

Fatality Investigation Report

OR 2006-44-1

Young warehouse worker killed by backing forklift

SUMMARY

On November 6, 2006, an 18-year-old warehouse receiving clerk was killed after a loaded forklift struck him in a warehouse aisle. The clerk and the forklift operator were working together to prepare newly received merchandise for storage and shipment. After a morning break, the forklift operator drove into the storage area, loaded the last pallet, and began backing down the aisle at a slight angle. Looking over his shoulder, the operator saw the warehouse clerk walking up the aisle toward him. The operator yelled at the clerk, made eye contact, and hit the brakes and tried to steer away. The forklift struck the warehouse clerk and pinned him against a metal shelf. First aid was provided while waiting for emergency responders. The victim died on the way to the hospital.



A narrow-aisle stand-up lift truck was backing down a warehouse aisle with a loaded pallet when the warehouse clerk in this incident walked into the aisle (stock photo of similar equipment).

CAUSE OF DEATH: Severe blunt chest trauma

RECOMMENDATIONS

- **Forklift operators must always look in the direction of travel and keep a clear view.**
- **Employers must ensure that workers know to stay clear of operating forklifts.**
- **Employers should closely supervise new workers to reinforce safe work practices.**

INTRODUCTION

On November 6, 2006, an 18-year-old warehouse receiving clerk was killed by a forklift backing into him in a narrow aisle. OR-FACE was notified of the incident the same day. The employer declined an interview with an OR-FACE investigator. Information in this report is based on Oregon OSHA, medical examiner, and police reports.

The employer was a retailer for garden/farm/ranch supplies, with three locations in Oregon. The firm employed about 175 workers, including 20 who worked at the warehouse where this incident occurred. The warehouse received and inventoried pallets of tools, equipment, chemicals, and outdoor clothing for distribution to the retail stores. The merchandise delivered to the warehouse was checked by receiving clerks, then moved to storage or divided into smaller units for direct shipment to the retail stores.

Warehouse work involved the use of pallet jacks, forklifts, narrow-aisle stand-up forklifts, handtrucks, and carts. The employer had written safety and health policies and procedures, and workers received written safety rules. Certified forklift operator training was provided by the warehouse manager. Training included driver awareness of the hazards for persons in the vicinity of an operating forklift. Receiving clerks received on-the-job training that included palletizing product, inventory, and forklift operations on the freight dock.

Both workers involved in this incident were recently hired, and were longtime friends. The 18-year-old receiving clerk was hired 2 weeks before the incident. He had completed forklift safety training in his first week and was getting on-the-job training as a receiving clerk at the time of the incident. About 1 week prior to the incident, the receiving clerk walked up behind a forklift operator without making his presence known, and startled him. The operator warned the receiving clerk to alert a forklift driver before approaching, but did not report the incident to management. On the day of the incident, reportedly, the receiving clerk again walked up behind the forklift operator while he was picking up a pallet, without making his presence known.

The forklift operator, also 18 years old, was hired 4 months earlier, and was certified and authorized to use all forklifts and pallet jacks. The narrow-aisle stand-up forklift involved in the incident had been put into service 3 months earlier. The operator received specific training on the forklift, but normally used a different forklift, with brakes and gears that responded differently. Following this incident, the forklift operator reported that the brakes on the forklift did not respond fast enough. A subsequent test showed the brakes were capable of stopping the forklift within a standard distance of 6-8 feet.

The operator generally stands sideways on a narrow-aisle stand-up forklift during operation (see cover photo). This particular forklift was not equipped with mirrors or any warning device, such as a back-up alarm or a flashing light, as these were offered as options by the manufacturer at the time of purchase.

INVESTIGATION

On the day of the incident, the warehouse receiving clerk and the forklift operator worked together on a shipment that arrived the night before and was placed in a temporary storage area in the warehouse aisles. The forklift operator brought pallets of merchandise to the loading dock, so he and the receiving clerk could divide the merchandise into smaller units for shipment or storage.

After their morning break at the receiving desk of the loading dock, the forklift operator drove the narrow-aisle forklift to retrieve the last pallet, located in an aisle about 150 feet from the receiving desk. After loading the pallet on the forks, the operator began to back down the aisle. He looked backward toward the load to judge the distance between the pallet and the storage racks, and traveled 15-20 feet before he looked forward and saw the receiving clerk walking up the aisle toward him. His presence surprised the operator. He shouted at the clerk and made eye contact, while also steering away and hitting the brakes.

The forklift struck the clerk and pinned him against the metal shelving. The operator pulled the forklift away from the clerk, helped lower him to the floor, and called for help. Coworkers called 911 and applied first aid. The victim died on the way to the hospital.

RECOMMENDATIONS/DISCUSSION

Recommendation #1. Forklift operators must always look in the direction of travel and keep a clear view.

Forklift operators must be constantly vigilant to avoid colliding with a pedestrian. The operator must always look in the direction of travel. If the load obscures the view, the operator must travel with the load trailing and keep a clear view in the path of travel (29 CFR 1910.178(n)). At cross-aisles, corners, or other locations where vision is obstructed, the operator must slow down and sound the horn.

Recommendation #2. Employers must ensure that workers know to stay clear of operating forklifts.

A forklift striking a worker on foot is one of the most common causes of forklift-related fatalities. Workers that may pass by or work near an operating forklift must be educated and required to stay clear.

The following rules for pedestrian safety around forklifts are critical.

- Operators must, and other workers should know the braking distance of a forklift.
- Pedestrians must inform the forklift operator of their intent to enter an area where a forklift is operating, and must receive acknowledgement from the operator that the operator understands their intention.

- A forklift operator must stop the forklift while pedestrians are in the hazardous area.
- Forklift operators must not drive “up to anyone standing in front of a bench or other fixed object” (29 CFR 1910.178(m)(1)).

The physical design of a work area where forklifts are operating can help to ensure workers remember to stay clear. In a warehouse setting, temporary barriers and warning signs can be used to isolate an aisle for forklift traffic. Employers should evaluate intersections and other blind corners to determine if overhead dome mirrors could improve visibility. Employers should also consider the particular work setting to determine additional warning signals when a forklift is in motion, such as operator use of the horn, an audible backup alarm, or flashing light.

Recommendation #3. Employers should closely supervise new workers to reinforce safe work practices.

New and young workers should receive frequent reinforcement to emphasize safe work practices. This is particularly important during the first month of employment, when there is a high incidence of new and young worker injuries and fatalities.

For workers in a warehouse setting, understanding the hazards of working in the vicinity of a forklift is particularly important. Retraining and close supervision is necessary when new equipment is introduced. Employers also need to encourage communication, and opportunities to communicate, so that employees will report unsafe behavior and near misses in a cooperative effort to promote safety.

REFERENCES

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