

Fatality Investigation Report

OR 2003-18-1

Auto salvage worker killed by unsecured car on transporter

Summary

On July 25, 2003, a 37-year-old truck driver for an auto-salvage company was killed when a salvage vehicle rolled off the top deck of his truck during loading. The car was lifted into position by a forklift. The victim was assisting in the loading operation, but had turned toward the rear of the truck, apparently to prepare the lower deck for the next car. Once released from the forklift to the top deck of the truck, the unsecured car immediately rolled backward. The victim was struck in the back of the head and knocked down as the front end of the car fell to the main deck on top of him. His injuries were immediately fatal.



Typical vehicle hauling setup on a transporter.
OR FACE Photo

The local police, fire and medical examiner were called to the scene. The medical examiner determined the incident to be an industrial accident and pronounced the victim dead at the scene.

Cause of death: Massive chest and head injuries

Recommendations

1. **Secure loads to the forklift, and be sure the load is completely secured in the transporter before removing the forklift.**
2. **A forklift operator must be sure that other workers are clear before releasing a load, particularly if direct line of sight is obscured.**
3. **Ensure effective communication between loading partners.**
4. **Employees who demonstrate loss of proficiency should be retrained.**

Keywords: Transportation, Machine-Related, Forklift

Introduction

On July 25, 2003, a 37-year-old white male truck driver for an auto-salvage company was killed when a salvage vehicle rolled off the top deck of his truck during loading. The Oregon FACE field investigator was informed of the incident from the local newspaper the next day. A site visit on July 28 included interviews with the forklift driver, the salvage yard manager, and employee witnesses. The employer of the victim declined to participate in the investigation, but an interview was conducted with a representative of the employer. An interview was also conducted with the deputy medical examiner that responded to the scene. The medical examiner's report was obtained on Oct. 7. Oregon OSHA conducted an investigation and a citation was issued on November 5, 2003. Local metro police were on scene, but do not typically file an investigation report unless criminal intent is determined.

The victim worked as a tow-truck driver for an auto salvage company that purchases vehicles from the regional yard of a national auto auction firm, where the incident occurred. The victim had past experience with several tow companies, and regularly loaded and transported vehicles from this auction yard. The victim's employer was unable to provide evidence of safety training for employees.

The auction yard has been in business over 15 years, and has about 37 employees. It receives and sells about 200 cars per week. The forklift driver for the yard was Hispanic and had limited English proficiency, but he had worked with the victim before and they had established a comfortable level of communication using hand signals and verbal commands.

According to the Oregon OSHA report, the forklift operator had performed adequately during an evaluation in December 2002. Interviews further revealed that a few weeks after the evaluation, however, the forklift operator dropped a car in a similar fashion to this incident and by another account, ran into a parked car. Although discipline was administered, there was no safety investigation, nor was refresher training provided for the operator. Records also showed that the auction yard had been previously investigated by Oregon OSHA in 1999 for a forklift accident where an employee was run over as a result of the operator being unable to see through the load.

Investigation

On the day of the incident, the victim parked his multi-level, four-car transporter in the front lot of the auction yard to pick up four vehicles that had been purchased the day before by his employer. The forklift operator brought out the first car from the back lot and set it by the transporter, then brought out the mid-size Mercury involved in the accident. The victim strapped down the sprung hood and then jumped up on the main deck of the transporter to secure the car while the forklift approached and raised the car above the cab to load it on the top deck.

The car was unsecured on the forks of the forklift. The engine faced the rear of the transporter. When the forklift operator lowered the car onto the upper deck, the victim allegedly secured the

car with a chain. The yard manager said the chain was not hooked to the frame of the car, but to a cosmetic part of the body, and was not properly positioned in its chain binder.

The forklift operator could not see the victim, but thought he heard someone say it was OK to pull away. When he backed away, the car began to roll toward the rear of the truck. The victim had apparently turned around and was unaware of the danger. No spotter was present to observe the operation and communicate between the forklift operator and the victim.

Recommendations/Discussion

1. Secure loads to the forklift, and be sure the load is completely secured in the transporter before removing the forklift.

Discussion

The salvage car was not secured on the forklift. Forklift operators are instructed to properly secure loads, and to not release a load until it is safe to do so. A stabilizing hook, used to temporarily secure a car on a transporter, must be attached to the frame of the car. The chain should also be checked to be sure it sits secure in its binding to prevent runout. The Mercury in this incident had four good tires, a questionable transmission, and a parking brake that was not used, which escalated the possibility for unsecured movement.

2. A forklift operator must be sure that other workers are clear before releasing a load, particularly if direct line of sight is obscured.

Discussion

The yard manager and operations manager both reported that the forklift operator was unable to see the victim through the load. In this case, the operator should not have released the load without being certain of the other's position. The operator appears uncertain of the OK signal by the victim, and perhaps the signal was instead a command to wait. When the line of sight is obscured, as appears common in loading cars on a transporter, an extra signal person able to see both workers is advised.

3. Ensure effective communication between loading partners.

Discussion

The two workmen relied upon gestures and verbal commands to communicate. The forklift operator was Hispanic, spoke little English, but understood somewhat better. Moreover, the two workers were acting independently, involved in their own tasks, without a coordinating their activities. Although they had some prior experience working together, they were not co-employees.

The yard manager claimed that the hand signals in this forklift operation are universally understood, but in this incident, with an obscured line of sight, hand signals could not be employed. The two workers needed to ensure that they understood and agreed upon definite verbal signals beforehand, particularly with the potential for confusion due to the language barrier. Explicit planning of the job tasks and their sequence is especially important between workers from different companies with limited experience working together.

4. Employees who demonstrate loss of proficiency should be retrained.

Discussion

Employees certified to safely operate a forklift should be retrained by the employer every 3 years. Any operator who has been observed performing an unsafe work practice, or has had an accident or near-miss accident, should attend refresher training. The forklift operator was responsible for an accident while operating the forklift less than a year prior to this incident, but was not retrained.

References

29 CFR 1910.178 Powered Industrial Trucks. Employer and operator training responsibilities are in subsection (l).

For More Information

The Center for Research on Occupational and Environmental Toxicology at Oregon Health & Science University performs Fatality Assessment and Control Evaluation (FACE) investigations through a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR). 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.

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