

# MIDWESTERN INSURANCE ALLIANCE

## Loss Control Newsletter

April 1999



Midwestern Insurance Alliance maintains the goal of providing our insureds with a wide range of loss control services. Only one of which is this monthly *Loss Control Newsletter*. To become aware of the many other services offered, contact Loss Control Manager, Keith Wertz at (502) 429-9990 or send e-mail to [krwertz@midwesterninsurance.com](mailto:krwertz@midwesterninsurance.com)

## What About Back Belts?

### What About Back Belts?

Lumbar support belts (more commonly known simply as "back belts") are the subject of some controversy. When they hit the market, many thought of them as the "silver bullet"... the cure-all for the enormous problem of back injuries. Well years have past and back injuries are far from having been eliminated. So what have we learned since the advent of these devices?

Do back belts aid in the prevention of back injuries? How do they work? Can they be detrimental? What are their limitations?

Although this newsletter is not the forum to provide an in-depth analysis of the issue, it is the intent of this newsletter to provide employers, managers and supervisors with a fundamental knowledge of what has been learned about back belts over the past several years. Nevertheless, it must be recognized that the research concerning back belts is

not conclusive. Further research is still needed.

### Purpose and Features

Back belts are intended to help stabilize the spine and prevent injury by promoting proper lifting techniques. They are available in a variety of styles, sizes and materials. Hence, the one-size fits all approach is not a good idea.

Although most back belts are made with a lightweight breathable material, the employer should be aware that belts constructed of polyester do not dissipate heat well. This concentrates heat on the wearer's back which may accelerate existing or potential injury symptoms

Many back belts come with suspenders. These are not because suspenders are stylish, but because back belts are not intended to wear snugly at all times. The suspenders permit the wearer to loosen the belt when he/she is not engaged in material handling tasks, while still

keeping the belt readily accessible.

In addition to suspenders, many have posterior stays that provide support in specific areas.

### Restriction of Movement

Many proponents of back belts indicate that back belts restrict certain movements, and thereby remind employees to bend at the knees. If this is true, it is a positive benefit.

### Behavior Modification

If the use of back belts results in a positive change in the way that employees approach material handling tasks, that's great! However, it is unlikely that simple use of a back belt, without an education and training program, will modify the behavior of many employees. A more effective approach would be to conduct training relative to proper body mechanics and stretching exercises.

It is important to remember that if a back belt is used at work, but the employees' behavior has not been modified to properly care for his/her back, away from work, an injury is still likely.

### **Possible Effects on Muscles**

Although back belts may help stabilize the spine, long-term use may cause abdominal muscles to grow steadily weaker. Thus, employees may develop a dependence on back belts. Because abdominal strength is used to help support the spine, weak abdominal muscles decrease support of the spine, which increases the likelihood of back injury once the use of the belt is discontinued.

### **A False Sense of Security**

One of the criticisms of back belts is that they provide a false sense of security. Employees who wear back belts, thinking that it will permit them to lift heavier loads without the risk injury are mistaken. If employees wear back belts they should understand that a back belt is not a Superman cape. A false sense of security places employees at greater risk.

### **Mandatory vs. Non-Mandatory Use**

The decision to use back belts is a personal decision made by the employer and the employees. However, both should be aware of the fact that there is little scientific evidence to support the contention that back belts are effective in reducing or preventing back injuries. Many employers

have adopted the policy of making employees know that back belts will be provided upon request. However, with the limited amount of scientific evidence to support their effectiveness, employers are warned against making back belt use mandatory.

### **No Investment... No Return**

*"No Investment... No Return"* is a recurring theme in the field of occupational safety. Employers cannot rely solely upon quick fixes (such as back belts) to prevent employee injuries. Instead, employers must come to two realizations: (1) injuries are preventable; and (2) the prevention of injuries requires an investment of effort (both time and financial resources).

With that in mind, employers should thoroughly analyze the tasks that employees perform and consider changing how those jobs are performed to minimize the risk of injury. In the field of occupational safety, a systematic approach to analyzing jobs is called a "Job Hazard Analysis" (a topic that will be addressed in an upcoming Loss Control Newsletter).

In addition to analyzing and modifying jobs, employers should conduct ongoing employee training. This should include retraining employees how to perform jobs that have been modified, as well as providing general guidelines relative to back injury prevention and instructing employees how to perform stretching and strengthening exercises.

### **Ergonomics**

If you have been listening to the news lately, you are probably aware that OSHA is pushing for a new regulation... one which addresses "ergonomics." Ergonomics is defined as designing (or redesigning) the work to fit the worker, instead of vice-versa.

In large part, ergonomics programs are intended to prevent cumulative trauma injuries, to include back injuries. It is important to remember that most back injuries are a result of the cumulative effects of excessive bending, poor body-mechanics, poor posture, general lack of physical fitness and other factors that effect the spine on a regular basis.

Hence, employers who are not currently making a concerted effort (investment) to prevent back injuries, will likely be specifically obligated to do so in the future.

### **Conclusion**

Back belts should not be used as an exclusive remedy for the problem of back injuries. Although back belts may remind wearers about proper body mechanics, much of the available research indicates that use of back belts without training has little effect in preventing back injuries. The best approach appears to be combining belt usage with ergonomic changes and employee training.

To receive a free booklet from NIOSH concerning back belts, contact the Loss Control Department of  
Midwestern Insurance Alliance at (502) 429-9990