Workplace Use of Back Belts

Conclusions
The NIOSH working group concludes that the effectiveness of using back belts to lessen the risk of back injury among uninjured workers remains unproven. The working group 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.

The working group further emphasizes that back belts do not mitigate the hazards to workers posed by repeated lifting, pushing, pulling, twisting or bending.

The working group also concludes that:
- There are insufficient data indicating that typical industrial back belts significantly reduce the biomechanical loading of the trunk during manual lifting.
- There is insufficient scientific evidence to conclude that wearing back belts reduces risk of injury to the back based on changes in intra-abdominal pressure (IAP) and trunk muscle electromyography (EMG).
- The use of back belts may produce temporary strain on the cardiovascular system.
- There is insignificant data to demonstrate a relationship between the prevalence of back injury in healthy workers and the discontinuation of back belt use.

Recommendations
The working group recommends that the most effective means of minimizing the likelihood of back injury is to develop and implement a comprehensive ergonomics program. The program should include ergonomic assessments of jobs and work stations to ensure that work activity can be accomplished without exceeding the physical capabilities and capacities of the workers (Waters, et al., 1993);

Additional recommendations made by the work group includes the following:
- Ongoing 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.
Copies of “Workplace Use of Back Belts” are available from:

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