



## RESEARCH SERVICES

OFFICE OF POLICY ANALYSIS,  
RESEARCH & INNOVATION

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### PROJECT COST:

\$21,858



Mn/DOT District 3 recently implemented Mn/STEP, where workers perform regular stretching exercises to increase flexibility and prevent injury.

# Reducing Injuries with a Workplace Wellness Program

## What Was the Need?

For Mn/DOT workers who perform laborious tasks, the most common on-the-job injuries are strains, sprains and other musculoskeletal disorders caused by overexertion or awkward postures. While Mn/DOT is committed to reducing such injuries, work conditions differ significantly among field workers, making it difficult to establish standard procedures that minimize overexertion.

However, it is possible to reduce the frequency of such injuries by improving the overall fitness of field workers. To do so, agencies typically use workplace health promotion and wellness programs, which educate employees about beneficial lifestyle changes. While some Mn/DOT districts have informal workplace wellness programs focused on stretching and nutritional education, Mn/DOT does not currently have a formal, departmentwide program in place.

To assess the possibility of implementing a formal workplace wellness program, Mn/DOT [conducted research in 2010 to gauge employee receptiveness](#). To continue this assessment, further research was needed to review wellness programs currently in place at other state departments of transportation.

## What Was Our Goal?

The goal of this project was to establish best practices for developing an Mn/DOT health and wellness program based on successful programs at other state DOTs.

## What Did We Do?

Researchers began by conducting a literature review of textbooks, journal publications and websites, and identified basic terms and definitions related to workplace health and wellness promotion. Next, they conducted phone interviews with nine safety officers at other DOTs to identify factors leading to the success or failure of past and current workplace health and wellness promotion initiatives, and to gather data about the costs of these programs. Finally, researchers conducted a phone interview with a Minnesota expert in health and wellness promotion to ask about current options available to the Mn/DOT workforce and past experiences with groups similar to Mn/DOT field workers.

## What Did We Learn?

Of the nine agencies contacted, four smaller agencies (less than 1,000 field workers) had programs that were primarily educational, with incentives for health screening. Three medium-size agencies (1,000 to 2,000 field workers) had more formal programs that included stretching, exercise, walking and education. Two larger agencies (more than 5,000 field workers) had formal programs as well as committees; worker input; management commitment; and performance measures such as participation, lost workdays and workers' compensation costs.

A majority of agencies indicated that overexertion or back injury was their primary concern when developing initiatives, followed by slips, trips and falls. To reduce overexertion and back injuries, agencies used measures ranging from education about lifting safely and preshift stretching or exercises, to "fit-for-work" policies or specific hiring of fit workers, to "no-lift policies," which involved hiring outside help for work that was

*Experts claim that implementing a health and wellness program can produce 300 percent to 600 percent return on investment by reducing worker injuries and workers' compensation payments.*

*“A workplace wellness program can help Mn/DOT develop a work environment that will enable employees to be healthier and reduce their risk of getting injured, both at work and at home.”*

—Todd Haglin,  
Safety Director, Mn/DOT  
Office of Administration

*“A health and wellness program should be comprehensive; prework stretching and tips on proper nutrition are just the beginning. It should focus on developing healthier relationships between workers, supervisors and top management.”*

—Todd Loushine,  
Assistant Professor,  
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Investigators used interviews to determine steps for effective implementation of a health and wellness program. The first phase involves obtaining a mandate from upper management, whose level of support can dictate the success of the program. (Image republished with permission from the American Journal of Health Promotion.)

considered riskier. To address slips, trips and falls, agencies used education that encouraged the proper selection and use of footwear.

Overall, results showed that successful health and wellness programs:

- Focus not just on establishing nutrition education and exercise components, but on fostering the value of wellness as part of the organizational culture. This includes promoting positive relationships between supervisors and staff, which are critical to avoiding employee dissatisfaction and its negative effect on well-being.
- Require the leadership and commitment of managers as much as the involvement and participation of employees.
- Empower workers to take control of their own health and provide incentives to increase participation in programs.
- Require a significant amount of planning using a team or committee approach.

**What’s Next?**

Mn/DOT is currently reviewing its options for a workplace wellness program and may create a pilot program in a district or subdistrict office that can be evaluated, refined and expanded in the future. Meanwhile, Mn/DOT District 3 has initiated its own pilot program, Mn/STEP, which is focused on stretching. In developing a health and wellness program, researchers recommended that Mn/DOT take the following approach:

- Establish management commitment and leadership, and involve key stakeholders such as health care providers and workers’ compensation officials.
- Form a committee consisting of workers, management and a health promotion and wellness expert to assess the needs of workers and define how health promotion and wellness can be aligned with organizational goals, policies and measures.

Researchers recommend that before implementation, Mn/DOT establish baseline measures of health conditions, worker perceptions, injury and illness, and workers’ compensation data so that during implementation, the performance of the program can be periodically assessed. According to experts interviewed for this study, a properly developed and administered health promotion and wellness program could provide a return on investment of 300 percent to 600 percent.

*This Technical Summary pertains to Report 2011-07, “Review of Workplace Wellness Program Options to Reduce Musculoskeletal Disorders in Laborious Work,” published January 2011. The full report can be accessed at <http://www.lrrb.org/PDF/201107.pdf>. For information about Mn/STEP, see <http://www.admin.state.mn.us/risk/publications/MN%20Step%20Flexibility%20Program.pdf>.*