



# Annual Compliance Training

## Powered Industrial Trucks

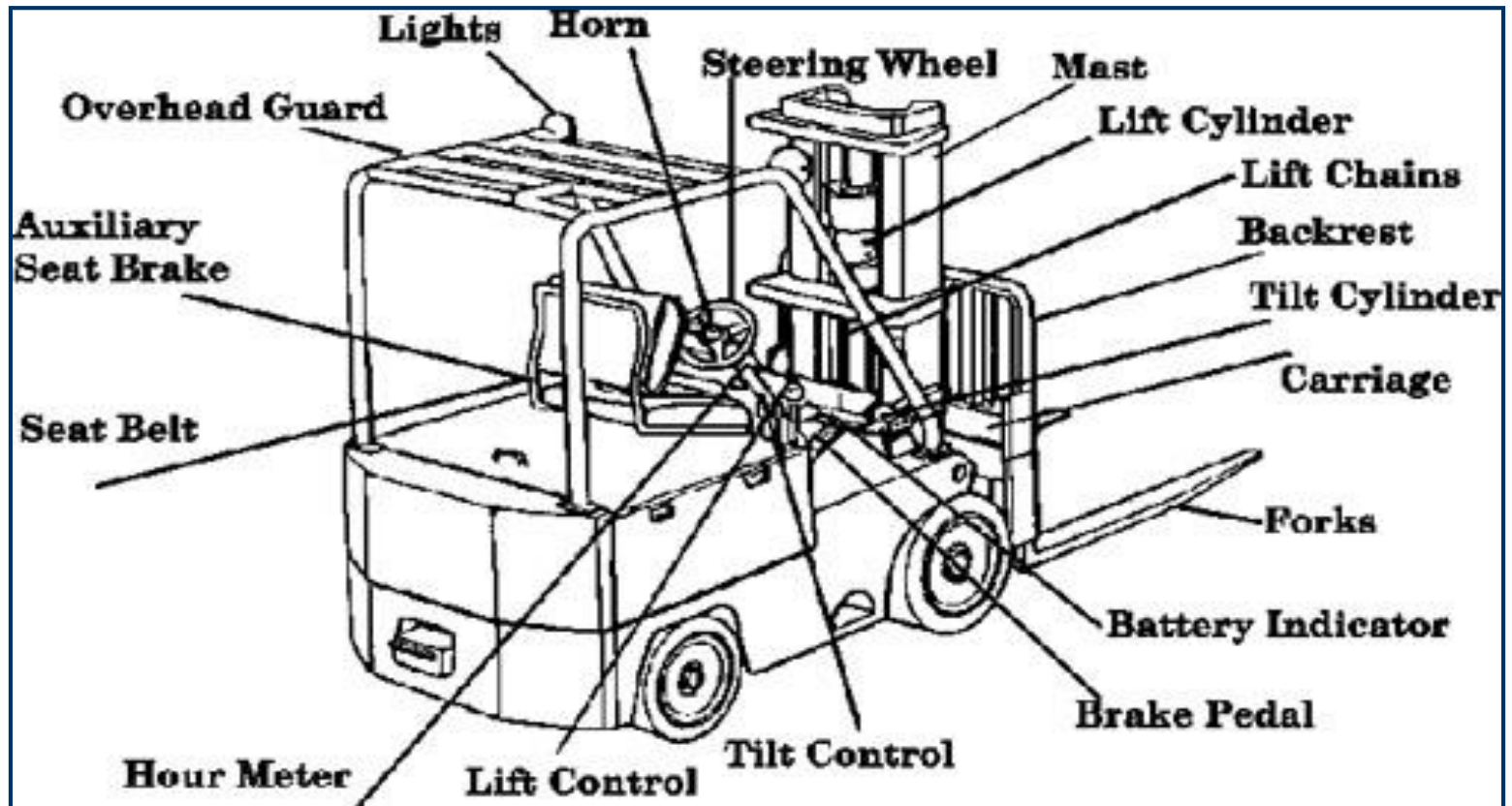
# Powered Industrial Trucks

- Any mobile power-propelled truck used to carry, push, pull, lift, stack or tier materials, i.e. forklifts
  - Earth moving and over the road haulage trucks are not included in the definition, i.e. loaders used to pile recyclable materials
- Typical Uses
  - Load tires into trailers
  - Stack pallets of parts on storage racks
  - Stack bins in storage areas

# Forklift Training Overview

- Operator's Daily Inspection
- Loading
- Operating & Traveling
- Speed and Control
- Operating on Ramps
- Trailer and Dock Safety
- Parking
- Stability Triangle

# Components of a Forklift Truck





# Forklift Condition Report (FCR) Operator's Daily Inspection

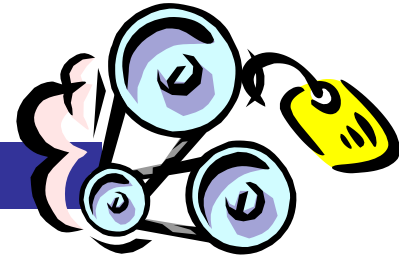


# Operator's Daily Inspection (Engine off)

- Tire Condition
- Fork Condition – Top Clip Retaining Ring and Heel
- Overhead Guard (ROPS) Condition
- Hydraulic Hoses and Cylinder Condition



# Operator's Daily Inspection (Engine Off)



- Mast, Lift Chains, Rollers Condition
- LPG Tank, Hose, and Locator Pin Condition
- Engine, Belts, and Battery Condition
- Fluid Levels & Leaks
  - Fuel, Engine Oil, Hydraulic Fluid, Coolant
- Mirrors, Fire Extinguisher, and Seat Belt
- Name Plate and Hour Meter Reading



# Operator's Daily Inspection (Key On)

- Lights
  - Head Lights
  - Tail Lights
  - Warning Lights





# Operator's Daily Inspection (Engine On)



- Gauges
  - Oil Pressure, Ammeter, Hour Meter, Fuel Level, Coolant Temperature
- Drive Control – Horn, Forward / Reverse
- Back-up alarm
  - 87 db(a) or 10 db(a) above background noise
- Steering, Service Brake, and Parking Brake
- Hydraulic Controls – Up/Down, Tilt, Stops, and Any Attachments

# Daily Inspection Paperwork

- Perform a daily inspection at the beginning of each shift
- The completed inspection form must be kept on file
- Report any damage or problems that occur to a forklift or other objects during the shift
- If defects are noted
  - Remove the key, tag the forklift “Out-of-Service”
  - Take the form to supervision and notify them of the problem
- Never operate a defective powered industrial truck or one that has an “Out-of-Service” or ***DANGER - DO NOT OPERATE*** tag on the steering wheel or control levers



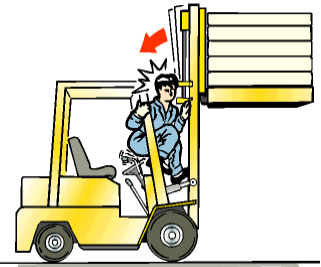
# Loading

- Only trained, authorized, and licensed personnel may operate forklifts
- Check the rating capacity on the forklift nameplate
- Determine if the load weight is within the capacity of the forklift
  - Note: Rule of thumb is that for every one inch further away from the carriage that the load is placed, there is a loss of approximately 100 pounds carrying capacity



# Loading

- Always wear a seat belt when operating the forklift
- Set the forks to the maximum possible spread for the load to be carried
- The forklift should be started with the forks down
- When the forks are empty, travel with the forks at a negative pitch, as low to the floor as practical
  - Approximately 3 inches when traveling



# Operating System Requirements

- Do not allow passengers to ride on forklift trucks
- Never allow anyone underneath a raised load
- Always keep arms, head, and legs inside the ROPS (Roll Over Protective Structure)
  - Never place arms and legs between the uprights of the mast

# Operating Safety Requirements

- Maintain Visibility
  - Travel in reverse if cannot see over load
- Slow down and sound the horn at cross aisles, blind corners, and other locations where vision is obstructed
- Lift trucks are not to be started (or any of its functions or attachments operated) from any position other than from the designated operator's position

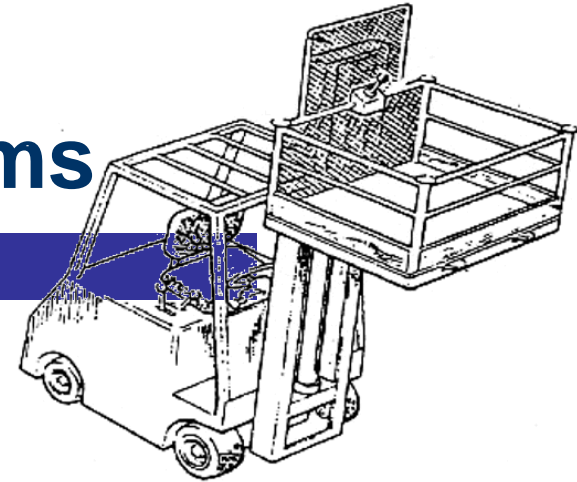


# Operating Safety Requirements

- If the temperature of any part of the truck is found to be in excess of its normal operating temperature, the vehicle must be removed from service and repaired
- Stop the truck if it emits hazardous sparks, flames or smoke from the exhaust system and have it repaired before using it again
- Keep the truck clean and free of excess dirt, oil, and grease
- Do not operate the truck in an enclosed environment without proper ventilation



# Elevating People on Platforms



- Use a man lift or scissor lift that is specifically designed for this purpose
- Never use a forklift to elevate workers who are standing on the forks
- Do not elevate a worker on a platform unless the vehicle is directly below the work area
- Whenever a truck is used to elevate personnel, secure the elevating platform to the lifting carriage or forks of the forklift
- Ensure the platform is equipped with proper handrails to restrain the person on the platform
- Do not drive to another location with the work platform elevated

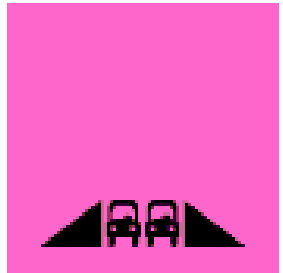


## Unsafe



# Operating Safety Requirements

- Never drive up to a person standing in front of a fixed object such as a wall, rack, piece of equipment, or other fixed object
- Stunt driving and horseplay is prohibited
- Do not handle loads that are heavier than the weight capacity of the forklift
- Ensure adequate ventilation by opening doors or using a ventilation system to provide enough fresh air to keep concentrations of carbon monoxide and other noxious gases from engine exhausts below acceptable limits

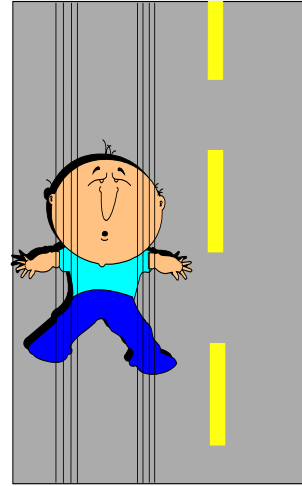




# Traveling

- Look toward the path of travel and keep a clear view of it
- Do not raise or lower the forks while the forklift is moving
- Turn forklift only when the forks are lowered to a safe traveling height, i.e. 3 inches

# Traveling



- Drive only on smooth surfaces, i.e. concrete, trailers, etc.
  - Forklifts are typically not designed to operate on rough terrain
- Drive only in designated PIT aisle ways
- Ensure that the operating surface (floor) is free from oil slicks, etc.
- Do not operate the forklift 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)



# Traveling

- Drive slowly on wet or slippery surfaces
- Never drive with faulty brakes
- Avoid sudden stops, starts, or turns
  - Such abrupt actions could spill the load or cause the machine to topple
- Do not jump from an overturning, sit-down type forklift
  - Keep the seat belt on and stay with the truck
  - Hold on firmly, lean in the opposite direction of the overturn
- Use extreme caution when handling off-centered loads that cannot be centered on the forks
- Do not push one load with another load



# Traveling

- Avoid operating forklift in pedestrian walkways
  - Yield the right-of-way to pedestrians at all times
  - If people are walking in the area, stop and let them pass before proceeding
- When operating in area of pedestrian traffic, minimize risk to others by cordoning off areas with signage and/or traffic cones to prevent walk-through traffic
- Use horn as a warning device for oncoming pedestrians



# Speed and Control

- Operate at a speed that will permit the vehicle to stop in a safe manner
- Don't allow pedestrians within 5 feet of the truck
  - Stop and let them pass
- Don't run over loose objects on the floor
- Keep the truck under control at all times
- Slow down at intersections, blind corners, and other areas of restricted visibility
- When making turns, reduce the truck's speed to a safe level, turn the steering wheel in a smooth, sweeping motion at a moderate, even rate
  - Except when maneuvering at a very low speed



# Operating on Grades/Ramps

- Use extreme caution on grades, ramps, or inclines
- Normally, travel only straight up and down
  - Never turn on an angled grade/ramp
- Keep unloaded forks facing downgrade
- Loaded forks face upgrade
- On all grades, tilt the load back if applicable, and raise it only as far as needed to clear the road surface
- Do not park on a ramp or incline



# Unloading/Loading Trailers/Railroad Cars

- Prevent movement of trucks and trailers while loading or unloading
  - Truck engine turned off
  - Brakes set
  - Place wheel chocks under truck/trailer/railroad car
- Fixed trailer jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor



# Loading Trailers/Railroad Cars

- Use only approved dock plates
  - Inspect dock plates before use
  - Ensure it is rated for the load
  - Properly secure the plate
- Inspect flooring before driving into trucks and trailers
- Ensure proper lighting is available



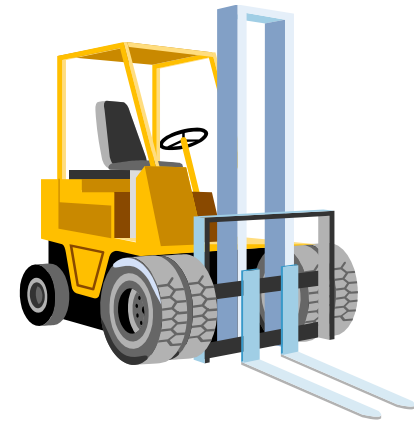


# Dock Safety

- **Use extra caution when operating a forklift truck on a loading dock**
- Drive forklifts slowly onto docks and over dock plates
- Always secure dock plates
  - Inspect plates to make certain they are rated to safely support the load
- Never back up forklifts at the dock's edge
- Keep at least two feet away from the edge of ramps, platforms, open dock edges, etc.
- To prevent falls - chain, rope off, or otherwise block:
  - Open loading dock doors
  - Other areas where employees could fall 4 feet or more

# Parking

- When dismounting from a forklift, tilt the upright mast forward until the forks are level or flat on the floor
  - The tips of the forks should be in contact with the floor
- Apply the parking brake
- Place transmission in neutral
- Shut off the power
- Remove the ignition key
- The operator is responsible for cleaning up all fluid leaks (oil, hydraulic, transmission, etc.) from the floor



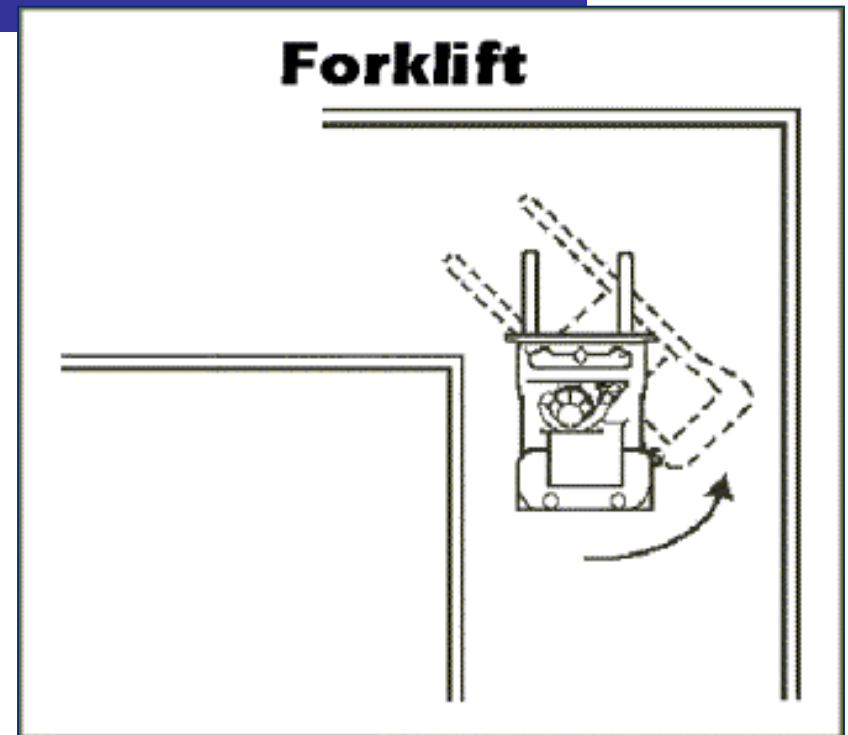
# Unattended Forktrucks

- A powered industrial truck is considered unattended when the operator is 25 feet or more away from the vehicle, even if it is still in view
- When the fork truck is not in the operator's view, it is considered unattended no matter how far away the operator is
- If you leave a truck, make certain
  - The load engaging means is fully lowered
  - Controls are neutralized
  - Power shut off, and
  - Brakes set



# Forklift Rear Swing Radius

- A forklift does not drive like a car
- The rear end swings out to allow for better maneuvering in tight spaces, i.e. rack storage areas





# Forklift Stability Rules

- Travel with loads low
- Never exceed the lift truck capacity
- Exercise caution when handling off-center loads
- Place forks under load as far as possible
- Set fork width wider for load stability
- Tilt load back against mast for stability
- Never add additional weight on the back of the lift truck to counterbalance a load that is too heavy



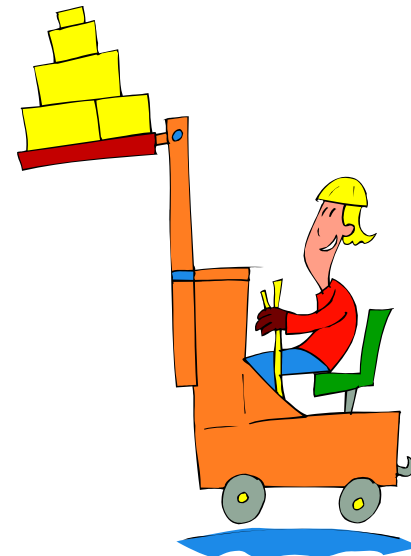
# Forklift Stability Rules

- Best seen in the way a see-saw or teeter-totter works
- Moment - is the product of the object's weight times the distance from a fixed point (usually the fulcrum)
- If the load and distance from the fulcrum (moment) is equal to the moment at the device's other end, the device is balanced and it will not move
  - If not, it is unbalanced and the device will move downward to the end with the greater moment



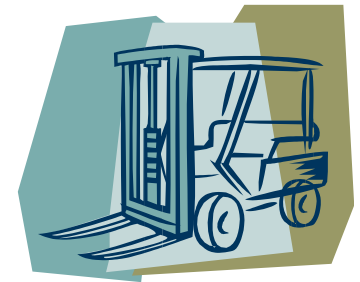
# Forklift Stability Rules

- Always remember that the stability of a forklift truck decreases as a load is raised
- Avoid tilting an elevated load forward until it is over the place of unloading



# Forklift Stability Rules

- Many factors affect a lift truck's stability; the vehicle's
  - Wheelbase
    - Distance between the centerline of the vehicle's front and rear wheels
  - Track
    - Distance between the wheels on the same axle
  - Height
  - Counterweight location
    - The weight that is built into the truck's basic structure
    - Used to offset the load's weight and to maximize the vehicle's resistance to tipping over
  - The load's weight distribution



# Rollovers



# Powered Industrial Truck Summary

- Perform a daily inspection
- Follow safe operating procedures
- Always wear a seat belt
- Control speed
- Follow safe procedures on ramps, docks, in/out of trailers/railroad cars
- Do not leave forklift trucks unattended
- Remember the stability triangle



# Powered Industrial Truck Questions?

- Do you have any questions on Powered Industrial Trucks?
- Please take a couple of minutes and answer questions 1 - 5 on the learning handout



If you are sitting in a forklift and it begins to turn over, you should unbuckle your seat belt and jump out.

True or False

# False

Stay inside the cage of the cab and keep your seatbelt on.

An operator's daily inspection should be performed once per week.

True or False



False

The inspection must be done daily.

When traveling down a ramp, unloaded forks should face downgrade while loaded forks should face upgrade.

True or False



True

It is perfectly acceptable to use a forklift to elevate workers who are standing on the forks, pallet, etc. so they can reach high places that would otherwise be out of reach.

True or False

# False

Use a man lift or scissor lift that is  
specifically designed for this purpose  
Never use a forklift to elevate workers who are  
standing on the forks

It is OK to raise and/or lower the forks while the forklift is in motion.

True or False

# False

The forklift must be stopped anytime you are lowering or raising the forks.

# Fall Protection Training



# Objectives

- Definition & Nature of a Fall
- The Purpose of Fall Protection
- Fall Protection Methods
- Fall Protection Equipment
- Fall Protection Inspection & Use
- Recommended Standards & Practices
- Q & A



# Introduction – The Definition of a Fall

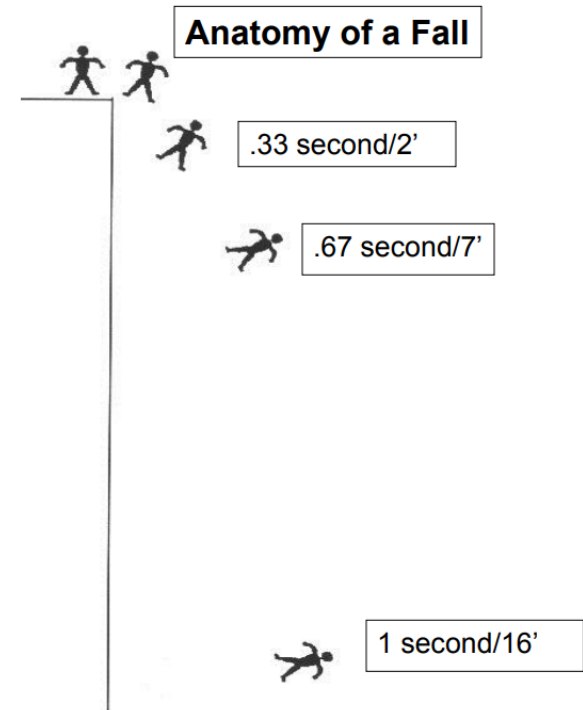
We have all heard the expression -  
'it's not the fall that's hurts but the sudden stop at the end'

“...a sudden, unanticipated descent in space driven by gravity”



# Introduction – The Nature of a Fall

- It takes most people about 1/3 of a second to become aware of a fall.
- It takes another 1/3 of a second for the body to react.
- A person can fall up to 7 feet in 2/3 of a second.



## What & Why?



# Bureau of Labor Statistics

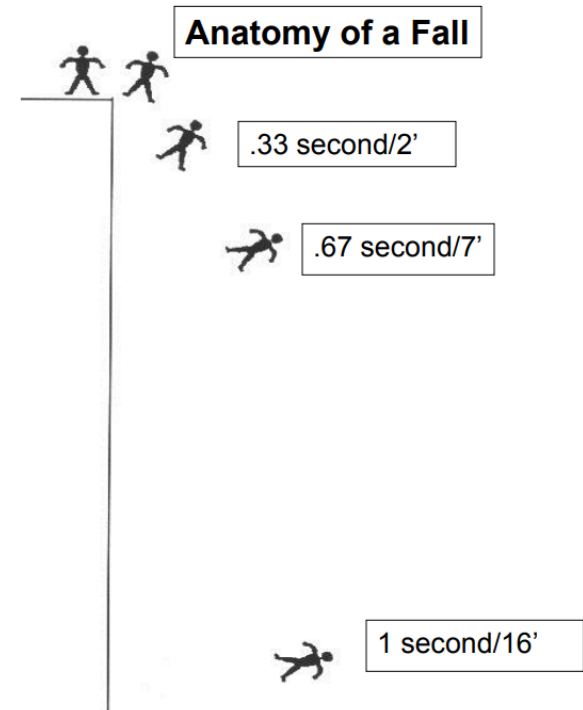
**Fatal work-related falls to a lower level by source and height of fall, 2011–16**

Height	Ladders	Roofs	Vehicles	Scaffolds, staging	Machinery	Trees	Stairs, steps	All other sources
Over 30 feet	29	127	62	93	81	81	4	181
26–30 feet	27	100	19	26	19	20	2	50
21–25 feet	59	130	16	43	14	12	3	45
16–20 feet	109	146	27	48	33	16	6	46
11–15 feet	145	151	49	50	23	6	14	93
6–10 feet	174	41	63	50	20	7	20	85
Under 6 feet	87	—	127	18	21	1	40	108
Height not specified	206	67	53	59	29	32	67	142

Note: Dash means no data were reported or data do not meet publication standards.

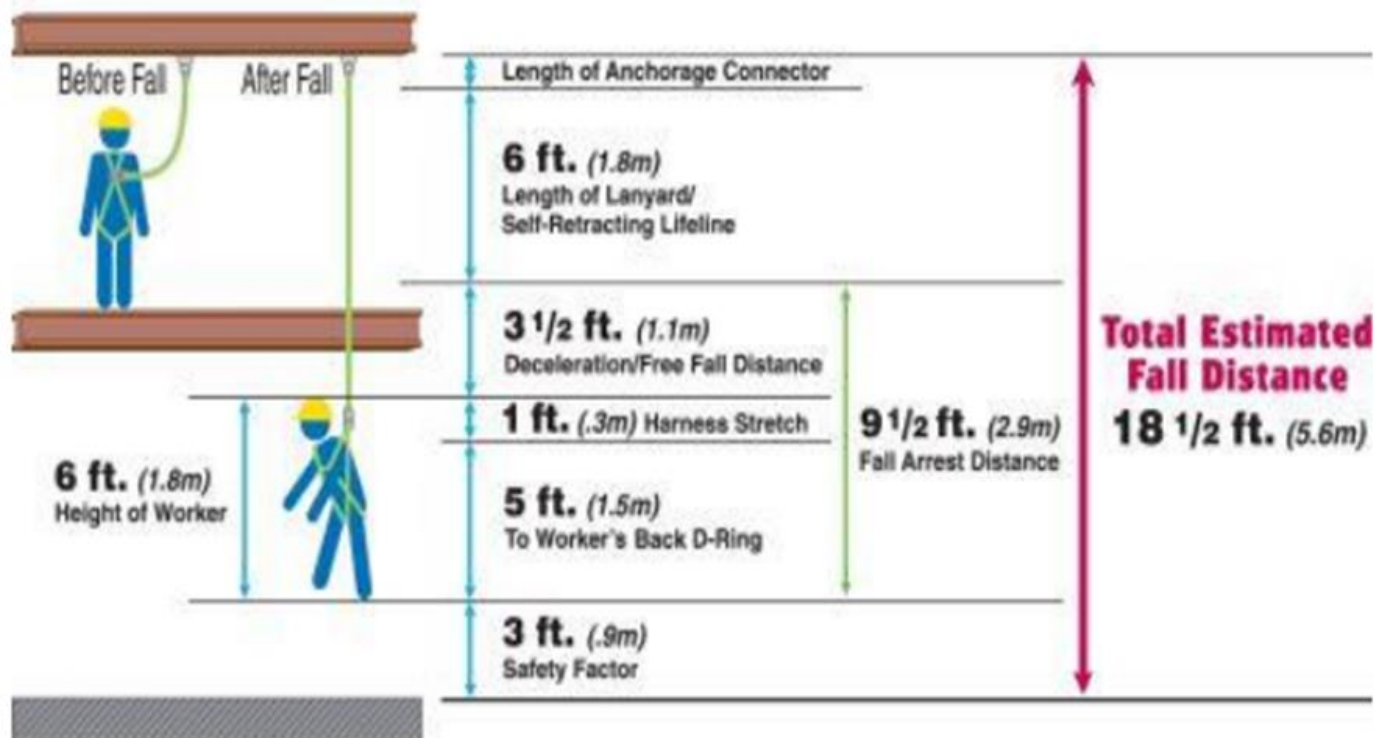
# Department of Labor

- The leading causes of traumatic occupational death.
- Accounting for eight percent of all occupational fatalities from trauma.
- Any time a worker is at a height of four feet or more, the worker is at risk and needs to be protected.



**PREVENTION IS THE REASON FOR  
PROTECTION**

# Fall Distance (Example)



# Questions



What are some ways we can PREVENT falls in the Distribution Center?

What is your role in the prevention of falls?



# Fall Protection Methods



## Elimination

- ✓ Careful assessment of the workplace and the work process



## Prevention

- ✓ Involves making changes to the workplace to eliminate the need to rely on the employee's behavior, and personal protective equipment

## Control

- ✓ Fall controls include fall protection such as safety nets or harnesses, and fall arrests

# Fall Protection Equipment



# Employees Role

- Use the proper fall protection equipment



- Ensure all components are in good condition



- Ensure all components function properly

- Stay ALERT



# Inspecting & Using Fall Protection Equipment

- Inspect the order picker
- Inspect the harness
  - Check for rips, tears, frayed material, etc
  - Ensure all rings and clips function properly
  - Make sure the lanyard extension is properly attached to the harness
  - Check the condition of all straps and fasteners
- Put on the harness
  - Fasten the leg straps securely so they do not hang loosely
  - Fasten the chest strap securely
- Connect the Lanyard and Lanyard Extension
  - The Lanyard Extension allows visual confirmation of the connection
  - Ask another employee to check the connection

# Inspecting & Using Fall Protection Equipment

## Damage or Malfunctions



- If any damage or dysfunction is discovered:
  - DO NOT USE IT
  - DISCARD THAT PIECE OF EQUIPMENT
  - REPLACE IT

# Recommended Standards & Practices

**What is the correct procedure for wearing and using fall protection equipment?**

- The Lanyard Extension should always be attached to the harness
- Make sure the leg and chest straps of the harness are fastened firmly and securely
- Have another employee check the Lanyard-to-Lanyard Extension connection
- Be sure a pallet is present



# Q & A

