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Health Hazard Information

According to the Bureau of Labor Statistics, more than one million workers suffer back injuries each year, and back injuries account for one of every five workplace injuries or illnesses. Further, one fourth of all compensation indemnity claims involve back injuries, costing employers billions of dollars. These figures do not begin to reflect the pain and suffering employees experience as a result of their injuries.

Back injuries are exceedingly painful. They are difficult to heal, and they have an effect upon everything a person does. It is important to learn techniques and procedures that may help you prevent a back injury.


Lifting Techniques: Avoiding Back Injuries

Although lower back pain can result from acquired conditions at birth, or from infections or tumors, the most common cause is sprains and strains. Employees can injure their back by improper lifting of moderate to heavy objects, falling, auto accidents, and sports activities. But of these, lifting improperly is the largest single cause of back pain and injury. Employees can prevent back injury and pain by knowing and using proper lifting techniques.

Problems with the lower back are a frequent cause of lost work time and compensation. A Bureau of Labor Statistics report said that nearly 17 percent of all occupational injuries or illness was caused from overexertion in lifting.

Although our backs hold up well, our lifestyles and activities can lead to back pain and injury. Here are some things that can go wrong:

- Strains and sprains can result from injury to muscles and ligaments that support the back. A torn ligament will result in severe back pain.
- Ruptured or slipped disk is not uncommon and occurs when the disk presses on a nerve.
- Chronic Tension or stress can result in muscles spasms and aggravate persistent and painful backache.
- Other conditions such as pain “referred to the back” from other organs, such as the kidneys and prostate, can result in nagging back pain.

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Why back pain happens

Poor technique is the main concern when lifting, but other factors can contribute to the problem. They are:

Poor Posture

Whether standing, sitting, or reclining, posture affects the amount of strain put on the back. The wrong posture increases strain on the back muscles and may bend the spine into positions that will cause trouble. When standing correctly, the spine has a natural “S” curve. The shoulders are back and the “S” curve is directly over the pelvis.

Good sitting posture should put employee’s knees slightly higher than their hips. Hips should be to the rear of a chair with the back not overly arched. Also, shoulders and upper back should not be rounded. Reclining posture is important, too. Sleeping should be done on a side with the knees bent or on the back. Sleeping on the stomach, especially on a sagging mattress with the head on a thick pillow, puts too much strain on the spine. Result will be morning backache.

Poor physical condition

Physical condition can also lead to back pain. Being overweight, and especially with a pot belly, can put extra strain on the spine. An estimate is that every extra pound up from puts ten pounds of strain on the back.


When out of shape, the chances for chronic back pain are greater. Lack of exercise is a major factor, too. A sudden strain on generally unused back muscles leads to trouble, particularly when there is a sudden twisting or turning of the back. Proper diet and exercise is the sensible way to help avoid back problems.

Stress

Stress is another factor that may lead to back pain. Tied in with general physical condition, stress created from work or play can cause muscle spasms that affect the spinal nerve network. Although stress is part of everyone’s life, and a certain amount of stress is normal, excessive stress causes backaches. The solution is a balanced life style, with time to relax.

Repetitive trauma

People often think back injuries result from lifting heavy or awkward objects. Many back injuries, however, do not come from a single lift, but develop from relatively minor strains over time.

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Back injuries, as with other cumulative trauma disorders (CTDs), may arise from repeated injuries. (But, repetitive, low-grade strains usually do not cause CTDs.) As the employee repeats a particular irritating movement, the minor injuries begin to accumulate and weaken affected muscles or ligaments. Eventually a more serious injury may occur.

Thus, a specific weight lifted may actually have little to do with any single injury. Employees should use mechanical aids when appropriate along with good lifting techniques. Lifting can be done safely when performed with caution.

Basics of good lifting

Today, most heavy objects are lifted by forklifts, cranes, and other types of equipment. However, sometimes it is necessary to load or unload by hand, moderate to heavy objects. When that is the case, knowing the proper ways to lift can save employees a great deal of pain and misery from a sprained back.

Size up the load before trying to lift it

Test the weight by lifting at one of the corners. If the load is too heavy or of an awkward shape, the best thing to do is (1) get help from a fellow worker, (2) use a mechanical lifting device or, (3) if you must lift, make sure you can handle the weight.


Bend the knees

This is the single most important rule when lifting moderate to heavy objects. Take a tip from professional weight lifters. They can lift tremendous weights because they lift with their legs, not their backs. When lifting a crate or box employees should:

- Place their feet close to the object.
- Center themselves over the load.
- Bend the knees.
- Get a good hand hold.
- Lift straight up, smoothly.
- Allow the legs, not the back, to do the work.

Once the load is lifted:

- Do not twist or turn the body once the lift is made keep the load close to the body, and keep it steady. Any sudden twisting or turning could result in back injury.

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- Make sure the load is carried where it needs to go before attempting to move it, also, make sure paths are clear of obstacles and that there are no hazards, such as holes or spilled liquids in the path. Turn the body by changing foot positions, and make sure of the footing before setting out.
- Set the load down properly, setting the load down is just as important as lifting it, Lower the load slowly by bending the knees, letting the legs do most of the work.
- Always push, not pull the object if possible when moving an object on rollers, for example, pushing puts less strain on the back and is safer, should the object tip.

Planning ahead

Planning ahead makes sense. If employees know certain loads will have to be carried from unloading areas, they should place the objects on pallets, not the ground, whenever possible. That way the load will not have to be lifted from the ground. They should not attempt to carry loads that are clearly too heavy for them. Long objects, such as pipes and plate, may not be heavy, but the weight might not be balanced and such lifting could also result in back sprain. Such objects should be carried by two more people.


If the load can be split up into smaller ones, employees are better off in doing that, even if loading takes a few extra minutes. Trying to lift it all at once or even two or three loads may be asking for trouble when the weight is great.

When working on something low, employees should bend their knees. They should keep their back as straight as possible. Bending from the waist can lead to back pain. If they have to work with their back, they should keep their knees bent and their back flat. In both of these situations, frequent rest breaks are necessary to keep from getting back fatigue.

When a serious backache happens

With simple care and rest, most back pain goes away. However, a serious back injury or chronic back pain will require treatment. If the pain does not go away, or is accompanied by weakness or numbness in the lower limbs, employees should see a doctor. Pain that radiates from the back to the buttocks and legs is typical of lower back disorders and is called sciatica.

When employees go to a doctor, in addition to their medical history and having a physical exam, they may need other tests to determine the exact source of the pain.

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Treatment may consist of bed rest, cold or hot packs, traction, physical therapy, or muscle relaxing drugs. Some treatment requires injections around the spinal nerves and, in some cases, surgery may be necessary.

Certain jobs require long hours of standing or sitting. These conditions can create back troubles. When in these situations, Employees should:

- Get up and stretch frequently when required to sit for long periods.
- Ease the strain on their lower back if standing by changing foot positions often, placing one foot on a rail or ledge.
- Keep their weight evenly balanced when standing. Don't lean to one side.

Work at working safely

By using common sense, you can help employees keep their back out of trouble. Every time they think about lifting, they should think defensively about their back and the possibility of a back sprain. Employees should follow good lifting techniques, not only at work, but also at home. With proper exercise, a good diet, and the proper lifting techniques, their chances of being out of work with chronic or severe back pain are greatly reduced. Employees should learn to:

- Plan ahead when lifting jobs are necessary.
- Get help to lift objects that are too heavy.
- Never twist or turn suddenly while carrying a heavy load.
- Make sure their path is clear, and be careful of their footing.
- Lift with the legs, not the back.
- Be aware of proper posture when sitting, standing, or reclining.
- Follow a sensible diet and exercise program to help their back.

Following these simple rules reduces the risk of experiencing a back injury.