

Guidelines to prevent forklift fatalities

Each year, tens of thousands of injuries related to powered industrial trucks, or forklifts, occur in workplaces nationwide. Such accidents also kill more than 100 workers a year. Ensure your company does not add to these statistics.

An IBM server worth \$1.4 million was wrecked after it fell off a forklift during shipping. Now the customer is suing.

“The rear wheels of their forklift hit the raised surface at the entry door of the warehouse, causing the forklift to rock and subsequently causing the server to rock. ... As a result of the rocking motion, the base of the pallet and the crate broke and the crate fell onto the curb, damaging the server packed inside,” the contractor stated in court papers filed in July. “The damage sustained by T.R. Systems was due to the poor workmanship and/or defective packaging design and methods used by IBM,” the company argued in court papers.

Now, \$1.4 million is a lot of money — yet this doesn’t hold a candle to the loss of human life still too common to forklift screw-ups.

In the U.S. alone, 1,021 workers died from traumatic injuries suffered in forklift-related incidents from 1980 to 1994, according to the [National Institute for Occupational Safety and Health](#) (NIOSH). Forklift-related accidents also kill more than 100 workers a year, according to eMedia’s Health & Safety in [Manufacturing Bulletin](#). About a quarter of these fatalities are caused by overturning.

It comes as little surprise, then, that “Powered Industrial Trucks,” or forklifts, came in at No. 6 on OSHA’s [most recent list](#) of top 10 violations.

National fatality data from NIOSH indicates that the three most common forklift-related fatalities involve forklift overturns, workers on foot being struck by forklifts and workers falling from forklifts.

[OSHA](#) says:

Many employees are injured when lift trucks are inadvertently driven off loading docks, lifts fall between docks and an unsecured trailer, they are struck by a lift truck, or when they fall while on elevated pallets and tines. Most incidents also involve property damage, including damage to overhead sprinklers, racking, pipes, walls and machinery.

Unfortunately, most employee injuries and property damage can be attributed to lack of safe operating procedures, lack of safety-rule enforcement and insufficient or inadequate training.

Identifying Forklift Hazards

Some factors to consider:

- The capacity of the forklift (can it handle the size and weight of your load?)
- Any odd characteristics of the load (is it top-heavy, cylindrical or awkward?)
- The condition of the forklift (are the forks damaged or is there some other problem that could cause an accident?)
- Where you are and where you are going with the load (are there any obstacles, bumps, ramps, people, cross aisles or narrow passageways to consider?)

Forklift Safety Rules

Employers

Worker Training

- Make sure that workers do not operate a forklift unless they have been trained and licensed.
- Develop, implement and enforce a comprehensive written safety program. A comprehensive training program is important for preventing injury and death.
- Inform operators of sit-down type forklifts that they can be crushed by the overhead guard or another part of the truck after jumping from the overturning forklift.
- Train operators of stand-up type forklifts with rear-entry access to exit from the truck by stepping backward if a lateral tip-over occurs.
- Ensure that operator restraint systems are being used on sit-down type forklifts.
- Train operators to handle asymmetrical loads when their work includes this activity.

Forklift Inspection and Maintenance

- Establish a vehicle inspection and maintenance program.
- Retrofit old sit-down type forklifts with an operator restraint system if possible.

Workers on Foot

- Separate forklift traffic and other workers where possible.

- Limit some aisles to workers on foot only or forklifts only.
- Restrict the use of forklifts near time clocks, break rooms, cafeterias and main exits, particularly when the flow of workers on foot is at a peak (such as at the end of a shift or during breaks).
- Install physical barriers where practical to ensure that workstations are isolated from aisles traveled by forklifts.
- Evaluate intersections and other blind corners to determine whether overhead dome mirrors could improve the visibility of forklift operators or workers on foot.
- Make every effort to alert workers when a forklift is nearby. Use horns, audible backup alarms, and flashing lights to warn workers and other forklift operators in the area. Flashing lights are especially important in areas where the ambient noise level is high.

Work Environment

- Ensure that workplace safety inspections are routinely conducted by a person who can identify hazards and conditions that are dangerous to workers. Hazards include obstructions in the aisle, blind corners and intersections, and forklifts that come too close to workers on foot. The person who conducts the inspections should have the authority to implement prompt corrective measures.
- Install the workstations, control panel and equipment away from the aisle when possible. Do not store bins, racks or other materials at corners, intersections or other locations that obstruct the view of operators or workers at workstations.
- Enforce safe driving practices such as obeying speed limits, stopping at stop signs, and slowing down and blowing the horn at intersections.
- Repair and maintain cracks, crumbling edges and other defects on loading docks, aisles and other operating surfaces.

Workers

- Operate the forklift only if you've been trained.
- Use seatbelts if they are available.
- Maintain a safe following distance from other forklifts — about three vehicle lengths.
- Follow the speed limit and other regulations.

- Drive with your load low — 6 or 8 inches off the ground — and tilted slightly back.
- Exercise extra caution when driving over duckboards and bridge plates, and make sure your load is within capacity.
- Raise and lower your load only when you are stopped.
- Stop and sound the horn at intersections.
- Avoid sharp turns.
- Keep your arms and legs inside the vehicle.
- Be sure to wear a hard hat and other protective equipment when necessary.
- Be sure your load is stable and secure.
- When leaving the forklift, lower the forks, neutralize the controls, shut it off and set the brakes.
- Report to your supervisor any damage or problems that occur with a forklift during your shift.
- Do not jump from an overturning, sit-down type forklift. Stay with the truck if lateral or longitudinal tip-over occurs. Hold on firmly and lean in the opposite direction of the overturn.