



Safe Lifting

Lifting Basics

Lifting Awkward Loads

The Mechanics of Lifting

Lifting Basics

Think Before You Lift

Is your path clear? Is it safe to lift alone? When you put down your load, use the same technique in reverse.

1. **Tuck your pelvis** by tightening your stomach muscles to keep your back aligned. Keep your feet shoulder-width apart.
2. **Bend your knees** to let your legs do the lifting. Be sure to maintain the natural curve of your back.
3. **Hug the load** to keep it close to your center of gravity.
4. **Avoid twisting** by pointing your feet, knees and chest in the same direction. Lift the object and then turn your whole body.

Lifting Awkward Loads

When the standard safe lift—bending your knees, hugging the load, letting your legs do the work—can't be used, follow these guidelines:

- **Overhead Loads**
 - Use a stool or ladder to avoid over-reaching
 - Test the weight, then slide the object toward you and hug it close as you descend
 - Keep at least one ladder on hand
 - Use leveraging as much as possible
 - If possible, hand it to a coworker before descending the ladder or stool
- **Odd-Sized Loads**
 - Carry long, light objects, such as pipes or lumber, on your shoulder with the front end higher than the rear
 - Get a helper for long, heavy loads. Each of you should shoulder it on the same side and walk in step

Lifting Awkward Loads

- For large loads that block your vision, get mechanical help or ask a coworker for help, even if the load is light.
- **Reaching Into a Bin**
 - Stand with feet at shoulder distance apart
 - Slightly bend your knees
 - Start to squat, bending your hips and knees, not your waist
 - Slide the load as close to your body as you can
 - Tighten your abdominal muscles
 - Raise yourself using your leg and hip muscles
 - If possible, brace your knees against the side of the container for additional support
 - Get help if the load is more than moderately heavy

The Mechanics of Lifting

- Moveable bones (vertebrae)
- Shock absorbers (discs) between the vertebrae
- Ligaments and muscles that keep the back aligned in three balanced curves



The Mechanics of Lifting

- **Unsafe Lifting** is any lifting that upsets your back's alignment such as:
 - Bending at the waist to pick up or put down an object
 - Twisting as you lift or put down an object

When you lift unsafely, your back is forced to work too hard.

- **Safe Lifting** keeps your back in alignment. You do this by:
 - Bending your knees instead of your back
 - Holding the load close to you
 - Lifting straight up then turning the whole body by moving one foot at a time

When you lift safely, your legs do the work, not your back.

Remember

- Back injuries are the most common industrial accident. **Before you lift**, ask yourself:
 - Does it have to be lifted?
 - If so, are there mechanical aids available?
 - Can I lift it alone?
 - Is it too big or awkward?
 - Do I have a clear path and good footing?