

### Introduction

The USF OTI Ed Center teaches classes in proper lifting procedures, lifting programs, and ergonomics in the workplace. The Education Center instructors receive numerous questions from students wanting to know how to protect their back while lifting, and if there is a back support device that will help protect them from back injury. As a result, the staff of the Education Center started to investigate to see if there were back support devices on the market that would help reduce the chance of injury and the pain and soreness of workers who performed lifting as a part of their normal work. LifeBack Enterprises, Inc. had just developed a product that seemed to have promise so we agreed to conduct a study to determine if workers reported less back pain and soreness in their back while wearing the LifeBack support belt.

### Study

Parameters for the LifeBack study included the following:

- Each employee assigned to the wear a LifeBack support belt would wear the device whenever lifting or performing any work that could strain the lower back
- Each employee would complete a form within one week after starting to wear the device and again at the end of 30 days, after that the employee would complete a form every 90 days.
- The completed forms would be sent to the USF OTI Education Center and added to the overall back injury research database.
- The USF OTI Education Center would compile the comments from workers at the end of 18 months and report the results to LifeBack Enterprises, Inc. and to students asking for information about back support devices.

### Results

Data has now been received from more than 1100 workers who are both wearing the back support device and working without any type of back support. As of October 31, 2008 we have received reports of 14 workers compensation claims filed by workers in the study who were not wearing a back support device at the time of their injury. The workers compensation claims for the 14 workers have already exceeded \$800,000 dollars. As of October 1, 2008 there were no injuries reported among the workers using the LifeBack Enterprises, Inc. support belt. In addition, one hundred percent of the workers who had back pain and used the LifeBack Enterprises, Inc. support belt for 60 days or more reported a decrease or elimination of their back pain.

More than 80% of the workers with back pain reported an immediate improvement when they started to wear the LifeBack support belt. These same workers reported continuing improvement at the end of 30 days and at the end of their 90 day reporting cycles. In some cases the workers reported that their back pain had been entirely eliminated. Chart (A) illustrates the reported improvement among workers wearing the belt for 60 days or more.

USF OSHA Training Institute Education Center  
13201 Bruce B. Downs  
Tampa, Fl 33201  
Office: (813) 974-6879  
Fax: (813) 974-8270 web site: <http://www.usfotcenter.org>