

# ESSENTIAL 29: Back Safety and Injury Prevention



## Key Takeaways:

- Learning how to practice good posture, improve work area conditions and work ergonomically to protect and strengthen your back.
- Understand what makes a healthy lifestyle, improved strength and flexibility, and how that protects you from work-related back injuries.
- Recall the specific actions takable to prevent work-related back injuries from moving or lifting materials.

## Course Description

There's incredibly good reasons to keep the back of your workforce by providing the proper personal protective equipment (PPE) to avoid injuries, and training employees in safe lifting techniques.

One of the most common health complaints around the world is back pain. Back pain hurts 80% of people during some point in their lives. The danger is higher for manufacturing, warehouse, hospitality and trades workers, and any other physically demanding job.

Common Variables that Increase the Risk of Back Injury: Aging Over the years, the discs between the vertebrae in our backs wear away and shrink. Our bones will eventually rub against each other, causing pain and stiffness. As well, the space around our spines narrows eventually, increasing pressure on the cord and spinal nerves, which causing pain. Forceful Exertion Forceful exertion is the physical effort expended to conquer the weight, resistance, or inertia needed for a job. Examples of activities requiring forceful exertion include everything from carrying a heavy box from a delivery truck to operating a handcart containing heavy materials. Awkward Postures Awkward postures are body positions such as bending, twisting, or reaching. All awkward postures compress tendons, nerves, and blood vessels, which increases the force a worker must use. Reaching up, running wiring to an overhead light fixture, kneeling and bending to install carpet all are examples of awkward posture activities. Vibration Vibration is used here as the quivering or trembling that comes from power tools and heavy equipment. Constant vibration restricts blood supply to affected body parts,

which, depending on the intensity and duration of vibration, can manifest ergonomic injuries. Examples of vibration activities include drilling a hole or operating a forklift. Repetitive Motion Repeating the same actions with little variation implements the use of only a few muscles or body parts while the rest of the body is unaffected. Motions that are repeated frequently have inadequate time for muscles and tendons to recover, causing them to become strained and fatigued. Activities requiring repetitive motions include moving items from a low box to a high shelf or loading cans onto a production line.

### 5 General Tips for Maintaining a Healthy Back

1. Stay a healthy weight – Overweight people are at greater risk for back pain, joint pain, and muscle strain. Especially when the weight is on the stomach, this is true because excess weight pulls the pelvis forward and strains the lower back. A healthy diet and a safe exercise program can help you achieve or maintain a healthy weight.
2. Get the right amount of rest – Sleep is fundamental to our bodies; it is important to get enough sleep and to sleep in a position with a natural alignment of the spine. Although, it is also important to be active if you don't want to develop back pain. Most lower back problems originate from muscles because if muscles are not moved and stretched regularly; they become tight, short, and stiff, eventually causing back pain and injuries.
3. Keep good posture – Correct posture and body mechanics expend less strain on the discs, the muscles, ligaments and back joints. If your posture is good and you move your body correctly, then you minimize your risk of back injury. A professional can help you optimize your working posture by doing an ergonomic assessment of your job and your work environment.
4. Reduce stress – Stress increases tension on every muscle, including your back muscles. As result, stress-reduction techniques, such as deep breathing and meditation, may help you reduce your risk of back pain and injury.
5. Be flexible – Inflexibility through tight hamstrings and limited range of motion in the trunk increases your risk for back injury or makes existing back pain worse. There are forms of exercise, such as yoga, Pilates and tai chi, that may relieve and prevent back pain because they increase flexibility.