

Many people work in occupations that require them to lift heavy objects on a regular basis. Baggage handlers, warehouse workers, construction workers, and health care providers, to name a few, are frequently exposed to regular lifting throughout the day. Back belts, also called back supports or abdominal belts, are currently worn by workers in numerous industries. Since the later 1980s, there has been a dramatic increase in the number of employers and workers who have been relying on back belts to prevent injury during lifting. Many companies have made the decision to require their workers to use back belts in the belief that doing so will reduce the likelihood of a back injury and/or the number of days spent out of work recovering from an injury. There is no question that reducing the number of back injuries is an important goal, but should back belts be considered personal protective equipment (PPE) in these occupational situations?

Some employers have been wrongly led to believe that OSHA approves the use of back belts. OSHA does not recognize that back belts are an effective engineering control to prevent back injuries. OSHA does not forbid or endorse their use.

In the most recent Bureau of Labor Statistics (BLS) data, the category of sprains, strains, and tears was the leading nature of injury an illness and accounted for 38% of the total injury and illness cases requiring days away from work in all occupations. Of that number, back injuries represented the most significant number of events leading to lost time.

As the use of back belts has risen, the National Institute for Occupational Safety and Health (NIOSH) has increasingly been asked for advice on back belt selection. In response to these inquiries, NIOSH decided to address a more fundamental question. An obvious starting point may have been to ask, "Which belt will best protect workers?" Instead, NIOSH researchers took a step back and asked, "Do back belts protect workers?" To answer this question, NIOSH formed the Back Belt Working Group to review and evaluate the existing data related to back belts. After thorough review, the final conclusions of this group are:

- Back belts should **not** be considered personal protective equipment.
- Back belts should **not** be recommended for use in occupational situations.

The concerns which led to these conclusions were:

- The use of back belts may produce some strain on the cardiovascular system.
- The use of back belts limits mobility and may reduce the limberness and elasticity of muscles and tendons. This could potentially contribute to back injury.
- The use of back belts may create a false sense of security, increasing the risk of lifting excessive loads.

NIOSH believes that workers and employers should have the best available information to assist in deciding whether or not to use or continue to use back belts. If you or your workers are wearing back belts as protective equipment against back injury, you should be aware of the lack of scientific evidence supporting their use.

NIOSH proposes that the most effective way to prevent back injury is to implement an ergonomics program that focuses on redesigning the work environment and work tasks to reduce the hazards of lifting. Companies should not rely on back belts as a cure all for back injuries, but they should begin to undertake prevention measures that reduce the risks associated with lifting, lowering, pushing, pulling, and carrying materials or products. Such a program should utilize proper engineering controls and the use of mechanical devices whenever possible to reduce employee exposure to injury.