

How to Lift Heavy Items Safely

Back Safety & Lifting Techniques

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

Important questions to ask:

- 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?



Mechanical help:

Many times the item you are moving could be moved with a piece of equipment - a dolly, a hand truck or a forklift. Consider using mechanical help wherever possible.

General considerations:

Moderation and balance are important considerations in care and maintenance of your back. You need the correct proportions of strength, flexibility, and overall quality of life to eliminate or minimize back injuries. You need to exercise, eat right, and stretch as often as possible to help prevent injuries, and to recover more quickly if injured. In addition, a reduction in stress levels can help to relieve the muscle tension that can contribute to injuries.

Common causes of back injuries:

- Heavy lifting
- Stressful Living
- Twisting and lifting
- Poor Conditioning
- Loss of Flexibility
- Bending and overexerting / awkward positions
- Lifting objects w/ odd shapes
- Reaching and lifting
- Sitting or standing too long in one position
- Poor posture
- Extra weight



Cumulative effects:

Also consider that not all of back injuries are a result of sudden trauma. Most 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. Familiarize yourself and practice these techniques when lifting items on the job and at home:

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Proper Lifting Techniques

Squat to lift and lower. Do not bend at the waist.
Keep you low back bowed in while bending over.
Keep the weight as close to you as possible.
Bow your back in and raise up with your head first.
If you must turn, turn with your feet, not your body.
Never jerk or twist!
Put the weight down by keeping your low back bowed in.
Keep your feet apart, staggered if possible.
Wear shoes with non-slip soles.

Risk Factors for Back Injury

Lifting with your back bowed out.
Bending and reaching with your back bowed out.
Slouched sitting.
Twisting or jerking movements.
Lack of proper rest.
Obesity and poor nutrition.
Stressful work and living habits.

Back and Lifting Safety

Safe lifting is a function of both the amount of weight being lifted and the lifting technique used. Always test the weight of unfamiliar loads before lifting. If a load is too heavy or awkward, have a co-worker help, or use equipment such as a cart or dolly. Your body is not designed to lift heavy weights. The way you carry a heavy object can subject your back to pressures two to ten times the object's actual weight. The pressure is increased more as you hold the load away from the body.

The following is a list of common sense items to prevent back and lifting-related injuries. These guidelines

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should be used when lifting or moving ANY objects, both at work and home.

- Facing the load, get firm footing. Keep your feet shoulder width apart for a stable base and point the toes slightly outward and one foot slightly ahead of the other.
- Bend your knees and squat. Don't bend at the waist. Keep "leverage" in mind at all times. Don't do more work than you have to. Lifting while bent at the waist means you are not only lifting the weight of the load but also about 1/2 of your own body weight.
- Tighten stomach muscles. Abdominal muscles support your spine when you lift, offsetting the force of the load. Train muscle groups to work together. Any type of abdominal exercise to tone muscles will also help. Conditioned stomach muscles can serve the same purpose as back belts to protect your back when lifting.
- Move the load close to your body and get a firm grip on it, using your hands - not just your fingertips. Make sure that this grip will hold and you will not have to change your grip later.
- Lift steadily using your leg, abdominal and buttock muscles. Let these muscles do the work, not your weaker back muscles.
- Lift smoothly; don't jerk as you lift. Sudden movement and weight shifts can injure your back.
- Keep the load close. Don't hold the load away from your body. The closer it is to your spine, the less force it exerts on your back. Keep your back in alignment with your ears, shoulders and hips. Your nose and your toes should be facing the load when lifting.
- When walking with the load, keep your back upright. Whether lifting or laying down the load, don't add the weight of your body to the load. Again, bend your knees and follow the same procedures in reverse when putting down the load.
- Whenever possible, use mechanical help, such as carts, hand trucks or forklifts.
- NEVER use "jerking" or twisting motions while lifting or carrying anything, no matter how heavy it is. If you must turn, turn with your feet, not with your body to avoid twisting when lifting.

Remember, you could hurt your back - anytime you find yourself doing one of the following activities

Heavy lifting ... especially repetitive lifting over a long period of time.

Twisting at the waist while lifting ... using a shovel or moving objects from one location to another while the feet remain in one position for example.

Reaching and lifting ... over your head, **across** a table, or from the back of a truck or trunk of car.

Lifting or carrying objects that have an odd shape or are awkward ... carry a typewriter.

Working with poor body posture or in uncomfortable positions ... tasks that require you to bend.

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