How Your Back Works
Back injuries are the most common type of warehouse accident. That’s because, no matter what our duties, we are constantly using our backs—to support our bodies, to bend, twist, sit, stand, even to lie down. All of these activities put stress on our backs. But at no time are our backs more vulnerable to injury than when we’re lifting. Understanding how your back works while lifting can help you avoid unnecessary strain and potential injury.

Back Basics
Your back is made up of moveable 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 in three balanced curves. (You know your back is aligned correctly when your ears, shoulders and hips are in a straight line.) When your back’s three curves are not in balance, there is a greater likelihood of both back pain and injury.

Lifting Mechanics
When you lift, it’s important to keep your back in balance. If you bend at your waist and extend your upper body to lift an object, you upset your back’s alignment and your center of balance. You force your spine to support the weight of your body and the weight of the object you’re lifting. This situation is called “overload.”

You can avoid overloading your back by using good lifting techniques. For example, when you bend at the knees and hug the object close to you as you lift, you keep your back in alignment and let the stronger muscles in your thighs do most of the lifting. You do not have to extend your upper body and are able to maintain your center of balance.

Safe Lifting
Safe lifting means protecting your back while you lift. Before you lift anything, ask yourself, ‘Can I lift it alone? Do I need help? Is the load too big or too awkward?’

When you do lift, be sure to bend at your knees, hug the load close to your body and raise yourself up with the strong muscles in your thighs. Remember never to twist while lifting. Instead, move one foot at a time in the direction you want to go and then turn with your leg muscles. When you know how your back works, and you use these techniques, you will find lifting is easier, and you can avoid back pain and injury.