

## **Back Injury Prevention**

The back is the body part most often hurt in work-related injuries with lost time. The bones, discs, joints, ligaments, and muscles in the back are vulnerable to pain and injury when not used properly. Help employees keep their backs healthy and pain-free with these basic rules for proper posture, exercise, and lifting.

## At Work

- **Maintain good posture**. Slouching and other awkward postures can strain joints and ligaments. Whether employees sit or stand, they can reduce stress on the back with a neutral posture (the back's natural 'S' curve).
  - Remind employees to sit without slouching and to stand tall, with head up and shoulders back.
  - Try changing work heights so employees can handle items with their backs in the correct position.
  - When driving, an employee should keep his or her back straight against the seat and close enough to the wheel so that knees are bent and slightly higher than hips.



• **Reduce repetition**. Discourage repeated, sustained motions that put stress on back muscles and joints and cause fatigue and injury, especially when combined with excessive force or poor posture. Use materials-handling devices, such as carts, skid loaders, conveyor systems, robotics, or sliding racks. Let employees vary their tasks and body positions throughout the day and let them take frequent stretch breaks.

- Establish a safe lifting policy. Develop procedures and training to let employees know how to lift correctly to avoid back injuries.
  - Train employees to plan a lift in advance by considering the object's weight and the distance it will be moved. If an object is too heavy, awkward, or bulky for one person to lift safely, use a two-person lift or mechanized lifting method, such as a cart or dolly, or divide the load.
  - Assess whether any hazards should be eliminated before lifting. For example, make sure the work area has enough space to move freely. The area should be dry; even; and have stable flooring

and enough light.

- When possible, push materials instead of lifting them.
- If employees must lift an object, they should:

Align themselves in front of the load with their feet straddling it, one foot slightly in front of the other for balance. Then they should squat slowly, bending the knees instead of the back and stomach. Using both hands, an employee should grab the load firmly and bring it as close to the body as possible to distribute the load's weight over the feet.



Tighten stomach muscles to help protect the lower back.

Lift with the legs, not the back. With the load close to the body, an employee should slowly straighten his or her legs until upright. Make sure the load isn't blocking the view before walking slowly toward the destination. Move the feet, not the waist, to turn to the side.

Finally, set the load down correctly. After reaching the destination, employees should reverse the above steps. If setting the load on the ground, they should squat by bending the knees and positioning the load in front of the body. If setting the load down on a table, they should do so slowly and keep contact with the load until it is securely on the surface.



## **Personal Habits**

Use your wellness program to encourage employees to take care of their backs when they are off the job.

- **Reduce Stress**. Encourage workers to use your employee assistance program when dealing with personal or professional stress. Stress and mental distractions can increase the chances for back injury when employees don't pay attention and neglect safety.
- Exercise. The muscles that support the spine's vertebrae are the most common source of back pain especially if muscles are weak, tight, or tired. Encourage employees to maintain strong back and stomach muscles by stretching and doing strengthening exercises, and to check with a doctor to determine the best exercise plan for them. Exercise is a proven stress reducer.
- **Maintain a healthy weight**. Extra weight puts more force on back and stomach muscles, so maintaining a healthy weight can reduce the risk of strain and pain. A doctor can provide advice on maintaining a healthy weight for individual employees.
- **Get a good night's sleep**. Employees should choose a firm mattress or place plywood between the mattress and box spring. The best sleeping position for back health is on the side with knees bent, or on the back with a pillow under knees.