

# Health and Safety

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## Back Belts May Not Protect While Lifting

Nursery work often requires long hours of bending and lifting, especially during the seedling harvesting, grading, and shipping period. In the past few years, you can see many nursery workers wearing back braces, and they swear that they offer back support. But the following article casts serious doubt on that assertion:

***New Report Says Back Belts May Cause Harm,***  
by Melissa Steineger

Everywhere you look these days it seems people are wearing back supports, those black nylon belts often with suspenders, that everyone from grocery store cashiers to truck drivers have donned. No wonder, since nationally the number of complaints about low back pain are second only to the common cold.

But a new federal report says back belts "do not mitigate the hazards to workers posed by repeated lifting, pushing, pulling, twisting, or bending" and "may produce temporary strain on the cardiovascular system". That jibes with what chiropractor Dr. David A. Torkko, D.C. has found. "Back braces don't protect the back," he says unequivocally. "We don't recommend that our patients wear them."

Back belts, weight belts, or back braces all work by increasing pressure on the abdominal cavity, thus assisting the muscles holding up the spine. Their therapeutic use may have begun with corsets used to help patients with back pain in earlier days. But what Torkko has found is that some patients rely on belts so heavily that their muscles actually atrophy because the belt takes

over the work of the muscles. A similar brace, the cervical collar, has been used so extensively by patients, he says, that when the collar is removed they can no longer hold up their heads.

Cynthia Alvarado, M.S., O.T.R./L., an occupational therapist at Portland Rehabilitation Center, has seen similar problems. Belts, Alvarado allows, can be useful as a reminder to lift properly for worker whose jobs requires frequent lifting. But, she adds, good lifting practices are better for the back. Used properly, she says, belts should be left dangling from the shoulder straps and loosely wrapped around the waist, then cinched very tight for actually lifting. Instead, many workers with relatively sedentary jobs are leaving the belts on all day to relieve low back pain.

To physical therapist Joe Keeney, belts offer virtually nothing. "Our theory here," says Keeney, who also works at Portland Rehabilitation, "is that you have to create a lumbar support with your muscles. Strengthening abdominal muscles would be a better solution than back belts."

"These devices are being marketed as a solution to back injury, and the existing scientific evidence does not support this claim." says Dr. Linda Rosenstock, Director of the National Institute of Occupational Safety and Health (NIOSH). NIOSH recently reviewed existing studies of back belt use to evaluate claims that back belts can reduce work-related back injuries. In fact, the NIOSH study indicates the belts can do more harm than good because workers think they are protected and may attempt to lift more than they can. NIOSH researchers also uncovered indications that a tightly fitted weight belt can put a strain on the cardiovascular system by increasing heart rates

and blood pressure levels during exertion. The study, which did not consider previously injured workers whose doctors have prescribed back belt use, "does not recommend the use of back belts to prevent injuries among uninjured workers and does not consider back belts to be personal protective equipment." "People wear them because they think they are protective," says Marie Haring Sweeney, chairwoman of the group that conducted the NIOSH study. "The data really doesn't support that."

For a free copy of the NIOSH Working Group report "Workplace use of back belts", contact:

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