FTA RESEARCH
FEDERAL TRANSIT ADMINISTRATION

U.S. Department of Transportation
Federal Transit Administration

REPORT SUMMARY

Health and Productivity of Commuter Railroad Employees Involved in Critical Incidents

Background

Increasing recognition of the need for high-quality transit service to improve transportation and reduce congestion has fueled growing demand for and development of new rail services throughout the U.S. and an associated increase in the number of rail transit workers. Over the course of their career, these workers are faced with a reasonable risk of exposure to Critical Incidents (CIs) such as accidents, near misses, collisions with other vehicles, personal injury, or contact with unauthorized individuals or equipment in the right-of-way of the train. It has been reported that anywhere from 10–16 percent of persons who have been exposed to railroad-related incidents may report considerable distress for some time following an event.

Objectives

The effects of these tragic incidents on the health and productivity of rail transit workers has not been investigated. However, anecdotal evidence suggests that there are lasting effects of these incidents on persons employed in the industry. The aim of this project was to study the effects of rail incidents on the health and productivity of rail transit workers.

Findings and Conclusions

A survey of 363 commuter railroad operating employees from 3 different locations throughout the eastern and western United States was conducted regarding their involvement in CIs. The survey also assessed the general psychological state, health, and perceived work productivity of these employees following involvement in a CI.

Results of the study reveal that nearly 44 percent of commuter railroad employees reported involvement in a CI, and of those, almost half reported experiencing more than one event. Persons exposed to CIs were significantly more likely to report experiencing severe depression and to also meet the criteria for Post-traumatic Stress Disorder (PTSD). Some evidence for a greater interference in work and social activities as a result of being involved in CIs was found, as were significantly more complaints regarding disturbed and restless sleep. Persons who were exposed to CIs reported twice the number of days of work missed and significantly lower self-confidence in completing work-related tasks. Unlike some other occupations in which people are able to avoid the situations that created the event, in the railroad industry one's livelihood is dependent upon continued exposure to equipment and locations.

The implications of these findings are that additional attention should be given to the detection and prevention of depression in the workplace. The psychological health of employees can be a significant cost of doing business, and the findings indicate that involvement in CIs and associated trauma can create a set of emotions and attitudinal consequences that can affect the ability of workers to concentrate and successfully attend to their tasks.

The study makes a number of recommendations related to effectively dealing with employees involved in rail transit incidents:

- Educate employees and management of the possible consequences of involvement in CIs.
- Increase screening for persons involved in CIs.
- Provide supervisor training on recognizing the signs and symptoms of distress following a CI.
- Consider developing workplace regulations related to requiring medical exams following employee involvement in a CI.
- Address workplace fatigue following employee involvement in a CI.
- Provide management training on identifying depression.

Benefits

This report aims to inform both management and labor of the effects of employee involvement in rail transit incidents. Effectively dealing with the repercussions of such incidents can help to avoid negative outcomes related to employee health, safety, productivity, and morale and can help to improve the overall operation and cost of doing business in the rail industry.

Project Information

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This research project was conducted by Patrick D. Sherry, Ph.D., of the National Center for Intermodal Transportation at the University of Denver. For more information, contact FTA Project Manager Lisa Colbert at (202) 366-9261, Lisa.Colbert@dot.gov. All research reports can be found at **www.fta.dot.gov/research.**