



Introduction

- According to the Bureau of Labor Statistics, truck drivers experienced 141,100 injuries and illnesses involving time away from work in 1999, with the incidence rate of nonfatal occupational injuries and illnesses involving days away from work of 306.5 cases per 10,000 full time workers
- In 2006, there were 86,000 recordable injuries and illnesses in truck transportation, with the annual average employment of 1,425.4 thousand and the incidence rate of total recordable cases of nonfatal occupational injuries and illnesses of 5.8 per 100 workers
- Incidence rates for nonfatal occupational injuries and illnesses affecting trunk (back) and involving days away from work in transportation industry in 1999 were 124 (80.5) per 10,000 full-time workers
- Incidence rate for nonfatal occupational injuries and illnesses affecting trunk (back) and involving days away from work in transportation industry in 2006 were 59.4 (36.4)
- Recognizing that musculoskeletal injury is common among commercial truck drivers, both employers and insurers are employing the functional capacity evaluation (FCE) as a tool to assist in decision-making regarding appropriate job placement of these commercial truck drivers as well as return to work duty after an injury. The hope being that if properly placed, there will be reduction in injury and subsequent workers' compensation costs
- In an effort to reduce the rate of low back injuries and associated workers' compensation costs, in 2003 a trucking company incorporated a standardized fitness-for-duty evaluation of drivers by adding Functional Capacity Evaluation (FCE) to the already established and traditional DOT physical examination

Objectives

- To evaluate the outcomes of the introduction of a standardized fitness-for-duty evaluation of commercial truck drivers during the comprehensive DOT physical examination on the incidence of back injuries and associated workers' compensation costs

Methods

Study population:

The study population comprises all truck drivers employed at one large nationwide trucking company anytime from July 1st 1999 to December 31st 2006

Description of the Standardized Fitness-for-Duty Evaluation Program:

This large nationwide trucking company utilizes a new comprehensive "Road Ready" DOT Physical management system. Testing is conducted at company's testing sites nationwide

Road Ready utilizes physical therapists, trained by Road Ready to conduct this standardized fitness-for-duty examination. The findings from this examination, as well as the physical therapist recommendations are passed on to the DOT medical examiner

The examiner then makes the final determination regarding certification of the driver based on both his evaluation and the Road Ready evaluation

Data collection and Analysis

The incidence of upper and lower back injury as well as the associated worker's compensation cost data were obtained from the trucking company's HR department

The Road Ready DOT physicals' data are gathered and stored via a Web-based Microsoft SQL server application

The incidence of lower back injuries is ascertained for each of the 5 years as is the associated Workers' Compensation costs

As the upper back was not targeted in the Road Ready assessment, incidence and Workers' Compensation claims for upper back injury is used as a control

The data used in this study was retrieved from this data management system and analyzed using Microsoft Office Excel software

Results

There was a 54% reduction in low back pain incidence with an associated 45% decrease in workers' compensation costs from 1999 to 2006

Figure 1. Incidence rates of upper back pain, low back pain, and both combined in truck drivers from 1999 to 2006

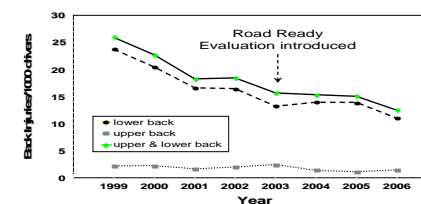
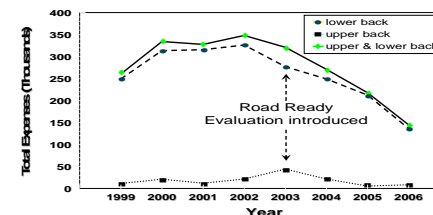


Figure 2. Workers' compensation costs associated with back injuries in truck drivers from 1999 to 2006



Conclusions

- This intervention appears to be effective in reducing low back pain and associated workers' compensation costs
- It can be explained by that the more in-depth musculoskeletal examination by the physical therapists performing the FCE portion of the exam can reduce the severity of the subsequent back injuries and medical expenses associated with the injuries

