

## THE PacificComp TRAINER

### BACK SAFETY

“Back injuries account for nearly 20% of all injuries and illnesses in the workplace and cost the nation an estimated 20 to 50 billion dollars per year.”<sup>1</sup>

The fact that back injuries account for a large percentage of injuries in the workplace is probably not news. You have probably been through many training sessions related to back safety in the past and likely will be trained more times in the future. So, you may ask, why is there so much training and retraining on one topic? The answer is because the back continues to be one of the leading factors in injuries, days away from work, and workers’ compensation costs.

There are several types of back injuries. A strain happens when you overexert the muscles in your back. A sprain occurs by stretching or tearing a ligament in your back. A bulging disk is when a disk begins to come out from between two vertebrae. A herniated disk occurs when the cushioning fluid of a disk leaks out and loses its ability to cushion the vertebrae.

In order to prevent back injuries, we need to identify why back injuries occur, develop solutions to the causes, and then implement the solutions. Let’s look at some of the more common causes of back injuries and what we can do to avoid them.

**Problem:** Improper Lifting Techniques

**Solution:** Lift properly. Stand close to the load with a wide base of support about shoulder-width apart. Bend at the knees, not the waist, and keep your back straight. Keep the load close to your body and make sure that you have a firm grip. Tighten your stomach muscles and concentrate on maintaining proper technique. You should always use proper lifting techniques even with light loads so that you form and maintain good habits. You will want to avoid reaching, twisting, bending at the waist, and awkward positions.

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<sup>1</sup> <http://www.cdc.gov/niosh/backbelt.html>

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**Problem:** Insufficient Strength or Unconditioned Back

**Solution:** A strong and limber back will obviously be less susceptible to injury than one that is not kept in shape. The process of keeping your back in good physical condition means strengthening muscles and improving flexibility. Your exercises should also incorporate other muscles used during lifting, such as, the stomach and legs.

**Problem:** Bad Posture

**Solution:** Much can be done to prevent back injuries while not in the act of lifting. One such way is to maintain good posture while sitting and standing. Slouching or other awkward postures add stress to your back and can cause pain. It can also leave your back in a weakened state, which will make you more susceptible to back injury. Good posture includes maintaining you back's natural curve with your shoulders, back, and head up.

**Problem:** Overweight

**Solution:** Similar to bad posture, when you are overweight, the extra weight puts continuous stress on your back, which leaves it in a weakened state. Some examples of exercises that would help strengthen your back and help you lose weight include walking, stretching, and performing squats and sit-ups. Your exercise program should focus on improving your conditioning, strength, and flexibility as well as losing or maintaining weight.

**Problem:** Heavy/Awkward Loads or Repetitive Lifting

**Solution:** Although the use of lifting equipment can sometimes create hazards, the use of proper equipment can be an effective way to avoid back injuries. Forklifts, pallet jacks, carts, hand trucks, hoists and conveyors are some examples of mechanical devices that can assist your back. Be sure to choose the right tool for the job and carefully follow its safety rules. Team lifting is another way to deal with loads that are heavy, awkward, or repetitive. When participating in a team lift, you should use the same proper lifting techniques that you would use if handling the load alone. Communicate with your lifting partner or partners to be sure that you lift, carry, and unload safely.

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**Problem:** Being Caught Unprepared

**Solution:** Injuries can occur if you are not properly prepared to lift and transfer a load. Before lifting, have an idea of what the load weighs, how you will grip it, where the load's center of gravity is, and if you will need another person or mechanical device to lift it. It may be too late to make these decisions after you have begun your lift. Also, what about your path for carrying the load? Is it clear from obstruction? Will you have room to navigate tight corners or spaces? Will you be able to see where you are going? Will you need direction or help from another? Lastly, do you have a place to unload? If you get stuck holding a heavy object with no place to go, the result may be an injury, even when you have done everything else correctly.

### **Cal/OSHA publications:**

#### **Ergonomic Guide to Manual Material Handling**

[http://www.dir.ca.gov/dosh/dosh\\_publications/mmh.pdf](http://www.dir.ca.gov/dosh/dosh_publications/mmh.pdf)

#### **Lifting safer Poster (Spanish/English)**

[http://www.dir.ca.gov/dosh/dosh\\_publications/liftingSafer.pdf](http://www.dir.ca.gov/dosh/dosh_publications/liftingSafer.pdf)