

# SAFETY SENSE

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**Editor's note: PASS ON EACH ISSUE OF THIS NEWSLETTER TO EVERYONE WITH SAFETY RESPONSIBILITIES AT YOUR COMPANY.**

## Preventing Lifting Injuries

### KEY POINTS:

- The U.S. Occupational Health and Safety Administration lists "lifting and awkward postures" among the top nine hazards of concern across the entire landscape and horticultural services industry.
- Lifting or moving heavy objects, such as hardscaping materials, plants, and bags of fertilizer or seed, can result in injury to the back, shoulders, knees, and other body parts. These injuries can be painful, permanent, and expensive. But knowledge of lifting limits and proper techniques can reduce the risk of injury.
- Some common causes of back injuries are lifting materials that are too heavy or unstable; lifting objects to or from awkward locations, such as overhead; repetitive lifting, twisting, bending, or reaching overhead; working for long periods in a bent-over or strained position; and lifting when you haven't warmed up certain muscles.

### Employers' Checklist for Protecting Workers From Lifting-Related Injuries

- ✓ Make sure you and your employees understand lifting limits. Unfortunately, there isn't a simple, solitary guideline based on weight alone. While one person should never lift an object weighing more than 50 pounds, circumstances exist in which one person should not lift lighter loads. This is because weight isn't the only factor that influences injury risk. Other factors include how often a person is lifting, how high he lifts objects, how far away from the body he holds the object, and how long he lifts or holds the object. The National Institute for Occupational Safety and Health formulated an equation that sets a recommended weight limit (not a regulation) for one person under different conditions. A lifting-task calculator based on that equation is posted at [lni.wa.gov/wisha/ergo/evaltools/ergocalc.pdf](http://lni.wa.gov/wisha/ergo/evaltools/ergocalc.pdf).
- ✓ Demonstrate to employees, or have crew supervisors demonstrate, proper lifting techniques. Use a box or similar object and explain the steps involved in safely lifting and lowering materials as you perform them. (See page 2 for these steps.) Emphasize that proper lifting techniques won't protect workers if the object is too heavy, awkward to hold, or can't be held close to the body.
- ✓ Encourage employees to stretch before working. (See stretches for particular muscle groups on page 2.) The older a person is, the more important it is for him to stretch.

### Employees' Checklist for Avoiding Lifting Injuries

- ✓ Reduce the need for lifting, twisting, bending, or reaching overhead. Ways to do this include storing materials where there is space to lift them without reaching or twisting, delivering materials close to where they will be used, splitting large loads into smaller ones, and using lifting-and-carrying devices such as hand trucks, wheel barrows, and skid-steer loaders.
- ✓ Never lift an object weighing more than 50 pounds by yourself. Under certain circumstances, handling lighter loads requires two people. Follow your employers' rules and see [lni.wa.gov/wisha/ergo/evaltools/ergocalc.pdf](http://lni.wa.gov/wisha/ergo/evaltools/ergocalc.pdf) for further guidance.
- ✓ Use proper lifting techniques, as described below. Overreaching and reaching over the side of a trailer to grasp objects are common mistakes in our industry. Reaching more than 1 foot away from your body when lifting something causes you to lose leverage provided by your body weight and puts all pressure on your wrist, elbow, or shoulder.
- ✓ Stretch the muscle groups that affect back stability before lifting anything. This can significantly reduce your risk of back injury. Example stretches are on page 2.

# Proper Lifting Techniques and Stretches for Preventing Injuries

## KEY POINTS:

- Most lifting-related injuries can be avoided if people use correct lifting techniques. Many lifting injuries in our industry occur late in the day, when fatigue, heat, and repetition lead to carelessness and failure to employ proper lifting techniques. Increased attention to lifting tasks is necessary during these times.
- Doing a few quick stretches in the morning can significantly reduce the risk of lifting-related injuries. Many muscle groups attach to the pelvis, and when these muscles are tight they cause the pelvis to tilt, putting the back in an unstable position and increasing the risk of injury. The hip flexors, quadriceps (front of thigh), hamstrings (back of thigh) and several back muscles attach to the pelvis.

## Proper Lifting Techniques for Objects Weighing 50 Pounds or Less

1. Face the object, place your feet shoulder-width apart, and make sure your footing is firm. Wear sturdy boots or shoes with nonslip soles.
2. Ensure gloves fit correctly and get a good grip on the object.
3. Keep the load close to your body and directly in front of you. Keep your elbows, chin, and arms tucked in tight and your body weight directly over your feet.
4. Bend at your knees and lift with your legs while keeping your back as straight as possible. Lift the object in a smooth, controlled motion. Avoid twisting motions.
5. Lower the object using the reverse process.

## Warm-Up Stretches That Can Prevent Back Injuries

- Quads — Standing, pull leg back (heel to buttocks), keeping hip neutral.
- Hamstrings — Place one foot in front with heel on ground and toes pointed upwards (see photo below). Press buttocks backward as you lean forward. You should feel a stretch in the back of your upper leg. Bend the opposite knee for a deeper stretch. Hold for 15 seconds, repeat two times and then stretch the other leg. Or sit and place one foot on a step, wall, etc. (about 18 inches high), keeping knee straight. Bend forward at hip, keeping back straight.
- Hip flexors — Place one leg on a step or wall and lunge forward slightly while lifting opposite arm.
- Back — Put your hands on your hips, place feet shoulder-width apart and lean back (see photo below). Hold about 10 seconds and then repeat twice.

*Photos courtesy Work-Fit*



Prepared by Olivia Grider for:  
Professional Landcare Network  
950 Herson Parkway, Suite 450  
Herndon, VA 20170  
(800) 395-2522 Fax (703)736-9668  
Website: [LandcareNetwork.org](http://LandcareNetwork.org)  
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