



Back injuries account for a large number of injuries and illnesses in the workplace and cost the economy thousands of dollars. In response to the increasing human and economic costs of back injuries, companies have tried using many devices to lessen the chance of back injury, either in conjunction with or in place of sound ergonomic programs. One such device is the “back belt.”

Back belts, also called back supports or abdominal belts, resemble corsets and have been used by some companies in the belief that they prevent worker injury during lifting activities. However, those who rely on back belts to prevent injury should be aware of the lack of scientific evidence supporting their use.

The decision to wear a back belt is a choice and the National Institute for Occupational Safety and Health (NIOSH) believes that workers and employers should have the best available information to make that choice. So NIOSH conducted an extensive study and concluded that there was “insufficient scientific evidence” that wearing back belts protects workers from the risk of job-related back injury.

In their study, NIOSH found that the back injury rate among workers who wore back belts every day was “statistically insignificant” from those who didn’t use them regularly. Even employees in the most strenuous types of jobs showed no real difference in either back pain complaints or injury claims when using back belts. A history of back injury was the strongest risk factor for predicting either a back injury claim or reported back pain among employees, regardless of back belt use.

NIOSH does not consider back belts to be personal protective equipment and does not recommend the use of back belts to prevent worker injury. They conclude that back belts do not lessen the hazards to workers who lift, push, pull, twist or bend repeatedly. The most effective way to minimize the likelihood of back injury is to develop and implement a comprehensive ergonomics program. The program should include:

An ergonomic assessment of jobs and workstations to make sure that work activity can be done without exceeding the physical capability and capacity of the worker, on-going, comprehensive training for all workers on lifting mechanics and techniques, a surveillance program to identify potential work-related musculoskeletal problems and a medical management program.

On the basis of available evidence, how effective back belts are in reducing back injuries remains unproven. Although, some companies have reported workplace injury reduction from using back belts many of those companies also implemented training and ergonomic awareness programs. So, in fact, the reported injury reduction may be related to these or other factors.

There is also little scientific evidence that back belts remind workers to avoid awkward postures and heavy loads. For just as there is speculation that back belts may help, there is also concern that they may have potentially harmful effects associated with a false sense of security.

Some research shows that workers believe they can lift more when wearing a back belt. If workers falsely believe they are protected by the belt, they may risk greater injury by lifting more weight that they would have without a belt.

Companies should not rely on back belts as a “cure all” for back injury, but should take preventative measures that reduce the risks of lifting tasks. The decision to use back belts should be a voluntary decision and not be a mandatory job requirement. NIOSH believes 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.



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