



- Workplace Hazards
  - Forklifts driven off loading docks
  - Forklifts fall between docks and unsecured trailers
  - Workers struck by forklift
  - Workers fall while on elevated pallets or tines
- Forklift Operator Hazards
  - Has not been properly trained
  - Not familiar with forklifts operation
  - Operates carelessly
  - Uses a forklift that is unsafe
  - 35,000 serious injuries
  - o 62,000 non-serious injuries
  - o 11% of all forklifts are involved in accidents every year



# **Ensure a SAFE ride**

Know your equipment

WHAT TO DO

Conduct a Pre-check

Know your route of travel

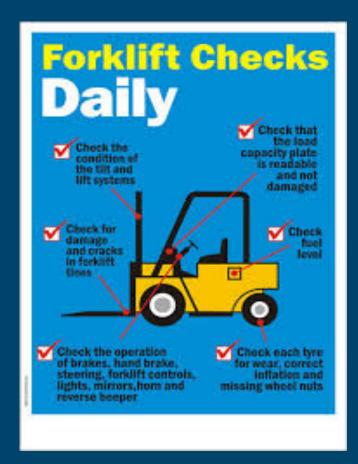


- Know your Equipment
  - Controls
  - Adjustments
  - Load Rating
  - Turning Radius
  - Balance Points
  - Overhead Clearance
  - Side Clearance





- Pre-Check
  - Safety check at the beginning of each shift
    - Controls
    - Leaks
    - Horn
    - Lights
    - Alarm
    - Battery
    - Steering
    - Brakes
    - Missing Parts
    - Extinguisher
    - Seat Belt
    - Fuel



- Do not operate any damaged forklift
  - Report "Out of Service" problems immediately



# Safety Rules

- #1 Rule: Use your seat belt at ALL times
- Operate only in designated areas
  - Adequate ventilation necessary
- Do not exceed the floor load rating
- Do not exceed the forklift's rated capacity
  - o found on the name plate

- Do not use a forklift to tow or push another forklift, another vehicle, or other equipment
- Use pneumatic-wheel forklifts for irregular terrain and when traveling on streets
- Use hard-wheel forklifts indoors only



# Before Traveling

- Tilt the mast back
- Maintain forks 4-6 in. off the driving surface
- Before Entering a Truck
  - Check dock boards
  - Check interior of truck
- Ensure trailer wheels are chocked
- If Tractor is not attached make sure there are jack stands





# When Traveling

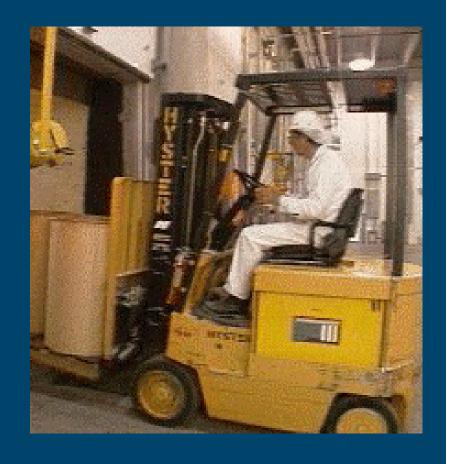
- Speed Requirements
  - Company policies
  - o under 5 mph (8 km/hr) indoor speed
  - under 15 mph (24 km/hr) outdoor speed
- Yield to pedestrians
- Observe all traffic signals
- Do not carry passengers
  - Except where factory-installed seats are provided
- Keep arms and legs inside forklift

- Do not jump from a moving forklift
- When following another forklift
  - Stay at least three vehicle lengths back
- When forward vision is obscured, drive in reverse

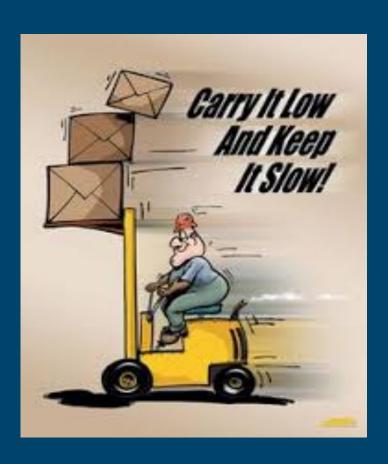


## Adequate clearance

- Under structures
- Between structures
- Overhead power lines 10ft of separation
- Entering a doorway
  - Watch Overhead & Side Clearance
  - Use Horn to Warn others
  - GO SLOW







## 🄰 Lifting

- Know the weight of the load
- Do not attach slings, cables, or chains to the forks to lift materials or objects from underneath them
- Secure unstable loads before starting the vehicle
  - Use tie downs
  - Use wide tines and lock in place
- Never add a counterweight
- Do not lift material or equipment you are unfamiliar with



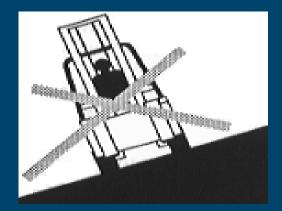
# Ramps

- Loaded
  - Always ensure load is against the back rest
  - Drive UP the ramp
  - Back DOWN ramps

- Unloaded
  - Drive FORWARD down ramps
  - o Drive BACKWARDS up the ramp for better view
- Hazards
  - Never turn sideways on a ramp or inclined area











# Parking

- Forks fully lowered
- Turn off the power
- Parking brake set
- Park on level area
- Place all the controls in the neutral position
- Don't Block the exit
- Take the keys
- A forklift is considered unattended if the operator is out of sight of the truck or more than 25 ft (8 m) away



# Refueling

- Fuel gasoline, diesel and propane forklifts outdoors only
- Appropriate clothing (PPE gloves)
- Close the valve for the propane bottle while the engine is funneling to consume all gas in the line
- No Smoking
- Propane tank secured

# Recharging

- Electric Forklift
  - Charge in designated, posted and well-ventilated areas
- No smoking or spark producing operations
- Battery maintenance
  - Wear appropriate clothing (PPE)



## Type D Forklifts:

Diesel-powered units that have minimum acceptable safeguards against inherent fire hazards.

# Non-Hazardous Forklifts:

These have minimum acceptable safeguards against fire hazards

#### Type LP Forklifts:

Liquefied petroleum gas-powered units that have minimum acceptable safeguards against inherent fire hazards

#### Type E Forklifts:

Electrically powered units that have minimum acceptable safeguards against inherent fire and electrical shock hazards

## Type G Forklifts:

Gasoline-powered units that have minimum acceptable safeguards against inherent fire hazards

#### Type G/LP Forklifts

Operate on either gasoline or liquefied petroleum gas & have minimum acceptable safeguards against inherent fire hazards



#### Type DS Forklifts:

diesel-powered with additional safeguards for exhaust, fuel, and electrical systems. \*meets requirements for Type D units



# Hazardous Forklifts:

Used in locations where metal dusts, organic dusts, flammable vapors, & gases may be present. Indoor use of fork trucks requires verification that safe limits of carbon monoxide emissions are not exceeded.



electrically powered units
with all electrical
equipment completely
enclosed. \*meets
requirements for Types E
and ES units

## Type DY Forklifts:

diesel-powered units with all the safeguards of Type DS unit. No electrical equipment--including ignition & equipped with temperature limitation features

#### Type ES Forklifts:

electrically powered – additional safeguards for electrical system to prevent sparks and limit surface temperatures. \*meets requirements for Type E units



#### Type EX Forklifts:

electrically powered units used in atmospheres containing specifically named flammable vapors, dusts, and, under certain condition, fibers



# Hazardous Forklifts:

Used in locations where metal dusts, organic dusts, flammable vapors, & gases may be present. Indoor use of fork trucks requires verification that safe limits of carbon monoxide emissions are not exceeded.



#### Type LPS Forklifts:

liquefied petroleum gas safeguards for exhaust, fuel and electrical systems. May be used in some locations where the use of an LP unit may not be suitable

## Type GS Forklifts:

gasoline-powered additional safeguards for the exhaust, fuel, and electrical systems. \*meets requirement for Type G units

# Type GS/LPS Forklifts:

gasoline or liquefied petroleum gas safeguards for the exhaust, fuel, and electrical systems



## OSHA Outlook

- Training Program
  - In-house guidelines
  - Outside Agency
    - Forklift Supplier
    - 3<sup>rd</sup> Party
- Certification
  - 3 year
  - Site Specific training necessary for new hires
  - Certification for each type of forklift





## Claim

- Forklift was on a hydraulic jack without jack stands or other support
- Employee crawled underneath to replace a filter
- Asked assisting employees to jack forklift up higher but jack gave way crushing the claimant resulting in death
  - Employee lost his life
  - \$200,340 paid in compensation
  - Used 3 ton hydraulic jack on 8 ton forklift
  - Insured had no written safety program covering the jacking, chocking, jack stands, blocking, etc.



## Claim

- Employees were working in a warehouse with multiple forklifts and electric pallet jacks in operation
- Employee was standing next to electric pallet jack with one foot on and one foot off
- Employees foot was backed into by a forklift and crushed between forklift and electric pallet jack, crushing pallet jack operators foot
  - Employee was rushed into emergency surgery to repair foot
  - Vascular Surgeons were unable to reestablish blood flow
  - Four days later the employees leg was amputated at the knee
  - Initial reserves were set at just over \$500,000



- > THINGS TO REMEMBER
  - Safe operation depends on YOU!
  - Know your Equipment
  - 3. Follow the Safety Rules
  - 4. Know your Load





MISSION STATEMENT

Ensure a SAFE RIDE by knowing your equipment



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