Forklift Safety

Steer Clear of Forklift Accidents
The forklift truck is a versatile and efficient type of equipment involved in many facets of material distribution in the workplace. Forklift capabilities contribute to hazards which can result in severe injury and extensive damage affecting operators, pedestrians, vehicles, materials and the environment.

Every employer using industrial trucks or industrial tow tractors must post and enforce a set of operating rules. The rules should include prohibiting horseplay, unlawful riding on vehicles, safe speeds for operation, unauthorized operations, when to sound the horn, and load requirements. Only drivers trained in the safe operation of industrial trucks and authorized by the employer should be allowed to operate these vehicles.

Vehicle Inspection
Drivers should check the vehicle at least once per shift with attention given to tires, horn, lights, battery, controller, brakes, steering, cooling, fuel and lift system.

Any unsafe condition or operation must be reported to the foreman or mechanic and the vehicle should not be operated until the unsafe condition is corrected.

Vehicle Operation
- Look in the direction of travel before moving a truck. Keep body parts within the truck's running lines and away from moving parts.
- Start, stop and turn smoothly, observing traffic regulations and speed limits. Slow down and sound horn at cross aisles and locations where vision is obstructed. When the load obstructs view, operate the truck with the load trailing.
- Stunt driving and horseplay are prohibited. Don't trap anyone between the truck and another object.
- Carry riders only if the truck has passenger seats. Don't allow riders on forks or platforms.
- Keep a safe distance from other moving vehicles. For trucks traveling in the same direction, the rear vehicle should stay behind the lead vehicle at least three vehicles lengths, or about three seconds of travel time. Do not overtake or pass another truck where it may be unsafe, such as at intersections or blind spots.
- Do not drive trucks on any floor, sidewalk or platform that will not safely support the loaded vehicle.
- Drive trucks slowly up or down grades. When going up or down grades greater than 10 percent, drive the loaded lift truck with the load upgrade. On all grades, the load and load-engaging mechanism should be tilted back (if applicable) and raised only as needed to clear the road surface.
- Railroad tracks should be crossed diagonally, wherever possible. Park at least 8.5 feet from the center line of the tracks.
- When parking a truck or leaving it unattended (the operator can't see it or is 25 feet or more away from it), put the controls in neutral, turn off the power, set the brakes, lower the forks or platform completely and remove the key or pull the connector plug. Block the wheels of an unattended truck left on an incline.
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Loading and Transporting

❖ Load a truck within its rated capacity, with the load positioned evenly on both forks or on the bed. Don’t move the vehicle until the load is safe and secure.
❖ Loads should be stable, neatly piled and cross-tied, if possible.
❖ No one should stand, pass or work under the elevated portion of any industrial truck, loaded or empty, unless it's blocked to prevent it from falling.
❖ When lifting, lowering or carrying a load, tilt the mast slightly back to cradle the load.
❖ Extreme care should be taken when tilting loads. Don’t tilt forward with the load-engaging apparatus elevated except when picking up or placing a load. When stacking or tiering, tilt backward only enough to stabilize the load.
❖ The width of one tire on the powered industrial truck should be the minimum distance maintained from the edge by the truck while it is on any elevated dock, platform, freight car or truck.
❖ Special care should be taken when handling loads on trucks equipped with attachments.
❖ If loads are lifted by two or more trucks working together, the total weight of the load should not exceed their combined lifting capacity.

Moving On or Off Other Machinery

* Before driving onto trucks, trailers or railroad cars, check flooring for breaks or structural weaknesses.
* Only authorized operators should drive vehicles onto elevators. Enter elevators or confine areas with the load end forward. Be sure the vehicle and its load does not exceed the elevator weight limits.
* Once on the elevator, the power should be shut off and the brakes set.
* In enclosed spaces, don’t idle trucks, exhaust vapors may accumulate and create a hazard.

When an industrial truck is used to open or close doors, follow these guidelines:

❖ Attach the device specifically designed to move doors.
❖ The force applied by the device to the doors should be applied parallel to the direction of door travel.
❖ The operator should be able to see the door moving operation from start to finish.
❖ The operator and any other person should be clear of where a moving door might land if it falls.
❖ Only drive vehicles in and out of highway trucks, trailers and railroad cars after wheels have been securely blocked or restrained and their brakes set.
Frequently Asked Questions

Q. Our organization uses the forklifts in-doors. Is this allowed?
A. Forklifts’ are designed for specific environments. It is critical to ensure that the design of the forklift meets the organization’s use demands. For example, using a forklift that is powered by a gas or diesel engine is generally prohibited in-doors due to the levels of carbon monoxide emitted in the exhaust. The best choice for indoor use is typically an electric powered forklift and in some circumstances Liquid Petroleum Gas (LPG) is acceptable. There are additional requirements for locations that use and/or transport volatile flammable liquids or gases, hazardous materials or when combustible dusts are present; even when gases and liquids are contained.

Q. We have battery powered forklifts. What are the requirements associated with charging our forklifts.
A. Battery charging should be accomplished in an area specifically designated for that purpose. The area should be a “No-Smoking” area, well ventilated and free of ignition sources. Facilities must be provided for flushing (eye wash and shower), neutralizing materials for spilled electrolyte, fire protection (fire extinguisher) and the charging apparatus must be protected from physical damage. Employees should always wear proper personal protective equipment when connecting charging equipment.

Q. Our operations require that our forklift driver frequently gets on and off the forklift continuously throughout the shift. What should we be concerned with?
A. The forklift may be left running as long as the operator is within site and not further than 25’ from the forklift. The forklift must be placed in neutral (neutralized—not left in gear), the forklift blades must be lowered to the ground level and the brake must be set. While not a requirement, the forklift operator should always use a 3 point on/off process and never jump from the lift to avoid other serious injuries. Also, if provided the operator must still wear the seat belt at all times while operating the forklift.

Q. We have a cage that we use to lift employees for general maintenance. Is this safe?
A. Generally speaking, a cage can be used to lift an employee but it must be properly enclosed and the designed in a manner that will prohibit the employees hands, arms feet and legs from being placed in the operating mast. An example of a prohibited practice would be lifting an employee while standing on a pallet. We would also discourage any employer from fabricating and/or using a cage that was not specifically designed for lifting an individual. Best practice would also indicate that the employee should not ride in the cage and it can only be used to lift and lower an employee for a specific task. In conclusion; use of a “cage” or vehicle mounted lifting device must be designed specifically for the intended purpose, the employer should develop safe work practices associated with the use of such equipment.

Q. Do we have to certify our forklift operators every year?
A. Under the Federal training requirements you do not have to certify your forklift operators every year. This is a common misunderstood practice and one that is often miss-communicated by well meaning safety professionals and consultants. Following are the specific requirements under the Federal act.

Employers must ensure that each operator is competent to operate a forklift safely and that they have successfully completed training. This includes:

- Formal (classroom lecture, interactive computer, video, etc.) and practical operation of the forklift(s) in the environment that they are working.
- Training must be conducted and evaluated by persons who have knowledge, training and experience to train and evaluate the operators’ competence.
- The employer shall certify that each operator has been trained and evaluated as outlined in the standard. The certification must include the name of the operator, date of training, date of evaluation and indentify the person(s) performing the training or evaluation.

Refresher training must be provided anytime an operator is seen violating a safe practice or operating in an
unsafe manner, is involved in an accident or near miss incident, when hazards, conditions or type of forklift is changed or if they receive an unsatisfactory evaluation. An evaluation of the forklift operator’s performance shall be conducted at least once every (3) years.

Q. If we hire someone that shows evidence of having training with a previous employer, do we have to re-train the individual?
A. If an operator has previously received training in a topic specified in the standard, and such training is appropriate to the truck and working conditions encountered, additional training in that topic is not required if the operator has been evaluated and found competent to operate the truck safely. Lastly, it is important that all training meets the minimum requirements outlined in the standard. These are outlined as follows: 1910.178(l)(3)

This Tribal First Risk Control Consulting fact sheet is not intended to be exhaustive. The discussion and best practices suggested herein should not be regarded as legal advice. Readers should pursue legal counsel or contact their insurance providers to gain more exhaustive advice. For more information on this topic, please contact Tribal First Risk Control Consulting at (888) 737-4752 or riskcontrol@tribalfirst.com.