

Personal Blueprint: Lifting Safely

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Home



Question # 1

The most reliable predictor of future back pain at the worksite is whether or not the employee enjoys his job!

True or False

Question # 1 Answer

The most reliable predictor of future back pain at the worksite is whether or not the employee enjoys his job!

True or False

The Boeing Back Study found that psychological factors were more important than physical factors as risk indicators for claims associated with low back injuries.

Question # 2

A stretching program implemented during work is the most effective way to reduce back injuries.

True or False

Question # 2 Answer

A stretching program implemented during work is the most effective way to reduce back injuries.

True or **False**

Stretching programs are designed to increase flexibility and is an important component of fitness but proper back mechanics is the most effective way to reduce back problems.

Question # 3

Lifting improperly or lifting too much weight are the primary causes of back injuries.

True or False

Question # 3 Answer

Lifting improperly or lifting too much weight are the primary causes of back injuries.

True or **False**

Not typically the primary cause but usually the event that aggravates the problem!

Question # 4

Most back pain is due to a specific injury!

True or False

Question # 4 Answer

Most back pain is due to a specific injury!

True or **False**

The majority of people who have back problems are unable to describe an associated incident or injury, but is the cumulative effect of many types of activities.

Question # 5

Maintaining good flexibility and back strength has been shown to be protective of future back problems.

True or False

Question # 5 Answer

Maintaining good flexibility and back strength has been shown to be protective of future back problems.

True or **False**

Muscle endurance as opposed to overall back strength has been shown to be protective of future problems. As you fatigue poor back mechanics result.

Question # 6

Most back injuries occur while picking an object off the ground.

True or False

Question # 6 Answer

Most back injury occur while picking an object off the ground.

True or **False**

Twisting the torso appears to be the major biomechanical error.

Question # 7

Wear and tear causing changes in the disks of the low back is the most common reason for low back pain.

True or False

Question # 7 Answer

Wear and tear causing changes in the disks of the low back is the most common reason for low back pain.

True or **False**

Muscle strain or sprain in the low back is the most common reason for low back pain.

Question # 8

When low back pain begins after a minor injury, you may first apply cold treatment followed by heat treatment.

True or False

Question # 8 Answer

When low back pain begins after a minor injury, you may first apply cold treatment followed by heat treatment.

True or False

Use a cold compresses immediately after a low back injury to reduce pain, inflammation, and help restore function to the lower back. A heat lamp or heating pad may be used on the lower back for brief periods (about 20 minutes) to relax muscles and increase blood flow.

Question # 9

Usually low back pain improves within a few days, but if it continues after 72 hours, you should contact your physician.

True or False

Question # 9 Answer

Usually low back pain improves within a few days, but if it continues after 72 hours, you should contact your physician.

True or False

Most cases of low back pain are caused by a mild injury and the pain disappears with home treatment. However, should your low back pain last several days and continue to be constant and intense, contact your physician.

Question # 10

Low back pain from injury requires a person to stay in bed without activity for at least one week.

True or False

Question # 10 Answer

Low back pain from injury requires a person to stay in bed without activity for at least one week.

True or **False**

Lengthy bed rest is not recommended for most people with low back pain. Experts say that light activity speeds the healing process and leads to recovery.

Question # 11

Pulling heavy objects, rather than pushing, is the best way to avoid a low back injury.

True or False

Question # 11 Answer

Pulling heavy objects, rather than pushing, is the best way to avoid a low back injury.

True or **False**

Actually, the best way to avoid a back injury is to push a heavy object rather than pull it.

Significant?

- **60-80% of population will suffer from back pain (Andersson, Fine, & Silverstein, 1995)**
- **“Back pain is the most frequent cause of limitation among those under 45...” (McCoy, et al. 1997)**
- **Peak age of onset for a back injury is 40 years old. (Andersson, Fine, & Silverstein, 1995)**
- **10 year average: 31 million dollars per year. (2004)**
- **Only 50% of low-back injured workers, off work for 6 months or longer, return to regular work. (Alberta WCB, 2001)**
- **Videman, et al., (1990) documented the increased risk of disc herniation for those who perform sedentary jobs characterized by sitting.**

Reasons for Back Problems

Individual Risk Factors

- ❖ Stress: Controllable and uncontrollable
- ❖ Lack of sleep/fatigue
- ❖ Emotional instability
- ❖ Family problems
- ❖ Substance abuse
- ❖ Lack of physical activity
- ❖ Poor muscle endurance
- ❖ Poor trunk muscle stabilization
- ❖ Excessive weight
- ❖ Poor ergonomics

Occupational Risk Factors

- ❖ Stress: Boeing study
- ❖ Heavy physical work
- ❖ Static posture (sitting or standing)
- ❖ Frequent bending & twisting
- ❖ Pushing, pulling and lifting
- ❖ Repetitive work
- ❖ Mental fatigue
- ❖ Lack of motivation
- ❖ Poor attitude
- ❖ Physical fatigue
- ❖ Vibration

Old Approaches

Safe LIFT



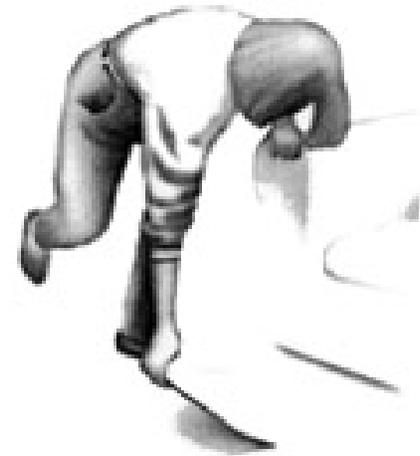
If you bend at the knees and hug the object close to you, your back stays balanced and the muscles in your legs do the lifting.



Wrong way to lift



Right way to lift







What improper back mechanics can you identify in this sequence of lifting slides?

Step 1



Step 3



Step 2



Step 4



What improper back mechanics can you identify in this slide?

Step 1



- ❖ *Standing too far back of object*
- ❖ *Feet should straddle the box with a wide stance*

What improper back mechanics can you identify in this slide?

Step 2



- *Right knee is in the way*
- *Left heel is off the ground*
- *Head is down*
- *Lower back is rounded (no inward curve)*
- *Object looks too large for one person to handle*

What improper back mechanics can you identify in this slide?

- *Head is down*
- *Back is rounded*
- *Back Muscles are working in isolation of other muscles*

Step 3



What improper back mechanics can you identify in this slide?

- ❖ *Object is held too high, shoulders are straining*



Step 4

So what have we learned?

“Industrial low back injury is an extremely complex issue and will only be successfully addressed by those willing to combine the wisdom of several different approaches and to form an integrative approach that is scientifically justifiable.” (McGill, 1997)

Lifting Safely Manual

