



# Backbelts

Back injuries make up nearly 1/5 of workplace injuries & are the main cause of injuries to workers under age 45.

They cost an estimated \$20 billion to \$50 billion per year nationwide. These injuries take time to heal; injured workers may be off the job for significant periods of time. Occasionally, you may have seen other companies' workers wearing supportive back belts. Perhaps you wondered if providing them to your workers would reduce the risk of back injury.

**According to the National Institute for Occupational Safety & Health (NIOSH), there is inadequate evidence to support or refute the notion that backbelt usage reduces the risk of back injury.** In other words, they are not yet certain if backbelt usage reduces or increases the risk of back injury. NIOSH reviewed backbelt studies & concluded that the limitations of the studies did not enable them to recommend using backbelts. (NIOSH performs research & makes recommendations for preventing workplace injuries & illnesses. Their recommendations often become the basis for Occupational Safety & Health Administration (OSHA) standards.)

## Wearing backbelts provides advantages & disadvantages.

**Advantages:** Some evidence indicates that backbelts can spread loads on the spine over more of the body's structure. Some researchers also think the belts can reduce injury by limiting spinal flexion, especially excessive bending forward or to the side.

**Disadvantages:** Some workers believe wearing backbelts increases their strength; they attempt to lift loads beyond their ability. Belts exert intra-abdominal pressure, which can increase blood pressure & heart rate.

Whether or not you choose to provide backbelts, the following actions can reduce the risk of back injury.

- Modify work tasks (e.g. use mechanical lifting devices so workers will not need to lift)
- Modify material arrangement (e.g. store items at a height between knees & knuckles)
- Modify materials (e.g. pack product in smaller, lighter quantities)
- Provide lifting aids (e.g. forklift, hand truck, lift tables)
- Teach safe lifting techniques & enforce their use:
  - Lift with leg muscles, not back muscles
  - Seek assistance or use mechanical lifting aid if item is too large or too heavy
- Partially unpack a container if it is too heavy to lift while full
- Instruct supervisors to remind employees to use safe lifting techniques when they see employees lifting in an unsafe manner
- Provide refresher training to all employees as necessary