

Back belts fail to prevent injuries

They protect soft tissue, but may weaken muscles long-term

TALKING POINTS:

- Canadian safety bulletin list pros and cons.
- Warns of "false sense of security" when wearing a belt.

Back belts may be an important treatment option for injured workers, but a person with a healthy back should think twice before relying on the belt.

That's the conclusion drawn by the province of Alberta, Canada, in an online health and safety bulletin headlined "Let's Back Up a Bit – Some Truths about Back Belts," published by the province's Human Resources and Employment agency.

The report echoes the recommendation by the U.S. National Institute for Occupational Safety and Health (NIOSH) that belts are not an effective means of preventing back injuries among uninjured workers.

The Alberta bulletin says, "Our concern about back belts is that their long-term use may make workers dependent on them, weakening muscles of the lower back and abdomen."

It goes on, "Problems may also arise from a worker's false sense of security when wearing the belt. Believing they're protected, workers may lift more weight more often, exposing themselves to greater risk of injury."

Citing NIOSH studies, the Alberta bulletin includes a point-by-point evaluation of the arguments for back belts to provide lumbar support. These include claims that the wide elastic belts worn outside clothing can:



- Reduce stress on the spine by increasing abdominal pressure. (No evidence that stress is reduced.)
- Reduce stress on the spine by adding support. (The support is to soft tissue, not to the spine itself. Also, "evidence is inadequate that such support prevents injuries."
- Prevent excessive bending by restricting back movement. (The belts do restrict side-to-side movement, but have little or no effect on forward bending, which increases stress on the back during lifting.)
- Remind belt wearers to lift properly. (Evidence is "weak at best" that the belts serve as a reminder.)
- Reduce workplace injuries. (Since 1994, three studies comparing belt wearers with non-wearers have failed to show any difference in incidence of injuries and insurance claims.)

The bulletin concludes by saying there is little scientific evidence that back belts increase lifting power or contribute to lower injury rates, yet there is "some evidence of potential harm from increased abdominal pressure and increased blood pressure."

To prevent back injuries, the bulletin instead recommends close attention to workplace tasks being performed. For example:

- Reduce or eliminate heavy and repetitive lifting.
- Reduce the weight and size of the object(s) to be lifted.
- Replace lifting and lowering with pushing and pulling.
- Use lifting equipment carts, dollies, jib cranes, scissor lifts, etc.
- Reduce the distance that objects must be carried.
- Ensure adequate clearance and headroom in work areas.
- Rotate workers among tasks which do not require lifting.
- Suit lifting tasks to each worker's capabilities.

Information: www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/775.html