

Training Solutions, Delivered!

MOVE IT SAFELY: Avoiding Injury While Moving Materials (Concise)

Leader's Guide, Fact Sheet & Quiz

Item Number: 4399 © AP Safety Training

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

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes <u>before</u> the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

4399 MOVE IT SAFELY: Avoiding Injury While Moving Materials (Concise) FACT SHEET

LENGTH: 10 MINUTES

PROGRAM SYNOPSIS:

Two of the main causes of injuries to material handling workers are attempting to show off to their co-workers and not wanting to take time to get the proper equipment or ask for help. This leads to workers struggling to lift and carry materials which are too heavy to be moved safely. In order to move objects safely, employees must be well trained in safe material handling techniques while also maintaining the proper attitude and state of mind to use their training each time they lift or move an object. This program discusses the techniques, precautions and safe work practices employees should follow so that when an object must be moved, they can "move it safely."

Topics include preparing to move a load, manual lifting techniques, use of hand trucks, carts and dollies and handling pallets safely.

PROGRAM OBJECTIVES:

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

- How to prepare for lifting and moving a load;
- Why you must stay within your limits without exerting yourself when you are lifting and moving an object by yourself;
- How to manually lift and move an object without injury;
- How to properly move loads with hand trucks, carts and dollies;
- How to safely handle pallets.

PROGRAM OUTLINE

PREPARE FOR THE JOB

• Material handling is a broad term that encompasses both manual lifting, which is the lifting, carrying or moving of objects without assist devices, as well as the moving of loads with mechanical aids such as hand trucks, pallet jacks, forklifts and other material handling equipment.

- No matter what type of load you intend to transport, or what method you intend to use to move it, the first step is to prepare for the job. In other words, you need to come up with a plan for safely lifting the load, carrying it to its destination and placing it securely.
- First, check the load's stability and weight. For small loads, you can do this by tilting it slightly to one side to determine if it is too heavy to lift and carry alone.
- If a load is too heavy for you to lift without assistance, do not attempt to lift it. Get help from a co-worker or use a hand truck or other device designed for transporting materials.
- On larger loads, check for labels or tags which may give you an indication of the weight and any special handling requirements for the contents.
- Of course, large loads require more powerful lifting equipment. When this is the case, you must ensure that the weight of the load does not exceed the lifting capacity of the equipment to be used.
- The weight of some objects may need to be looked up in a reference book or found by other methods.
- In addition to weight, the stability of the load must also be considered. Before moving a load manually you may need to re-stack loads that are composed of multiple pieces.
- Moving a load on a pallet, lifting with a crane or using a hand truck or dolly also requires the load to be arranged in a stable manner with the center of gravity of the load in the appropriate location to ensure a stable move.

PATH OF TRAVEL

• Safe material handling requires planning and an important part of your plan must be a safe path of travel.

- Make sure your planned route has no slip or trip hazards as well as any obstacles that may interfere with the equipment you may be using.
- Also, check for overhead hazards, especially when using forklifts, cranes or when moving tall loads.

• Finally, inspect your route for any potential hazards created by passing near fixed objects such as doorways, support beams or storage racks. Many injuries occur when our body parts strike fixed objects we weren't prepared for while traveling with a load.

PERSONAL PROTECTIVE EQUIPMENT

- When moving materials, make sure you are wearing the appropriate shoes or boots for the work environment to be entered and for the materials to be transported.
- Also consider if eye protection, hearing protection or a hardhat are required. If you are not sure, ask.
- If the material has rough or sharp edges, or splinters, wearing leather work gloves can prevent hand injuries.
- If the load requires handling chemical containers, you may need to wear chemical resistant gloves.

ATTITUDE

• Staying within the limits of your lifting capabilities is part of having a good safety attitude.

• Of course, part of that same safety commitment is to always use proper lifting techniques when lifting and moving materials. Using proper technique is key to preventing back injuries.

MANUAL LIFTING TECHNIQUES

Grip & Stance

• Once you have decided that it is safe to lift an object by yourself, it is important to make sure you follow safe lifting, carrying and placing techniques.

- First, decide how you will grip the load. If the object has handles or handholds, you should use them. Tilting the load can also create a spot for a solid grip.
- Stand close to the object with your feet spread about shoulders-width apart.

Knees & Legs

- Then lower yourself down to the load by bending your knees and keeping your back in its natural position which maintains the back's natural curvature.
- The motion to avoid is bending over at the waist. Bending at the waist is harmful to your back and is the cause of many injuries.
- After lowering yourself by bending your knees, get a firm grip on the load and bring the load close to your body.
- Then use the strength of your legs to rise up and lift the load.

Keep Load Close

- The reason to keep the load close to your body while lifting is to minimize the force placed on your lower back.
- Holding a load away from you creates much more force on your back than holding it close.

• Some people find that taking a stance wider than shoulder-width allows you to get even closer to the load and makes for an easier lift.

• A wide stance also allows you to get lower with less knee bend. It is easier to rise up again if your knees are not bent to an extreme angle.

Jerking & Twisting

• Be sure not to suddenly jerk or snatch a load and never twist your back while lifting. Jerking and twisting can cause strains and sprains in the ligaments and muscles of the spine, which can be quite painful and take a long time to heal.

• Instead of twisting your back while lifting, perform the lift first then shuffle and pivot your feet in order to turn. This turns your whole body as one unit and greatly reduces the wear and tear on your back.

• Make sure your fingers aren't underneath the load when setting it down.

HAND TRUCKS

• When using a hand truck, always use the correct one for the job. While a standard truck is good for moving boxes and other square-shaped items, specialty trucks with curved beds should be used when moving barrels and other round containers.

• To keep the load stable, place the heaviest items at the bottom and only stack objects to a height that you can see over while traveling.

- When traveling, grip the handle firmly and when possible, you should push the truck instead of pulling it.
- When you reach your destination, support the load with one hand and slowly lower the truck with the other to make a controlled stop. An uncontrolled stop can easily spill the load.

CARTS AND DOLLIES

- When loading a cart or dolly, make sure the total weight of the items is distributed evenly to maximize stability.
- Some carts also have a lower storage area. Placing some of your items on the lower level helps keep the center of gravity of the cart low, which makes it less likely to tip over.
- Accessing the lower level of a cart without straining our back can be a challenge. Don't bend at the waist; instead, squat down and keep the load close to your body until it's time to transfer it to or from the cart.
- You can also kneel down and use your leg as a "bridge" to help support the load as it is transferred. This technique is especially useful for heavier items and also works to access items on low shelves or under racks.

HANDLING PALLETS SAFELY

- Material handlers often need to load, move and handle pallets. Working with pallets creates a few safety concerns that must be considered.
- When handling pallets, gloves should be worn to avoid splinters.
- Ideally, a forklift or pallet jack would be available to move pallets when needed, but this is not always the case.
- Two workers lifting together can easily move a pallet, but a pallet may also be safely moved by one person.
- To move a pallet alone, you can tilt the pallet onto its edge so that the planks run parallel to the floor. Then, bend your knees and find a secure grip on one of the planks and lift with your legs.
- Another method is to simply push the pallet while sliding it along the floor. This allows you to move the pallet without lifting.
- Pallets should be stored flat and not on an edge. Pallets stored on edge tend to fall over which can result in injury.
- Avoid walking or standing on pallets. Pallets are the source of many ankle injuries.
- If you can't reach what you are after without walking on a pallet, consider having the pallet moved to be more accessible.
- It may also be possible to use an assist device to move the object within reach.
- Before placing a pallet into service it should be inspected to ensure it is in good condition.
- When arranging a load onto a pallet, the center of gravity of the loaded pallet should be in the center of the pallet.
- Many loads will need to be shrink-wrapped, taped or banded to the pallet to ensure they remain stable during transport.

CONCLUSION

- In this program, we have discussed some of the safe work practices and precautions you can take to prevent painful and often disabling injuries while performing material handling operations.
- Perhaps the most important point to remember is to stay within the limits of your physical lifting abilities and to seek help when a load is too heavy to safely move alone.
- No matter the method, use the tips and techniques learned in this program to make sure that when you decide to move an object that you are able to "move it safely."

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ANSWERS TO THE REVIEW QUIZ

1. a 2. d 3. c 4. b 5. a 6. b 7. b

MOVE IT SAFELY: Avoiding Injury While Moving Materials (Concise) REVIEW QUIZ

| The following questions are provided to determine how well you understand the information presented in this program. | |
|--|--|
| NameDate | |
| a. | The weight of the load is the only consideration for safely moving materials. True False |
| a. b. c. | When determining a safe path of travel, which of the following items must be considered? Slip and trip hazards Overhead objects Fixed objects All of the above |
| a. b. | Which of the following is a way to avoid twisting while lifting? Stand on one foot Only lift while kneeling Shuffle and pivot your feet |
| 4. | When loading a hand truck, the heaviest items should be placed on top. |

- a. True
- b. False
- 5. You should always push a loaded hand truck rather than pulling it.
- a. True
- c. False
- 6. Accessing the lower level of a cart requires bending at the waist.
- a. True
- b. False
- 7. Pallets should be stored on their sides to save space.
- a. True
- b. False