

LIFTING AND YOUR BACK: PREVENTING BACK INJURY TUTORIAL

Back Injuries

Low back pain is the most common work-related medical problem in the United States and the second most common reason for missing work. Most injuries involve the lower back. More than one million workers suffer back injuries every year. Three out of four back injuries occur while lifting. Many back injuries can be avoided with proper lifting techniques, exercise, good posture and proper diet.

Preventing Back Injuries

It is helpful to understand how the back works in order to understand how to reduce back injuries. The back is made up of three main components: the spine, spinal cord and muscles.

The Spine

The spine supports the body and head, protects the spinal cord and gives flexibility to the body. The spine is made up of 33 vertebrae; these are connected by discs, which are filled with gel. These discs act like a shock absorber for the back.

The Spinal Cord

The spinal cord is a part of the central nervous system. There are 31 pair of nerves that extend out of the spinal cord into the body

The Muscles

Your body has approximately 400 muscles in your back which help to stabilize the spine and help with posture. More than 1,000 tendons connect these muscles to the spine.

Body Mechanics

Using good posture whether you are sitting, standing, lifting, bending, pushing or pulling is one of the first principles of good body mechanics. Body mechanics-the way you move your body and back- can help prevent back injury.

Lifting

Lifting is the most common cause of back injury among healthcare workers. When lifting, follow two general rules:

Keep loads close to your body. This will keep the pressure on your spine as low as possible.

Bend your knees, not your back. Bending at the knees encourages you to use your leg muscles, which are more powerful.

Safe Lifting

To lift safely:

- Stand close to the object
- Spread your feet shoulder width apart with one foot slightly ahead of the other
- Contract your stomach muscles
- Squat, bending your knees and hips
- Keep your head up and your back aligned.
- Contract your stomach muscles.
- Lift using your legs
- Keeping the load close to your body, straighten your legs and return to a straddling position with feet remaining shoulder width apart.

When lifting as a team, one person should signal the other when to lift, walk and unload. Don't twist as you lift. Instead, pivot with the hips and shoulders in line and shift your weight. Avoid lifting heavy objects above your waist. If you must do so, stop half ways to set the load on a table and change your grip.

Sitting

Sitting can be twice as hard on your back as standing. If you must sit a lot on the job:

- Get a chair that supports your lower back, or use a lumbar cushion.
- Using a rolled towel placed between the chair and your lower back can help.
- Adjust the chair so your knees are at least as high as your hips when your feet are on the floor.
- Desktop should be slightly above your waist.
- Sit close to your work. Don't lean over it.
- Don't slump.
- When sitting for periods of time, take frequent back breaks to get up and stretch.
- Stand, press your palms against your lower back and gently arch your back.

- While seated, press your back against the chair back. Reach straight up from your shoulder with your right arm. Look up and feel the stretch extend through your side. Switch arms and repeat four times.

Standing

- When standing, place one foot on a low stool or other object.
- Change positions frequently.
- Wear comfortable shoes and stand on a cushioned mat.
- Bring your work to a comfortable level. Don't bend over it.

Pushing and Pulling

- Make sure you push, don't pull whenever possible.
- Stay close to the load.
- Don't lean forward
- Use both arms and tighten your stomach muscles

Falls

If a client starts to fall....

- DO NOT TRY AND STOP THE FALL!!
- Grasp the client, and get as close as you can to guide them to the floor.
- Bend at your hips and bend your knees. Do not bend your back
- Always use the gait belt for transfers. ALWAYS