



SAFETY UNLIMITED, INC.

Weekly Safety Meeting

Back Injury Prevention

There are approximately 400,000 back injuries each year. They are the leading source of lost time injuries and cost billions of dollars annually, not to mention the hours, days, or even months of disabling pain. In construction work, material is constantly being moved or lifted, and most often the lifter is one of you! This makes learning and practicing the basics of back safety extremely important.

Back injuries are the most common injury in the workplace and the cause of most missed work time. The injury can be caused by a strain, spasm, or sprain to the ligaments or muscles of the back. This can happen due to lifting something that's too heavy or over-extending (over-stretching) the back. If the spine suffers from strain or compression, it can cause rupture or bulging of the discs. This assault to the disc can create extreme pain and pressure on one of more than fifty spinal nerves.

Back Injuries Facts:

- 80% of back injuries are temporary, the rest are chronic or lifelong.
- Three out of four back injuries occur during heavy lifting activities.
- More than one million workers suffer back injuries each year!
- As you age, back injuries are more common.
- At any given moment, over 60 million Americans are suffering from back pain.
- 80% of adults will suffer a back injury in their lifetime and 10% will suffer re-injury.
- The most common cause of back pain is muscular strain.
 - Remember to lift carefully!
- Herniated discs often require surgery.

Taking Care of Your Back:

1. Get as close to the load as possible. The further the load is from the centerline of your body, the greater the strain imposed on your back. If need be, squat down to lift the load and pull it between your legs. This gets it closer to the center 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. Try to see that 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 component parts, 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. Keep the natural arch in your lower back, which distributes the load evenly over the surface of spinal disks and is less stressful than if the disk is pinched between vertebrae. Bending principally from the hips, rather than bending at the waist, is acceptable if you maintain the arch in your back.
4. Glue your hand to your thigh. If you carry a load in one hand, such as when carrying a toolbox, 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. A protruding stomach is an extra load carried away from the centerline of the body and prevents you from keeping a lifted object close--the number one rule for back care. 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. A "pot belly" puts extra, stressful weight on the spine.
7. Stretch and loosen up before work. Research has shown that trunk flexibility and mobility is significantly lower in the morning than later in the day, increasing the number and severity of back strains at this time. A few minutes of stretching can warm up cold stiff muscles and tendons and help you avoid an injury. All professional athletes know this--"construction athletes" should too!

Remember:

As we mentioned, the single most common source of back injuries is improper lifting. Remember that each and every time you prepare to lift something. Back injuries can put you out of commission for a long time. Sometimes, they'll nag you forever. So please take care of your back.

Lifting's a breeze when you bend at the knees!!

