

# examinetics

## Occupational Health Pathfinder

### Overview

Many industries and operations (eg manufacturing, agricultural and warehousing) use powered industrial trucks (including forklift trucks or lift trucks) routinely in the workplace. Forklift trucks are used to move, raise or lower objects that are stored in containers or on pallets to other areas of the workplace. Their use helps to improve workplace productivity and reduces the need for excessive manual handling of goods and objects by employees. However, according to the National Institute for Occupational Safety and Health there are around 100 fatalities and 20,000 serious injuries each year, in the USA, as a result of forklift truck incidents.

### Forklift truck operator safety

There are many different types of forklift trucks with different load capacities and they differ for specified maximum weight and forward center of gravity for a load. Worker injuries mainly occur as a result of falls from forklift, forklift overturn, pedestrian collision and crushing incidents. Operator falls can result as the worker ascends or descends into the driver cab or is ejected from the vehicle in the event of a collision or other incident. Forklift trucks may overturn as a result of overload, unequal center of gravity of the load or travel over an uneven surface causing the vehicle to topple over. Pedestrian co-workers, without adequate preventative measures, are at risk from forklift collision or accidents associated with an unsafe load.

### Regulatory issues

There are strict standards in relation to forklift training, operation and maintenance. For example, people under the age of 18 years, in non-agricultural industries, are not permitted to operate a forklift truck. All forklift operators must have undergone both theoretical and practical training before operation of a forklift and are required to undertake refresher courses. Powered industrial trucks must also comply with standards as defined in the "American National Standard for Powered Industrial Trucks, ANSI B56.1-1969". The OSHA standards that employers and employees must adhere to are those as stated in the General Industry Standards, in particular 1910.178 "Powered industrial trucks", and standards for Marine Terminals (29 CFR 1917 Subpart C, "Cargo handling gear and equipment") and Longshoring (29 CFR 1918 Subpart G, "Cargo handling gear and equipment other than ship's gear"). There are other directives and regulations that employers should be aware of. The OSHA and NIOSH pages, as identified in our essential links section, both comprehensively outline regulations or signpost employers and employees to all the regulations that apply.

## Forklift truck safety

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### KEY POINT SUMMARY:

- Forklift trucks are used to move, raise or lower objects that are stored in containers or on pallets to other areas of the workplace
- Their use helps to improve workplace productivity and reduces the need for excessive manual handling of goods and objects by employees
- There are around 100 fatalities and 20,000 serious injuries each year, in the USA, as a result of forklift truck incidences (NIOSH)
- Worker injuries mainly occur as a result of falls from forklift, forklift overturn, pedestrian collision and crushing incidences
- There are strict standards in relation to forklift training, operation and maintenance
- The OSHA and NIOSH pages, as given in our essential links section, comprehensively outline or signpost employers and employees to all the regulations that apply in relation to forklift trucks and should be considered as required reading

### FIND OUT MORE...

#### OSHA website

[www.osha.gov/SLTC/powerindustrialttrucks/](http://www.osha.gov/SLTC/powerindustrialttrucks/)

#### National Institute for Occupational Safety and Health

[www.cdc.gov/niosh/2001-109.html](http://www.cdc.gov/niosh/2001-109.html)

#### Business Owner Briefing

OSHA Pocket Guide: worker safety series - Warehousing

[www.osha.gov/Publications/warehouseing.html](http://www.osha.gov/Publications/warehouseing.html)

#### Medical Director Review

*"Evaluation of an occupational health intervention programme on whole-body vibration in forklift truck drivers: a controlled trial"*  
(Hulshof et al., 2006)

<http://oem.bmj.com/cgi/content/full/63/7/461>

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