

# Back Safety Quiz



## QUESTION

What are the three work procedures and processes that cause back pain'

## ANSWER

- **Force.** When too much force is exerted such as by lifting or moving heavy objects.
- **Repetition.** Repeating certain movements.
- **Inactivity.** An inactive job or a desk job.

## WHY IS IT RIGHT

### BACK SAFETY PROGRAM

A back-safety program is key to dramatically reducing debilitating back injuries on the job.

Disabling back injuries are costly and all too prevalent. A quick fix approach to battling back pain is not the answer.

Whether it's dull and achy or sharp and stabbing, back pain can make it hard to concentrate on your job.

Unfortunately, many occupations ' such as nursing, construction and factory work ' can place significant demands on your back. Even routine office work can cause or worsen back pain. Understand what causes back pain at work and what you can do to prevent it.

### BACK PAIN/LIFESTYLE

Factors such as aging, obesity and poor physical condition also can contribute to back pain. While you can't control your age, you can focus on maintaining a healthy weight, which minimizes stress on your back.

Start by eating a healthy diet. Make sure you get enough calcium and vitamin D. These nutrients can help prevent osteoporosis, a condition that causes your bones to become weak and brittle and is responsible for many of the bone fractures that lead to back pain.

Combine aerobic exercise, such as swimming or walking, with exercises that strengthen and stretch your back muscles and abdomen. Exercises that increase your balance and strength can also decrease your risk of falling and injuring your back. Consider tai chi, yoga and weight-bearing exercises that challenge your balance.

For most healthy adults, the Department of Health and Human Services recommends at least 150 minutes a week of moderate aerobic activity or 75 minutes a week of vigorous aerobic activity ' preferably spread throughout the week ' and strength training exercises at least twice a week.

## **PREVENTION STRATEGIES**

### **a. Effective Prevention Methods to Cope with Back Injury**

- Stretch before and after strenuous activity.
- Use good posture at all times, and do not slouch. When standing, keep your weight balanced on both feet rather than shifting it back and forth.
- Sleep on a firm mattress.
- When sitting for long periods of time, take frequent breaks.
- Maintain a healthy weight and try to avoid weight gain, especially around the mid-section, which can take a toll on the low back.
- Don't try to lift objects that are too heavy for you.

When lifting, use the strength in your legs more than the back.

- Avoid smoking, which accelerates degeneration in the spine.

#### **b. Effective Ergonomics Methods**

Applying ergonomics can help prevent repetitive motion injuries such as carpal tunnel syndrome, particularly if you are constantly working at a computer.

- Use a headset for lengthy or frequent telephone work.
- A footrest should be used if, after adjusting the height of the chair, feet do not rest flat on the floor.
- When performing daily tasks, alternate between sitting and standing or take small walking breaks throughout the day.
- Position the monitor directly in front of the user to avoid excessive twisting of the neck.
- When typing, press the keys gently; do not bang them or hold them down for long periods.
- Keep your shoulders, arms, hands, and fingers relaxed.

#### **c. Engineering Controls**

##### **How engineering controls reduce the risk.**

The most effective way to prevent injury is to redesign the work environment and work tasks to reduce lifting hazards. These engineering, administrative and workplace controls take a close look at lifting jobs and redesign them so they are safer.

Engineering controls are used to redesign a job so employees do less-strenuous manual lifting. They often involve the use of mechanical lifting equipment.

##### **Engineering controls include**

- Reducing load weight or size.

- Adding handles to material packaging so that workers can get a strong, comfortable grip.
- Adjusting the work environment so workers can keep loads close to the body and between shoulder and knee height, without having to twist.
- Installing mechanical lifting aids and material handling equipment (conveyors, slides, chutes, hoists, adjustable lift tables, and hand trucks).

### **Use of administrative and work-practice controls**

Implementing administrative and work-practice controls involves carefully selecting and training workers so they know how to safely perform lifting tasks.

### **Administrative and work-practice controls include:**

- Conducting medical monitoring of employee strength/lifting capabilities.
- Setting weight, size, and frequency limits on manual lifting tasks.
- Providing physical conditioning for employees.
- Training employees to use proper lifting techniques.
- Determining the need for using two-person lift teams when mechanical lifting aids are not available.

### **WHY IS EVERYTHING ELSE WRONG**

**Overexertion and cumulative trauma are the biggest factors in back injuries.** Bending, followed by twisting and turning, were the more commonly cited movements that caused back injuries. Strains and sprains from lifting loads improperly or from carrying loads that are either too large or too heavy are common hazards associated with manually moving materials.

### **DON'T:**

- Twist your back or bend in a sideways direction.
- Attempt to lift or lower an object if you're in an

awkward position.

- Feel compelled to lift an item that is too heavy ' get help instead.
- Lift or lower an object if your arms are extended.
- Continue to lift an item if you realize it's too heavy.
- Lift above your shoulders or below your knees.

## **FACTORS THAT CONTRIBUTE TO THE RISK OF INJURY**

The weight of the load is obviously a factor in whether or not material can be lifted safely, Other lift factors include:

- The force needed to perform the lift.
- The frequency of lifting.
- The duration of lifting activities.
- Postures and body motions during the lift.

**Concerning the force needed to perform the lift, there may be increased risk for injury if:**

- The lift involves pinching to hold the object.
- Heavy lifting is done with one hand.
- Very heavy items are lifted without the assistance of a mechanical device.
- Heavy items are lifted while bending over, reaching above shoulder height, or twisting.

**The following postures and motions can contribute to the risk, as well:**

- Bending or twisting the back while lifting or holding heavy items.
- Lifting objects out of, or putting them into, cramped spaces.