



Training Solutions, Delivered!

BACK SAFETY AWARENESS

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 1522

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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 before 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.

1522 BACK SAFETY AWARENESS FACT SHEET

LENGTH: 9 MINUTES

PROGRAM SYNOPSIS:

Preventing back pain begins with a good safety attitude and thinking about personal safety before performing each lift. Safe lifting techniques, team lifting methods for heavy objects and using assist devices are all effective methods that keep the spine healthy and free from injury.

In this video, employees return to work for Back Safety Awareness Day. Topics include components of the spine, causes of back injuries, back strains and sprains, and the importance of exercise and posture in maintaining a healthy back.

PROGRAM OBJECTIVES:

- How poor lifting techniques lead to painful back injuries;
- How to safely plan the lift, execute the lift, travel with the load and set down the load;
- How exercise and good posture can aid in preventing back pain.

PROGRAM OUTLINE:

COMPONENTS OF THE BACK

- The spine is made up of cylindrical bones called vertebrae. The vertebrae are stacked on top each other to form the spinal column.
- Between each vertebra is a disc. The discs have a jelly-like center that act as padding to absorb the impact of lifting, standing and sitting. They also allow lots of space between the vertebrae for nerves to run in and out of the spinal cord.
- The combination of vertebrae and discs with muscles and ligaments form a strong but flexible vertical framework that supports our body.

HOW BACK INJURIES OCCUR/LEVER PRINCIPLE

- Improper lifting techniques and poor posture put stress on individual parts of the spine, which can wear out or become damaged.
- The closer a load is kept to the body, the more the force of the lift is distributed vertically up and down the spine. Holding the load away from the body, especially with the back bent, causes most of the force to be placed on just a few discs.
- These discs are severely pinched between the overloaded vertebrae. This can cause the discs to wear out and even rupture.
- Our backs work like levers. Unfortunately, we place 100 pounds of force on our back in order to lift 10 pounds because we are operating from the short end of the lever.
- To make matters worse, such things as holding the load farther out from our bodies and bending from the waist rather than squatting causes the lever arm to get longer and even more force to be applied to the structure of the lower back.

RUPTURED DISCS AND PINCHED NERVES

- Twisting and turning while lifting can cause the discs to be ground between the vertebrae. This places great strain on the disc and can lead to a rupture.
- Many back problems are caused by a gradual degeneration of the discs rather than one traumatic injury. This is important to remember because when you first start lifting incorrectly, you won't feel any pain or know anything is wrong.

SAFE LIFTING TECHNIQUES

Plan the Lift

- Make sure you can make it through narrow passageways and doorways with the load without damaging the load or your fingers.
- Remove any sharp protruding objects such as screws or nails before lifting. Protect yourself against any sharp edged or rough materials by wearing leather or heavy cloth gloves when needed.

Executing the Lift

- When preparing to lift the load, plant your feet about shoulder-width apart and bend your knees. Center your body weight over your feet.
- Get as close to the load as possible while maintaining your spine's natural curve. Pull in your abdominal muscles to help support the back.
- Get a good grip on the object and bring it close to your body. Keep your elbows in close to your body.
- Rise slowly and allow your legs to do the lifting. We have all heard it time and time again, but solid safety advice stands the test of time: lift with your legs, not your back.

Traveling with the Load

- When traveling with the load, keep it close to your body and make sure that you can see over it.
- Face the direction of travel and avoid any twisting or bending motion.

Setting Down the Load

- When setting down the load, reverse the steps used for lifting. Be careful not to smash your fingers under the load when you release it.

OTHER SAFE LIFTING TECHNIQUES

- If an object to be lifted is located above your shoulders, use a step stool or sturdy ladder to reach it. Get as close to the load as possible and slide it towards you. Remember to do all the work with your arms and legs, not your back.
- Loads that are under racks and cabinets can also cause problems. Pull the load toward you, then support it on one knee before you lift. Use your legs to power the lift.

BACK STRAINS/SPRAINS

- Back strain is a general term used for a pulled or torn muscle.
- A back sprain refers to stretched or torn ligaments.
- The same types of poor lifting practices we discussed earlier can lead to these ailments.

EXERCISE

- To avoid these problems, consult your physician about specific exercises and stretches to keep your back flexible and strong.
- Stretches performed after lifting are also helpful in reducing stiffness.

POSTURE

- The health of your back depends on your ability to maintain a neutral posture. When you assume a neutral posture, your body will find its natural balance and avoid overly stressing the components of the back.

Sitting

- When sitting, neutral posture includes sitting with your ankles, knees, thighs and elbows at right angles. You should keep your head balanced naturally over your shoulders and not protruding in front of your body. Also, keep your shoulders relaxed and not hunched.
- Choose a chair that offers support to the lumbar region of the spine. You don't really need a fancy multi-adjustable chair to accomplish this. A simple support cushion placed between your chair and lower back will help you maintain the correct posture.

Standing

- When standing, you need to keep your spinal column aligned in its natural "S" curve. If you must stand for long periods, propping one foot on a stool reduces stress on your lower back.

BACK SAFETY AWARENESS

ANSWERS TO THE REVIEW QUIZ

1. b

2. d

3. a

4. c

5. b

6. c

7. a

**BACK SAFETY AWARENESS
REVIEW QUIZ**

The following questions are provided to determine how well you understand the information presented in this program.

Name _____ Date _____

1. The component of the back that has a jelly-like center and absorbs impacts to the back is known as a _____.
 - a. Vertebra
 - b. Disc
 - c. Spinal cord
 - d. Ligament

2. How many pounds of force are put on our backs to lift a 10-pound load?
 - a. 5 pounds
 - b. 10 pounds
 - c. 50 pounds
 - d. 100 pounds

3. Your back muscles can become weak due to lack of exercise.
 - a. True
 - b. False

4. What should you do if you suffer a mild backache that you feel doesn't warrant consulting a physician.
 - a. Stop all physical activities except for work
 - b. Take two or three days of bed rest
 - c. Stay active including good posture and body movements

5. If you don't feel immediate pain when beginning to lift something, you are not at risk of suffering any back problems.
 - a. True
 - b. False

6. When setting down a load, you should _____.
 - a. Bend at the waist and release the load on the ground
 - b. Move the load away from the body then squat to set it down
 - c. Reverse the same steps used for lifting

7. The health of your back depends on your ability to maintain a _____ posture.
 - a. Neutral
 - b. Positive
 - c. Negative