Back pain is one of the most common conditions in the United States. Over the course of a lifetime, eight in 10 Americans will have at least one episode of back pain.

The problem results in over 100 million lost work days per year. And over 41 million people visited a doctor for back pain in one year.

**Back injuries - common causes**

Many back injuries are the result of cumulative damage. But certain motions and movements can contribute to back injuries more than others. These include:

- Heavy lifting
- Twisting at the waist while lifting or holding a heavy load
- Reaching and lifting
- Lifting or carrying objects with awkward or odd shapes
- Working in awkward positions
- Sitting or standing too long in one position
- Poor posture

**How the back works**

A spine consists of small bones called vertebrae. They are stacked to form a column. Vertebrae are held together by ligaments, and muscles are attached to the vertebrae by tendons. A cushion, or disc, sits between each vertebra. The spinal cord runs through the column and nerves branch out through spaces between the vertebrae.

The lower back holds most of the body's weight. Stress is placed on your back every time you bend over, lift something heavy or sit leaning forward. While standing, bending or moving, even minor problems with bones, muscles, ligaments or tendons can cause lower back pain. Discs may then irritate nerves from the spinal cord and cause pain.
Sudden back injuries can be due to a tear or strain in ligaments and muscles. Back pain may also come from injuries that break down discs or by muscles that have involuntary contractions (spasm). Stress or tension can bring on back spasms, too.

**What can you do to avoid back problems?**
Three practices may help avoid serious problems: Lift safely, sleep correctly and keep up with core conditioning.

**Lift safely.** When possible, use lift-assist devices for heavier objects. When you can't avoid lifting, remember to reduce the amount of pressure placed on the back. Bending the knees keeps your spine in better alignment and allows legs to do the work.

- Keep feet apart for better stability and lifting power.
- Keep your back straight so spine, back muscles and organs align right.
- Tuck your chin to keep the neck, head and spine straight.
- Grip an object with your whole hand for more lifting power.
- Keep arms and elbows tucked in for more gripping power.
- Center your body over your feet for better balance and lift.
  - Bend your legs and then lift by straightening the legs. The leg muscles will carry the load instead of your back.

**Sleep better.** A poor sleeping position can create back stress. The best sleeping positions are:

- On your side with knees slightly bent
- On your back with a pillow under knees

**Conditioning.** Regular exercise can improve overall fitness and lower the likelihood of back problems and injury. Exercises for strength, flexibility and aerobics are best.

Get into a daily flexibility routine and do strength training for your core muscles. The core muscles surround your midsection, support spine and torso movement, and coordinate limb motion. Strong core muscles improve posture, balance and stability. They can also reduce back and neck pain.

Yoga and Pilates classes offer good core workouts. Each uses the body as its own form of resistance. If you have trouble doing certain exercises, swimming, walking, or bike riding may be good options. Always check with your doctor before you increase your activity level.

**SOURCES:**
- Oklahoma State University. Environmental health and safety. Anatomy of the back: why do injuries occur?
- National Ag Safety Database (NASD). Landscape safety series: Preventing back injuries.