Reviews of Articles

Blind About Back Belts?

As Published in Occupational Hazards, February 1996

"Lifting, pushing and pulling a load are the cause of most back injuries in plants and warehouses. . .and also an obstable to pro- ductive material handling," writes Editor Bernie Knill in Material Handling Engineering.

The solution to avoiding injury in these tasks takes three approaches, he says:

designing a system to eliminate or mechanize the effort, removing the worker,

provide mechanical assistance to the operator who can't be replaced, or

if the task can't be mechanized, change load weight or positioning or provide training in lifting or back support belts.

"Ergonomists have been focusing on lifting's contribution to back injuries, less on pushing or pulling," he says.

And their studies have concentrated on back support belts and lifting--studies which have come up with a variety of results, as outlined in the NIOSH Workplace Use of Back Belts.

Knill says the NIOSH report, while "mildly positive," wasn't anything to base back support acceptance or rejection on and says the conclusion should have been: "Make up your own minds."

Knill suggests that when the only solution to a warehouse or plant operation is manual lifting, an internal back belt study team should be organized with representation from management, accounting, engineering, safety/ergonomics and workers involved in the operations.

"The team should be given a mandate to visit companies that are users of back support belts, as well as ex-users, and to check out their management directives, standards for measuring effectiveness, criteria for selecting a vendor and rules for back belt use," this editor writes.

He also says that material handling equipment--hoists, manipulators, walkie trucks, lift tables and work positioners--carries its own potential for back injury or fatigue.

"Giving a worker a powered walkie truck to move pallet loads doesn't necessarily mean that he shouldn't be wearing a back support belt as well," Knill says.