

A. Lesson Goal:

By the end of the training sessions, workers will:

- Understand safe lifting techniques and other ways to prevent back strains and injuries.

B. OSHA Regulation: General Duty Clause 5A1

C. Have Handy

- Boxes of different sizes and weights for one- and two-person lifting
- A large, heavy bag or sack

The supervisor of the loading dock or warehouse would be very helpful for this meeting. In addition, try to hold the meeting in a place with a counter or shelf to demonstrate non-standard lifting.

D. Background for Instructor:

1. Introduction

Next to the common cold, back injuries account for the greatest number of lost workdays. About eight out of ten Americans will experience some kind of back pain. For too many of them, the pain is serious and permanent.

The real tragedy is that most back injuries can be prevented. All too often, they happen because people don't know how to lift properly, or try to lift an object that's too heavy for them.

2. Types of Injuries

Your back supports your whole body. It's a complex combination of bones, muscles, ligaments, and nerves that work closely with muscles in your stomach. Here are some of the common injuries that can result from putting too much strain on your back:

- Strains and sprains to the back muscles
- Slipped discs, which are tears or other damage to the vertebrae
- Muscle spasms, usually caused by stress or tension
- Hernias, which are ruptures in the abdominal muscles

Many of these injuries result when the back or stomach muscles are not strong enough to do what you're asking them to do. The danger of back injuries is increased if a person is out of shape, has poor posture, is overweight, or tries to do too much.

Even if you're in good physical shape, back pain and injuries can result from:

- Twisting while carrying an object
- Lifting awkwardly shaped objects
- Leaning and stretching to pick up an object
- Tripping or falling while carrying an object

3. Preventing Back Injuries

There are proper and improper ways to actually lift an object. But the most important part of preventing back injuries happens *before* you start to lift anything.

- Plan your lift by thinking about what you're going to do and how to do it.
- Take your time—avoid abrupt, jerky movements.
- Stretch your muscles before starting a job that involves lifting.
- Try to find other ways to lift and carry the object, such as mechanical aids, instead of doing it all by yourself.

4. How to Lift Properly

Here is the proper technique for lifting and putting down most objects:

- To pick it up: Stand close to the load, bend your knees, and let your legs do the work instead of your back.
- To put it down: Don't twist, but move your feet to change position. Again, let your legs do the work. Place the object on the edge of a surface and slide it back.

5. Non-Standard Lifting

From time to time, we're called upon to lift and carry awkward objects or under non-standard conditions. Here are some tips for preventing back injuries in these situations:

- **If lifting from a high place**—use a platform instead of a ladder, and get the load as close to you as possible before lifting.
- **If lifting from an awkward place**—get as close as possible and remember to use the leg muscles instead of the back.
- **If lifting drums and cylinders**—keep the above rules in mind, also remember that rounded objects can shift suddenly, so be extra careful.

6. Get Help

Another important rule for any kind of lifting is to *get help* rather than trying to do too much by yourself. Sometimes it's hard to admit that something "is too heavy for me," but admitting this is a lot easier than dealing with a serious back injury and what might turn out to be a lifetime of pain.

If two people are involved in a lift, it's helpful that they be approximately the same height, that they perform the same motions together, and that they agree beforehand on which one will give directions on what to do and when.

Finally, if you do feel back pain while lifting or carrying, stop what you're doing, rest, and seek medical attention. Trying to "work through it" could turn a minor injury into a major one.

E. Examples and Practical Exercises:

- Get a volunteer to demonstrate standard lifting and putting down of a box or other object.
- Demonstrate non-standard lifting, such as from a high place.
- Demonstrate proper technique for two-person lifting and carrying.
- Ask if there are any difficult lifting operations in your work area that need special instructions or assistance.