparsely populated area. The force of impact crushed the engine and passenger compartment of the victim's vehicle, pinning the victim inside the wreckage. First responders were notified approximately 20 minutes after the crash occurred and were on the scene 36 minutes later.

Employers may be able to minimize the potential for occurrence of this type of incident through the following precautions:

- **Provide periodic safe driving reviews (similar to the National Safety Council Defensive Driving Program) to outside sales personnel.**
- **Encourage personnel involved in travel to utilize Interstate roadway when practicable, particularly when driving in hours of darkness.**
- **Review procedures for scheduling sales calls to distant locations to assure that traveling personnel minimize driving when darkness or fatigue might create unnecessary hazards.**

INTRODUCTION

On Friday evening, March 6, 1992, a customer service representative who was returning to his home base from an out-of-state sales call, apparently lost control of his vehicle, which drifted across the center line of a two lane rural roadway, striking the front left of a westbound semi-trailer with the front left of the victim's pickup. The roadway was dry, asphalt and unlighted, on a grade and curve with clear to cloudy weather conditions, and was properly marked to designate the center line and shoulder areas. The posted speed limit for the area was 55 miles per hour. Lap and shoulder belts were in use by all persons involved in the incident and there were no apparent vehicle defects as contributors. Both vehicles were disabled by the crash and had to be towed from the scene.

INVESTIGATION

Through a notification agreement with the Accident Records Section of the Wyoming Department of Transportation, the WY- Wyoming FACE Project was notified of the incident by copy of the

Investigator's Traffic Accident Report on March 16, 1992. Conversations were held with the employer and the investigating officer, and hospital and coroner's reports were requested.

Emergency Medical Services was notified approximately 20 minutes after the crash occurred and was on the scene 36 minutes after notification. The victim was extricated from his vehicle by volunteer fire rescue personnel, and arrived in the hospital emergency room approximately 1 hour after arrival of ambulance personnel at the scene. CPR was begun en route and continued at the emergency room. The victim was treated for 23 minutes, and expired in the emergency room.

The employer had been in business for over twelve years as a manufacturer and distributor of explosives. The business employs 50 people, with five serving in the occupation of technical service and sales. Typical duties of customer service representatives was to call on clients, sell product and provide technical services as requested. The company does employ a safety officer and has written rules and procedures. The only rules and procedures that were specifically geared toward traffic safety proscribed seatbelt use and compliance with posted speeds.

The victim had been employed by the company for 7 years, involved in sales and technical services for the past two years. There was no formal training for the position other than to use the technical knowledge gained from previous experience with the company.

The victim was presumably returning home from a sales call at the time of the incident, and was expected to be travelling east on Interstate highway south of the incident site. There is no indication as to why he was driving on two-lane roads, or whether some level of worry, fatigue, or business-related distraction was a contributor.

CAUSE OF DEATH

The Medical Examiner listed the cause of death as Hemorrhagic shock, due to bilateral hemothorax, due to Rupture of descending aorta, with a significant condition of Pneumothorax with rupture of spleen.

RECOMMENDATIONS/DISCUSSION

Companies employing outside sales personnel should include safe driving procedures in safety rules and rocedures. Periodic update training, such as the National Safety Council's Defensive Driving Course could be provided on an annual basis, or concurrent with renewal of driver's license or company car license renewal.

No roadway deficiencies were noted. The road was asphalt and dry. The incident occurred on a curve and upgrade. Roadway markings were sufficient to indicate the center line and shoulders. While the incident occurred in darkness with no roadway lighting, the roadway was dry and the weather was clear to cloudy.

The victim was trapped inside the vehicle as a result of the force of the crash, and was unable to extricate himself. The engine compartment, roof, and inner cab were crushed by the force of impact, prohibiting persons at the scene from access to the victim prior to extrication. Distances involved

prevented quicker response than occurred. Ambulance, fire rescue and law enforcement personnel responded immediately on notification, but had to cover considerable distances to arrive at the scene, and to transport the victim to the nearest emergency room.

Extreme care should be taken by companies whose sales personnel transport explosives and other hazardous materials, to guard those products against the possibility of traffic altercations. While no additional hazard was involved in this incident, it points out the high risk potential to company vehicles where product might be existent.

There may be an advantage to the company to further pursue the reason why the sales representative was outside the anticipated course of travel at the particular time, and if there is reason to suspect fatigue or business-related distraction that contributed to this incident. There was no apparent reason, other than fatigue, distraction, or asleep at the wheel, for the victim to have crossed the center line without taking evasive action. The vehicle was new and low-mileage with no identifiable defects. Lap and shoulder belts were available and in use.

FATAL ACCIDENT CIRCUMSTANCES AND EPIDEMIOLOGY (Wyoming FACE) PROJECT

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), performs Fatal Accident Circumstances and Epidemiology (Wyoming FACE) investigations when a participating state reports an occupational fatality and requests technical assistance. The goal of these evaluations is to prevent fatal work injuries in the future by studying the working environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact.

States participating in this study include: Georgia, Indiana, Kentucky, Maryland, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

NIOSH Funded/State-based Wyoming FACE Projects providing surveillance and intervention capabilities to show a measurable reduction in workplace fatalities include: Alaska, California, Colorado, Massachusetts, New Jersey, Minnesota, Missouri, Wisconsin, and Wyoming.

Additional information regarding this report is available from:

Wyoming Occupational Fatality Analysis Program
522 Hathaway Building - 2300 Capitol Avenue
Cheyenne, WY 82002
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Please use information listed on the Contact Sheet on the NIOSH FACE web site to contact In-house FACE program personnel regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.