

# The Mechanics of Lifting

Back injuries are the most common type of on-the-job accidents. That's because no matter what job we do, we are constantly using our backs. Our back is constantly under stress, but at no time is it more vulnerable to injury than when we are lifting. Understanding how your back works while lifting can help you avoid unnecessary strain and potential injury.

Your back is made up of movable bones, called vertebrae, and shock absorbers, called discs between each vertebra. These structures are supported by ligaments and muscles that help keep the back aligned. **You know your back is aligned correctly when your ears, shoulders, and hips are in a straight line.** When you lift with your back out of line there is a greater likelihood of both back pain and injury.

Before you make a lift, ask yourself these questions:

- Does it have to be lifted? Maybe it can be pushed.
- Are there mechanical aids available? Is there a fork lift or hand cart available?
- Can I lift it alone? Employing the assistance of others is often a good decision.
- Is it too heavy or awkward? Have a plan before you try and lift.
- Do I have a clear path and good footing? Know where you're going with the load.

**Unsafe Lifting**



Unsafe lifting is any lifting that upsets your back's alignment, such as:

- Bending at the waist to pick up or set down an object
- Twisting as you lift or put down an object

**Safe Lifting**



Safe lifting keeps your back in alignment. When you lift safely, your legs do the work, not your back. You do this by:

- Bending your knees instead of your back
- Holding the load close to your body
- Lifting straight up, then turning the whole body by moving one foot at a time.