

Preventing Back Injuries Meeting Kit

CAUSES OF BACK PAIN

The back is a network of fragile ligaments, discs, and muscles which can easily be thrown out of order. The back's complex design breaks down when it is forced to perform activities it was not designed to do.

One sure way to risk injuring the back is to lift heavy or bulky loads improperly or unassisted. The unsupported back cannot operate like a derrick or a crane boom. Lifting with the back twisted or bent just begs for a pulled muscle or ruptured disc. The back can be damaged quickly but can take a long time to heal. Workers should be encouraged to do their lifting with good sense and a little extra help from a co-worker or mechanical aid.

Many work related injuries are caused or aggravated by stressors such as heavy lifting, contact stress (repeated or constant contact between soft body tissue and a hard or sharp object), vibration, repetitive motion, and awkward posture.

COMMON BACK INJURIES

Lower back strains and sprains: Lower back injuries are fairly common among workers. Employees who must sit or stand for long periods of time may develop pain in their lower back, while employees who are very active could easily sustain a sprain. Most of these injuries are mild and may be treated with pain medication and physical therapy.

Bulging, herniated, and slipped discs: In between each vertebra bone sits a soft disc that acts as a shock absorber. When one of these discs slips out of place or is damaged, this can cause a great deal of pain.

Pinched nerves: When a disc pushes against a nerve in the back, this is called a pinched nerve. This type of injury can be very painful and can affect the neck, back, and legs.

Fractured vertebrae: Fractured vertebrae can require substantial medical care. Injuries that result from traumatic accidents, such as motor vehicle accidents or heavy machinery malfunctions, can include fractured vertebrae.

Degenerative disc disease: As we age our lumbar spine discs suffer wear and tear.

STEPS TO AVOID AND PREVENT BACK PAIN AND INJURIES

Pay attention to posture. When standing, balance your weight evenly on your feet. Don't slouch. To promote good posture when sitting, choose a chair that supports your lower back. Adjust the height of your chair so that your feet rest flat on the floor or on a footrest and your thighs are parallel to the floor. Remove your wallet or cellphone from your back pocket when sitting to prevent putting extra pressure on your buttocks or lower back.

Lift properly. When lifting and carrying a heavy object, get close to the object, bend your knees and tighten your stomach muscles. Use your leg muscles to support your body as you stand up. Hold the object close to your body. Maintain the natural curve of your back. Don't twist when lifting. If an object is too heavy to lift safely, ask someone to help you.

Modify repetitive tasks. Use lifting devices, when available, to help you lift loads. Try to alternate physically demanding tasks with less demanding ones. If you work at a computer, make sure that your monitor, keyboard, mouse and chair are positioned properly. If you frequently talk on the phone and type or write at the same time, place your phone on speaker or use a headset. Avoid unnecessary bending, twisting and reaching. Limit the time you spend carrying heavy briefcases, purses and bags.

Listen to your body. If you must sit for a prolonged period, change your position often. Periodically walk around and gently stretch your muscles to relieve tension.

BEST PRACTICES FOR BACK HEALTH

- **Exercise regularly to keep muscles strong and flexible.** Consult a physician for a list of low-impact, age-appropriate exercises that are specifically targeted to strengthening lower back and abdominal muscles.
- **Maintain a healthy weight** and eat a nutritious diet with sufficient daily intake of calcium, phosphorus, and vitamin D to promote new bone growth.
- **Use ergonomically designed furniture and equipment** at home and at work. Make sure work surfaces are at a comfortable height.
- **Switch sitting positions often and periodically walk around the office** or gently stretch muscles to relieve tension. A pillow or rolled-up towel placed behind the small of the back can provide some lumbar support. Put your feet on a low stool or a stack of books when sitting for a long time.
- **Wear comfortable, low-heeled shoes.**
- **Sleeping on one's side with the knees drawn up** in a fetal position can help open up the joints in the spine and relieve pressure by reducing the curvature of the spine. Always sleep on a firm surface.
- **Don't try to lift objects that are too heavy.** Lift from the knees, pull the stomach muscles in, and keep the head down and in line with a straight back. When lifting, keep objects close to the body. Do not twist when lifting.
- **Quit smoking.** Smoking reduces blood flow to the lower spine, which can contribute to spinal disc degeneration. Smoking also increases the risk of osteoporosis and impedes healing. Coughing due to heavy smoking also may cause back pain.
- **Avoid prolonged inactivity or bed rest.**
- **Warm up or stretch before exercising or physical activities**

FINAL WORD

Our backs have a complex design that breaks down when it is required to perform activities it was not designed to do. The complex design of the back is encased in a network of fragile ligaments, discs, and muscles that can be thrown out of order.