

# THE SAFETY OBSERVER

Safety Information for Employees

## BACK SAFETY

Back injuries occur in all trades of work, and back injuries are the most expensive and disabling for employees as well. You use your back for just about everything you do, therefore it is constantly exposed to potential injury. Of all the many tasks that we use our backs, they are never more exposed to injury than when lifting. Understanding how our backs work when lifting can help to prevent unnecessary strain or injury.

### Back Basics

Your spine is made up of a combination of bones and padding. The bones are called vertebrae, and the padding which acts as shock absorbers between each vertebra are called discs. These vertebrae and discs of the spine provide the supporting frame for the back. Connected to this frame is an intricate system of muscles and ligaments that increase the strength and stability of the spine, arms and legs. Some of these muscles are exercised in everyday life, like when we walk, or climb stairs. But, some back muscles do not get adequate exercise from the typical person's daily activities. Also, back muscles show a natural tendency to weaken with age unless they are specifically exercised.

### Mechanics of Lifting

Keeping your back in balance when you lift objects is how you lift objects safely. Extending your upper body and bending at the waist to lift something can disturb the alignment of your back. By doing this, you force your back to bear the burden of your body weight and the weight of the object. This is called "overload". Using proper lifting technique can prevent an overload. When you bend at the knees and hug the load close to your body, you are setting yourself up to lift correctly with the muscles in your thighs. These muscles are designed for lifting, and your back's muscles are designed to keep your back aligned and balanced.

### Lifting Safely

Lifting safely means more than protecting your back. There are several steps or considerations that are to be made before you lift an object – Can you lift this alone? Do you need to use a mechanical device, or seek help from a coworker? Is the load too awkward? Is it securely packed or wrapped properly? Is the path you will be taking with the object clear? All these things need to be addressed before you even begin to lift. When you are ready to lift, remember to bend at the knees with your feet staggered shoulder's width, hug the load, and raise yourself up using the strong muscles in your thighs. Never reach, lean, or twist with the load. Use your feet for turning your body. Most important, keep your back in balance and avoid the overload. It is easier to understand how to protect your back when you know how it works.