

# SAFETY TALK

## [back injury prevention]

Most of you have probably heard that to lift safely, you must lift properly. You're told to bend your knees, not your back, and not to twist as you lift. This is good advice but sometimes it seems to go against human nature. Yet, there are actions you can take to help you lift properly.

### 1. Plan to get as close to the load as possible.

The farther the load is from your body's centre line, the greater the strain on your back. If need be, squat down to lift the load and pull it between your legs. This gets it closer to the centre of your body and helps prevent the need to bend at the waist. However, since your leg muscles are the largest muscles in your body, they are the biggest energy consumers. Repeated squatting can be very fatiguing, and reduces a person's ability to lift in this manner for any length of time. In addition to lifting the load, you are also hoisting the majority of your body weight. For repeated lifting, other strategies must be used.

### 2. Avoid picking up heavy objects placed below your knees.

Ensure heavy objects are placed and stored above knee level and below shoulder level. If you suspect the load is too heavy to be lifted comfortably, do not chance it. Use a mechanical aid, break the load down into its components, or get help. The most common cause of back injury is overloading.

### 3. Keep your back straight.

This means don't bend at the waist when reaching to lift an object. Bending principally from the hips is preferable if you maintain the arch in your back, rather than bending at the waist.

### 4. Glue your hand to your thigh.

If you carry a load in one hand, such as when carrying a tool box, place your free hand on the outside of your thigh and mentally 'glue' it into position. This will help you maintain correct back alignment rather than lifting and tilting to one side. When carrying a heavy load, side bending can be just as stressful to the spine as bending forward.

**5. Tighten your stomach muscles.**

This technique helps prevent your spine from twisting. If you lift a load and need to place it off to one side, turn by moving your feet. After repeated lifts you might find yourself getting a bit sloppy and forgetting to move your feet. You can overcome this tendency if the place you set the load down is at least one step away from where it is lifted.

**6. Stay in good physical condition.**

Soft tissues, like muscles, play a vital role in allowing individuals to move and use their bodies. Having strong and fit muscles will ensure that you can maintain neutral postures throughout your workday. When you bend at the waist to lift, due to the leverage principal the load is up to 10 times heavier than its actual weight. Therefore, it's important to keep your body in good shape to help avoid injury. Staying in good shape plays a major role in having a balanced lifestyle!

**7. Warm up your muscles before work.**

There is an increased number of back strains in the morning, because trunk flexibility and mobility is significantly lower at that time. A few minutes of your time can warm up cold, stiff muscles and tendons and help you avoid an injury. All professional athletes know this – 'industrial athletes' should too!