

# High Impact

A NORA Partnering Award Winner



## Slip, Trip and Fall (STF) Prevention in Health Care Workers

Across the globe, falls are the second leading cause of accidental death and the third leading cause of disability. In the U.S., the health services sector is the largest private employer, with some 10 million workers. During 2002, this sector accounted for more injured workers than the construction and mining industry combined. STFs accounted for the largest proportion of lost time injuries to these health care workers and the incidence of these injuries in hospitals was considerably higher than in private industry. The large population of workers at risk and the frequent occurrence makes STF incidents a substantial problem for health care workers.

An unprecedented, collaborative, cross-industry partnership between private sector and public sector U.S. hospitals, organized labor, private and public sector health and safety researchers, and international researchers with cooperation from manufacturers of footwear, flooring and floor wax was established during this project. The group conducted a descriptive analysis of six-years of historical STF incident surveillance data from the study hospitals to target intervention strategies; conducted case-crossover and case follow-back studies by telephone interviewing hospital employees who suffered a fall; conducted laboratory studies to evaluate the slipperiness of hospital flooring and shoes, tested with a range of contaminants and; incorporated the findings from the three companion studies along with on-site hazard assessments at the study hospitals to establish a 'best practices' STF injury prevention program.

Below are just some of the products and impacts of this partnership:

- A laymen's document is in development for distribution to all US hospitals to encourage replication of the countermeasures that were determined to be effective.
- BJC Health System hospitals, one of the partners in this project, experienced an estimated 25 percent reduction in workers' compen-

sation costs attributed to same level STF incidents after implementation of the prevention program

- NIOSH incorporated the findings from the three companion studies along with on-site hazard assessments at the study hospitals to establish a 'best practices' STF injury prevention program.
- The results of various component studies have been presented at NOIRS 2003, the 2004 American Industrial Hygiene Conference and Exhibition, the XVII World Congress on Safety and Health at Work 2005, and accepted for presentation and publication at the 2006 International Ergonomics Association Conference.

### Conclusion

This novel partnership evolved from a previously successful collaboration between BJC Health System and NIOSH. The previous partnership helped to reduce the prevalence of overexertion injuries from patient lifting and as a result STF injuries became the highest cost injury problem. Discussions and planning among the different partners ensued and the result was this project that concurrently applied multiple research methods to the same study population. The result of this amazing collaboration was a reduction in the hospitals' STF incidence rate from above industry average to below the industry average when compared to national data. Through this partnership, effective interventions have been developed to help protect workers in the health care sector from injury and illness at work due to STFs.

For a listing of partners and a full project description, go to [www.cdc.gov/niosh/nora](http://www.cdc.gov/niosh/nora) and click on the "2006 NORA Awards" link.

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