

## **Appendix 3 - 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:

1. Do you need to lift the item manually?
2. How heavy is it?
3. Where are you moving the item from?
4. Where does it have to go?
5. 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. Consider using mechanical help wherever possible. If the item needs to be moved manually, and it is heavy or ungainly, ask for help. When using mechanical help, remember to push, not pull - you'll have more control, and greater leverage. Fasten the load to the equipment, so sudden stops or vibration don't jar it off. 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? 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 - remove tripping hazards, protect openings, set up a "well wheel" or a "bucket and line" if you need to get materials up a ladder. Make sure that the lighting is sufficient to see where you are going. Stabilize uneven or loose ground, or choose an alternate route. The shortest way isn't always the fastest, or the safest.

As in life in general, 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.

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

1. Posture
2. Body Mechanics/Work Habits
3. Stressful Living
4. Loss of Flexibility
5. Poor Conditioning

Also consider that not all 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:

## Proper Lifting Techniques

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

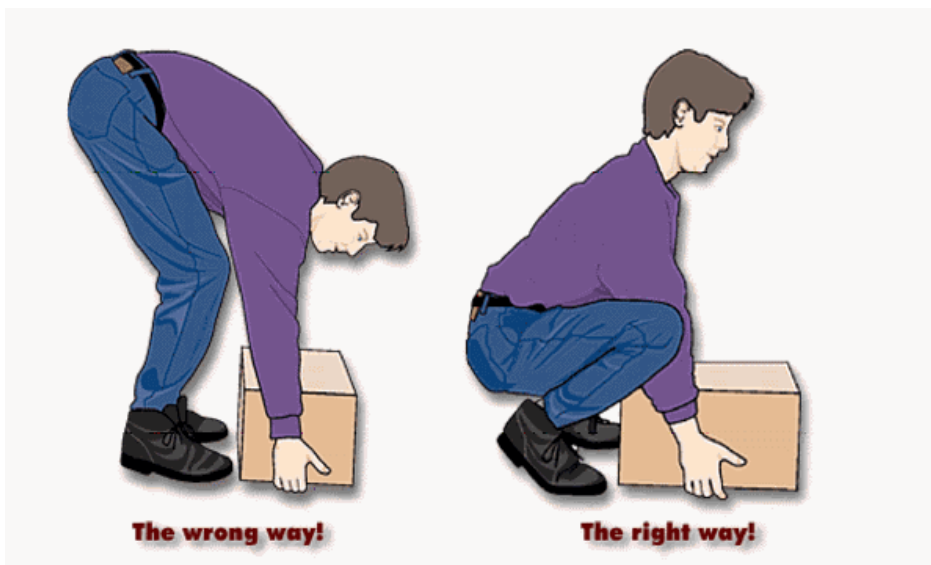


Figure 1. The images show the wrong way, and the correct way to lift a heavy item

## Risk Factors for Back Injury

1. Lifting with your back bowed out.
2. Bending and reaching with your back bowed out.
3. Slouched sitting.
4. Twisting or jerking movements.
5. Lack of proper rest.
6. Obesity and poor nutrition.
7. Stressful work and living habits.