

## **DON'T BE A DUMMY ABOUT FORKLIFT SAFETY**

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation. Featured are:

**INTRODUCTION:** A brief description of the program and the subject that it addresses.

**PROGRAM OUTLINE:** Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

**PREPARING FOR AND CONDUCTING THE PRESENTATION:** These sections will help you set up the training environment, help you relate the program to site-specific incidents, and provide program objectives for focusing your presentation.

**REVIEW QUESTIONS AND ANSWERS:** Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

**ATTENDANCE RECORD:** Document the date of your presentation as well as identify the program participants. The attendance record may be copied as needed.

### **INTRODUCTION**

Forklifts play a key role in almost every type of industrial operation. These powerful machines come in various types and sizes, which allows them to perform a variety of tasks. While each model operates differently, all share one significant trait: each can be very dangerous to operators and pedestrians alike. Over 100 deaths and an additional 20,000 serious injuries are attributed to forklift use each year. Most of these incidents occur as the result of unsafe acts.

This video features workplace "dummies" who commit common safety errors that result in injury and property damage: driving forklifts erratically, not paying attention, showing off and taking unnecessary risks. These incidents drive home the point that safe forklift operators must have good safety attitudes and must exercise sound judgment. Topics include pre-operational inspection, responsible driving and operation, vehicle stability, unique handling characteristics, traveling on sloped surfaces and using forklifts to reach elevated areas.

### **PROGRAM OUTLINE**

#### ***BACKGROUND***

- During its lifetime, nearly every forklift will be involved in at least one incident that results in property damage or human injury. Over 100 deaths and an additional 20,000 serious injuries are attributed to forklift use each year.
- Most of these incidents are caused by unsafe acts of the operator:
  - Being in a hurry to get the load or place the load;
  - Pushing the truck to the limit by carrying too much load or taking unnecessary risks;
  - Letting your guard down by taking chances or not paying attention.
- You have to be smart and play it safe all the time when operating a forklift; you don't want to be a dummy about forklift safety.
- This program uses workplace "dummies" to illustrate unsafe acts and reenact common forklift mistakes.

#### ***TRAINING & AUTHORIZATION***

- Before operating any type of powered industrial truck, you must be fully trained and authorized.

- Each type of forklift has different capabilities and handling characteristics, so being trained on one type of truck does not qualify you to operate other types of powered industrial trucks.
- As a lift truck operator, you will receive hands-on training on the specific type of forklift you will operate.

### ***PRE-OPERATIONAL INSPECTION***

- The first step to operating a forklift safely is the pre-operational inspection. The purpose of this inspection is to ensure the proper operation of the vehicle.
- The pre-operational inspection must be done at least once a day. If the truck is used continuously, it should be inspected after each shift.
- The inspection should test the function of the steering, operation of the controls and the forward and backward braking functions.
- Tire condition and tread, seatbelt condition and the condition of fork pins or other attachments that may be worn or broken should also be checked.
- Finally, make sure the ID plate is attached and legible.
- Any defect found in these critical systems, including a missing ID plate, requires the truck to be tagged out of service. Be sure to remove the key and report the defect immediately.
- Failing to conduct a complete inspection leaves the vehicle susceptible to a serious malfunction.

### ***SAFE DRIVING PROCEDURES***

- While driving a forklift, you must consider many small things all day to maintain a safe work environment.
- When approaching a blind intersection or doorway, stop and sound your horn to alert pedestrians and other lift truck operators of your presence.
- Keep a constant watch for pedestrians and other obstacles by scanning your path of travel. Make sure you always have a clear view.
- When going from areas of light to areas of dark, stop and give your eyes time to adjust before entering to make sure nothing is in your path.
- Each time you back up, look completely behind before moving to make sure the path is clear.
- Keep an eye out for pedestrians. Never allow them to pass under a raised load or between the lift truck and fixed objects such as a wall or bench.
- When getting off of the forklift for any reason, lower the forks all the way to the ground, shut off the engine and set the parking brake. Remove the key if you are going to be more than 25 feet from the truck to prevent unauthorized use.

### ***UNIQUE HANDLING CHARACTERISTICS***

- Lift truck operators must understand the unique handling characteristics of forklifts in order to operate them safely. Forklifts have very different braking, steering and tip-over characteristics compared to automobiles.

- These characteristics change depending on the weight of the load and the conditions of the work area.
- For example, the distance it takes to stop a lift truck increases when going down an incline, traveling over areas with poor traction or anytime the lift truck is carrying a load.
- Always operate the lift truck in a manner and speed that will allow it to be stopped safely. When you encounter conditions that reduce stopping distance, reduce your speed and increase your distance from edges and other objects.
- The steering characteristics of the lift truck are also different than that of an automobile.
- Lift trucks steer from the rear, which enables them to run around in tight quarters. This causes the rear of the truck to swing wide when turning.
- If you don't take the wide rear end swing into account while driving, you may collide with property or pedestrians.

### ***THE STABILITY TRIANGLE***

- Perhaps the most important characteristic of forklifts you must understand is its tendency to turn over under certain loading and operating conditions.
- Lift trucks have a zone of stability defined by three points of their suspension system. These points create the borders of what is known as the stability triangle.
- Under ideal conditions, the forklift's counterweight combined with the weight of the load will focus the total weight of the loaded truck in a specific spot called the center of gravity.
- When the center of gravity is in the center of the stability triangle, the truck is very stable and will not tip over.
- Ideal conditions for lift truck stability occur when the forklift is on a flat surface, with the load low to the ground and not moving. Any deviation from these conditions will reduce stability.
- Operators must know that even simple movements reduce the truck's stability: raising the load, turning the vehicle, crossing uneven surfaces or going on an incline.
- When done properly, these actions alone won't tip you over. Operators then can become complacent about stability and start combining these movements together, which can lead to tip over.

### ***PREVENTING TIP-OVERS***

- To help prevent tip-overs, reduce the speed of the truck before making any turn. Keep the load as low to the ground as possible.
- In addition, make sure the forklift has come to a complete stop before raising or lowering the load. Never raise or lower the load while moving.
- When crossing railroad tracks or similar obstacles, always proceed at an angle. This keeps two of the three points of contact on solid ground at all times, reducing the chances of a tip-over.
- When traveling on ramps and inclines, stay in the center of the ramp and don't hug the edge. Always go straight up or straight down; never travel diagonally or turn on a slope.
- Always keep the load facing uphill, which includes backing down a slope any time the truck is loaded. Be sure to keep the load tilted against the mast to reduce the chances of the load falling off the forks.

- Backing down a ramp also keeps the lift truck's braking wheels on the uphill side, improving control when the brakes are applied.
- Operators should do everything in their power to avoid turning over the forklift. Tip-overs are the most common source of lift truck fatalities.

### ***RESPONDING TO TIP-OVERS***

- If you are involved in a tip-over, your life may depend on taking the proper action.
- During the tip-over, do not attempt to jump from the truck. Many people are killed by the safety cage crushing their head or neck during the tip-over.
- The safest place to be when a truck tips over is inside the safety cage. As soon as you feel the truck tipping over, pull yourself tight against the steering wheel and lean in the opposite side of the turn over.
- By holding on tight and wearing your seatbelt, you can stay inside the protected area of the safety cage.

### ***OTHER SAFE WORK PRACTICES***

- Using a pallet or the forks of a lift truck as a lifting platform is highly dangerous and is not allowed at any time. Only an approved lifting cage with guardrails and the appropriate restraint devices may be used to raise personnel with a forklift.
- If someone requests you to make an unsafe lift, it is your responsibility to refuse.
- Under no circumstance are passengers allowed to ride on a forklift. Not only are there no seatbelts provided for passengers, but riders are also left vulnerable to being struck by falling loads or passing objects since they are outside the safety cage.
- When working with trailers, you are responsible for making sure the wheels are properly chocked.
- You should also inspect the floor system of the trailer for signs of weakness and make sure the dock plate is installed properly and has enough capacity for your lift truck.

### **PREPARE FOR THE SAFETY MEETING OR TRAINING SESSION**

Review each section of this Leader's Guide as well as the videotape. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

### **Here are some suggestions for preparing your videotape equipment and the room or area you use:**

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the videotape program.

Place or secure extension cords to prevent them from becoming a tripping hazard.

### **CONDUCTING THE PRESENTATION**

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to illustrate the consequences of unsafe forklift operation while stressing the importance of the lift truck operator's safety attitude and sound judgment.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about unsafe acts forklift operators have taken at your facility and what the consequences were or could have been. Use the review questions to check how well the program participants understood the information.

After watching the videotape program, the viewer will be able to explain the following:

- The importance of the pre-operational inspection;
- The unique handling characteristics of a forklift;
- How to prevent tip-overs and what to do if one occurs;
- The hazards that exist when using forklifts to elevate co-workers and driving on docks and trailers.

**DON'T BE A DUMMY ABOUT FORKLIFT SAFETY**  
**REVIEW QUIZ**

Name \_\_\_\_\_ Date \_\_\_\_\_

*The following questions are provided to check how well you understand the information presented during this program.*

1. If you have been trained and authorized to operate a particular type of forklift, you are then qualified to operate all types of lift trucks at your facility.
  - a. true
  - b. false
  
2. If your forklift has been used on the shift before yours, you should still conduct a pre-operational inspection.
  - a. true
  - b. false
  
3. You should remove the key from a parked forklift if you are going to be more than \_\_\_\_\_ feet from it.
  - a. 25
  - b. 50
  - c. 75
  
4. The stopping distance of a forklift increases when \_\_\_\_\_.
  - a. traveling down an incline
  - b. traveling over loose gravel
  - c. you are carrying a load
  - d. all of the above
  - e. none of the above
  
5. Where are the three points located that make up a forklift's stability triangle?
  - a. at the top of the safety cage
  - b. between the forks and the mast
  - c. at the suspension system
  
6. You should always keep the load facing uphill on a slope, even if you are backing down it.
  - a. true
  - b. false
  
7. If a forklift has just begun to tip and you can unfasten your seatbelt, you should jump out of the cage in the opposite direction of the tip-over.
  - a. true
  - b. false
  
8. Who is responsible for making sure the wheels of a trailer are chocked before a forklift enters?
  - a. the trailer's truck driver
  - b. the forklift operator
  - c. the forklift operator's supervisor
  - d. the foreman or supervisor of the loading dock

***ANSWERS TO THE REVIEW QUESTIONS***

1. b

2. a

3. a

4. d

5. c

6. a

7. b

8. b