



Safety Scene

Proper Lifting Techniques Prevent Back Pain

by Molly E. Butz

**Be kind to your back and your
back will be kind to you!**

According to the American Public Health Association (AHPA), back pain is the single most common and costly work-related injury. And, similar to many occupational injuries, the hidden costs of a back injury, such as scheduling delays and decreased production rates, increase the overall financial impact enormously.

Back pain and injuries can occur in varying degrees. The pain can range from dull and achy to pure agony, and doesn't necessarily indicate the severity of the injury. Sprains and strains to the muscles, tendons, ligaments and disks are a few of the main causes for back pain; however, the good news is that many of these back problems are preventable through the use of proper lifting techniques.

There are a wide variety of injuries that can occur in the back. Some injuries are serious enough to require surgery, some even lead to permanent disability. Any back injury can limit your activity level, both on and off the job. A component manufacturing facility can be a particularly precarious place to work, especially when discussing back care. Lifting or moving heavy lumber and boxes of metal plates, repetitive motions and many other daily activities can lead to pain or injury to the back.

...back injuries cost American industry 10 to 14 billion dollars in workers' compensation costs and about 100 million work days annually.

Remember that most back injuries can be attributed to one of these causes:

- Poor conditioning
- Lifting, bending or reaching with a bowed out back
- Twisting or jerking movements
- Repetitive motion
- Slouched sitting
- Loss of flexibility
- Lack of adequate rest
- Drug or alcohol abuse
- Obesity and/or poor nutrition
- Stressful work and/or living habits

Poor posture can contribute to back problems. As a preventative measure, it will help to become aware of your postures for sleeping, standing and sitting. Two favored sleeping positions include: sleeping on your side with your knees bent or sleeping on your back. For good chair posture, sit with your knees slightly higher than your hips with your hips located near the rear of the chair and when standing, stand with the shoulders back with the spine's "S curve" centered over the pelvis.

Physical conditioning is important. Extra weight means extra strain on the back. Even ten pounds can make a difference on the strain transferred to your back. Stress can play a part in muscle spasms so it is important to take time to relax. In

at a glance

- Attention to posture, conditioning, avoiding obesity, alcohol, drugs, smoking, and minimizing stress will take help you in maintaining a healthy back!
- Truss plants have many awkward loads to lift and carry, so lifting care is very important.

Proper lifting technique is critical to back safety, but perhaps more important is proper planning.

In addition, repetitive motion can contribute to back problems.

Back injuries can also occur off the job and non-work related factors can contribute to back problems. Hobbies and leisure activities often prove to be a source of back strain, so it's important to keep yourself in good physical shape and monitor all of your activities off the job as well.

Also consider that not all back injuries are a result of sudden trauma; many are of a cumulative type, where a repeated minor injury has flared up, or continued use of a heavy tool in the same position has caused pain, or a great deal of time is spent in the same position.

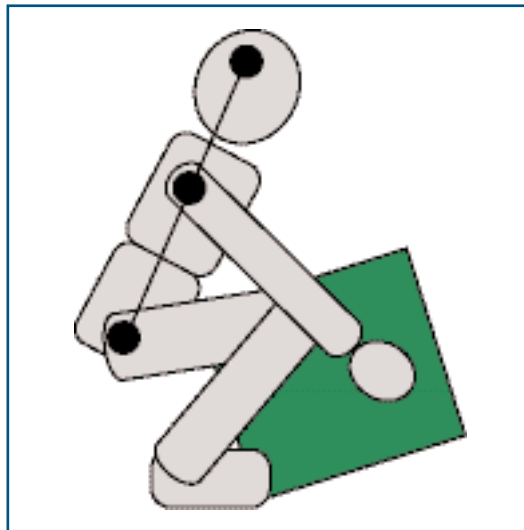
By using the correct lifting posture, you can avoid back injury. Rules of proper lifting include:

- Size up the load before lifting—test by moving a corner or pushing the load.
- Bend the knees when lifting—let your legs do the work.
- Place feet close to the object and center yourself over the load.
- Lift straight up in a smooth motion.
- Do not twist or turn your body once the lift is made.
- Make sure there is a clear path—don't fall over something you can't see.
- Set the load down properly (with your legs).
- Always push a load that is on a cart—never pull it.
- If it is a long object, get some help.
- Split the load into smaller loads if possible.

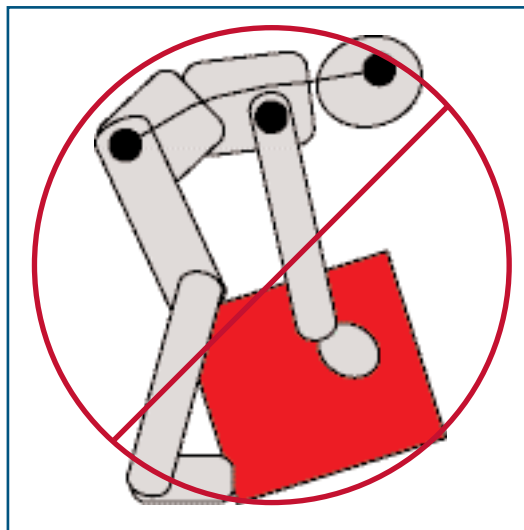
Proper lifting technique is critical to back safety, but perhaps more important is proper planning. Before you lift that box, tool, piece of equipment, lumber or truss, take a moment to consider your action:

- Do you need to lift the item manually?
- How heavy is it?
- Where are you moving the item from?
- Where does it have to go?
- What route do you have to follow?

Many times the item you are moving could be moved with a piece of equipment such as a dolly or a forklift. Consider using mechanical help wherever possible. If the item needs to be moved manually, and it is heavy or ungainly—like a truss or wall panel—ask for help! When using mechanical help, remember to push, not pull—you'll have more control, and greater leverage. Also be sure to fasten the load to the equipment, so sudden stops or rolling vibrations don't cause it to fall off.



correct lift



incorrect lift

When moving an item from a hard-to-reach place, be sure to position yourself as close to the load as possible. Slide it out to get it closer, and be sure that you have adequate room for your hands and arms. Be aware of adjacent obstructions on either side or above the load. Think about where the item will be placed once you've lifted it: will it be overhead? On a shelf? Under an overhang? In a narrow spot? Try to allow yourself as much room as possible to set the load down. You can always shift it slightly later. Check your path from place to place so that you can remove tripping hazards and protect openings. Make sure that the lighting is sufficient to see where you are going. Also, stabilize uneven or loose ground, or choose an alternate route. The shortest way isn't always the fastest, or the safest.

As always, moderation and balance are important considerations in the care and maintenance of your back. According to the National Institute for Occupational Safety and Health (NIOSH), back injuries cost American industry 10 to 14 billion dollars in workers' compensation costs and about 100 million work days annually. A healthy lifestyle—attention to posture, conditioning and body mechanics, avoiding obesity, alcohol, drugs and smoking, and minimizing stress—will help you in maintaining a healthy back! **SBC**

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To pose a question for this column or to learn more about WTCA's Operation Safety Program, contact WTCA Staff at 608/274-4849, email wtca@woodtruss.com, or view the Operation Safety demonstration online at www.wtcatko.com.

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