Back Injuries and Lifting
Proper Lifting Mechanics & Injury Prevention

In this month’s Spotlight on Safety issue, we will discuss how to prevent back injuries while at work and at home.

Mayo Clinic estimates approximately 80% of all Americans will suffer lower back pain over the course of their lifetime. There are many different ways to injure your back. Some common motions or tasks that can lead to back injury at Northwestern include heavy lifting, static body positioning, bending/twisting, pushing/pulling, and reaching in awkward areas. Back injuries can be easily aggravated and produce ongoing symptoms that sometimes plague us for a lifetime.

According to the 2015 Bureau of Labor Statistics, there were a total of 630 back injuries at colleges and universities, resulting in an average of 9 days away from work. The vast majority of those injuries occurred while employees were in the process of lifting/twisting, pushing/pulling, and performing duties requiring repetitive motion.

Overexertion usually occurs when we attempt to lift objects that are too heavy or lift with an awkward posture. Repetitive motion injuries can occur because we complete a task too frequently, such as bending or lifting.

Back injury risk factors can be divided into two categories – controllable and uncontrollable. Uncontrollable factors include age, sex, spinal defects, or degenerative spinal disease (e.g. osteoporosis or arthritis). Controllable factors related to back injuries are body positioning and mechanics, physical health, weight, and stress levels. Though we cannot control all risk factors, such as age or medical conditions, here are some strategies we can use to prevent a back injury:

- **Seek help:** If your job requires you to move materials, tools, and other items, think about what material handling equipment could be helpful. Getting help from a coworker or using equipment such as dollies, carts, or pallet jacks can be the difference between suffering a back injury or not. As a general guideline, do not lift items weighing more than 50 lbs. without help from a coworker or using material handling equipment.

- **Body mechanics:** Always approach the item you intend to lift head on. Bend at the knees (not at the waist) and squat down to the item. Keep the load as close to your body at waist-level and avoid turning or twisting. If you have to turn, lead with your legs, never your arms.

- **Lifestyle:** Healthy, active individuals are less likely to suffer from back pain and injury. Certain decisions we make will help lower our risk of injury. Maintain good posture while sitting and standing. Even the way you sleep influences your likelihood of a back injury. Yoga is a good way to stay limber and lower stress levels.

- **Train:** Complete Back Injury and Lifting training at learn.northwestern.edu.

Safety at Home – Watch Your Back!

- **Did you know?** Back belts are not proven to work as advertised. Back belts are believed to make humans lift longer and be stronger, yet there is no scientific evidence proving they are beneficial. Using a back belt often gives people a false sense of strength, leads them to believe they can lift heavier weight than normal, and often results in a higher chance for injury. Know your limits and do not rely on a back belt to support your back while lifting and moving things at the gym or home.

- **Did you know?** The way you sleep may be the source of your back pain. Who does not enjoy a good night’s sleep after a hard day's work? Studies show that sleeping on your stomach is the worst for your spine and sleeping on your side is not much better. The best way to ensure the least amount of back pain is to sleep on your back. If you cannot change your sleeping habits, stomach sleepers can put a pillow under their lower abdomen and pelvis and side sleepers between their knees to ease strain on your back.

Tips for Success When Talking to Your Team

- **Preparation is Key:** Determine if you have adequate material handling equipment such as carts, dollies, or hoists. If you are unsure, survey your employees to see if they could benefit from getting some for the department.

- **Stay Positive:** Encourage people to seek help or use material handling equipment when they are performing heavy lifts or transporting items. If you notice someone lifting improperly, take the time to have a conversation with them, teach them about the risks and how to properly lift.

- **Share a Story, Ask for a Story:** Have you ever injured your back? Tell your coworkers what you learned and how you take precautions to ensure it does not happen again.

For Additional Information

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