



BACK INJURY PREVENTION



Back Injury Prevention

This training is best viewed in Internet Explorer 6.0 or above.



BACK INJURY PREVENTION

Introduction

Low back pain is extremely painful, and once you've experienced an episode of back pain, you become more vulnerable to further injury.

The best thing you can do is use proper postures and techniques to prevent back pain in the first place. The following slides will focus on prevention of back injury, for both first-time and repeat cases.

And since 75% of low back injuries occur while lifting objects, we will focus especially on proper lifting techniques.

What Causes Back Pain?

Every time you bend or lean over to pick something up, you put tremendous pressure on your lower back. Even just leaning forward while sitting at a desk or table can eventually lead to back problems.

Other contributing factors include:

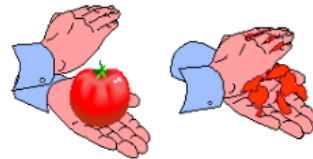
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| Poor posture | Strenuous work | Challenging physical tasks |
| Poor physical condition | Obesity | Sedentary lifestyle or job |
| Tension & stress | Impact trauma | Repetitive trauma |
| Aging & disease | Strenuous sports | Other stresses on the muscles & ligaments of the back |

When you pick something up by bending at the waist instead of using your legs, the stress on your lower back is actually ten times the weight of the load.

So if you pick up just a 25-pound load, the force on your lower back is a whopping 250 pounds!

Illustration

Imagine placing a tomato between your palms.
Squeeze the tomato with both hands.
What happens? The tomato will burst.



Let's try this again. Only this time...
While squeezing the tomato, twist your hands in opposite directions.
Now what happens? The tomato will burst more easily and with much less force.

The same stresses apply to your lower back whenever you lift something and twist your body at the same time.

Risky Moves

Whenever you find yourself facing one of these moves, find an alternate method.

It's not worth risking a back injury!

- Heavy lifting, especially repeated over a period of time
- Twisting at the waist while holding a load, like with a shovel
- Reaching and lifting
- Lifting or carrying objects with an awkward or odd shape
- Working in awkward and uncomfortable positions for a length of time

Prevention is the Best Medicine!

Most back pain is caused by using the back muscles improperly.

Here are a few things you can do to strengthen your back muscles and reduce the chance of injury. Work with your doctor to determine the best plan for you.

- **REGULAR EXERCISE** will strengthen the back and stomach muscles
- **LOSE EXCESS WEIGHT**
- **MAINTAIN GOOD POSTURE:**
 - While sitting or standing, keep your back straight and don't slouch.
 - When you sit or drive, keep your back straight against the seat. Your knees should be slightly higher than your hips.
 - Using a firm mattress, sleep on your side with your knees bent, or sleep on your back with a pillow under the knees for support.

Proper Lifting Technique

Lifting properly will help prevent back injuries. Simply follow these basic steps:

1. Assess the situation
2. Position yourself correctly
3. Lift the load with care
4. Carry the load cautiously
5. Set the load down correctly



Proper Lifting Technique

1. ASSESS THE SITUATION

People often approach lifting as a mindless task, and that's why lifting injuries are so common. Before you begin, evaluate the situation to determine the best method for moving the object.

Is it bulky? Awkward? Oddly shaped?

How heavy is the object? Will you need help?

Are there any hazards along your route, like stairs or clutter?

Can you break down the load into smaller loads?

Can you use a dolly or cart to move the load?

Test the weight of the load by lifting a corner. If the load is too heavy or is oddly shaped, then stop! Find a co-worker for help or use a dolly or cart instead.

Never lift anything unless you're sure you can do so safely.

Proper Lifting Technique

2. POSITION YOURSELF CORRECTLY

Stand in front of the load. Straddle the load with one foot slightly in front of the other for balance. Keep a firm footing, and center your body's weight over your feet.

Slowly squat down by bending your knees, without bending your back. Keep yourself in an upright position, and allow your heels to come up off the floor.

Using both hands, firmly grasp the load and bring it as close to your body as possible. This will help distribute the weight over your feet, making it easier to move the load.



Proper Lifting Technique

3. LIFT THE LOAD WITH CARE

Slowly straighten your legs to stand up with the load. Use smooth motions, and don't twist or jerk your body. Let your legs carry the weight of the load.

Tightening your stomach muscles can help support the spine, but remember to breathe! Holding your breath will do more harm.

Make sure the load isn't blocking your vision.

If you're picking something up off the floor, it may help to put one knee on the floor and lift the load onto your other knee. Then stand up with the load.



Proper Lifting Technique

4. CARRY THE LOAD CAUTIOUSLY

Walk slowly, keeping your back straight or just slightly arched. Keep the load close to your body, like you're hugging it.

If you need to turn, do so by moving your feet. Do not twist or pivot your body at the waist!

Don't try to lean over or lift the load over your head.

If you become tired, set the load down and rest for a few moments.

If you encounter obstacles such as closed doors, call for a co-worker to assist you.



Proper Lifting Technique

5. SET THE LOAD DOWN CORRECTLY

Follow the reverse of the procedure for lifting a load properly.

Position yourself where you want to set the load.

If you're putting the load on the ground, squat down by bending your knees and position the load in front of you. Let your legs do the work, not your back.

If you're setting the load on a table, put the load down slowly and maintain contact until you're sure the load is secure.

Remember, don't twist your body, and try to keep your back straight or just slightly arched.

Conclusion

This concludes Back Injury Prevention Training.

For more information, please consult either
your supervisor or the Safety Director.

Don't forget to complete and submit the quiz to Human Resources!