

### Nature of Organization

About 230 employees working in geographically dispersed primarily urban office work locations with other provincial sites requiring a lot of walking standing and stair climbing. The organization was interested in delivering a wellness program to its employees with specific focus on the prevention of musculoskeletal (MSK) injuries that were very prevalent throughout all worksites. The purpose of the program was to 'encourage employees to decrease their personal risks and lead healthier lifestyles with particular attention to decreasing MSK injuries'.

### Description of Program

This was a 3-year wellness program consisting of annual biometric screenings onsite, and completion of a Health Risk Assessment (HRA) questionnaire that was customized to include additional MSK questions, to capture the specific issues and prevalence of musculoskeletal disorders (MSDs). Confidentiality of personal health information was guaranteed and data were stored on secure Canadian servers. Based on the findings of the customized HRA, the following wellness interventions were implemented

- Online wellness challenges and a variety of educational resources; articles, videos, monthly newsletters and resource binders specific to each worksite.
- Onsite workshops and group presentations on MSK injury prevention and management, advice on activity and common beliefs and misconceptions about MSDs.
- Nutrition and weight management with focus on establishing and monitoring healthy eating habits.
- Smoking cessation by telephone and onsite group sessions.
- Micro-break exercises to avoid repetitive stress injuries and other physical activity programs, for home and work, to increase endurance and overall fitness.
- Ergonomics and MSK injury prevention with emphasis on train-the-trainer sessions for occupational health committee members who were trained to identify risks for MSDs and offer guidance to co-workers for sustainability. Emphasis was placed on this component which included education about sitting and standing posture, and the importance of maintaining a healthy weight and improving strength and flexibility. Workstation assessments and modifications were also conducted such as relocating telephones to avoid overreaching, changes in footwear, chair adjustments and avoiding repetitive movements.
- Telephonic and online one-on-one counselling was also available primarily for advice on healthy nutrition and weight management.

### What was Achieved

Each employee received a personal and confidential report of their individual HRA results showing comparisons from year to year. The organization received annual aggregate executive summary reports stratified by work locations as requested. An aggregate report summarizing the prevalence of MSDs and body parts affected was also provided. All company reports were anonymous, offered only in aggregate format ensuring privacy and confidentiality of personal information. Nearly 90% of employees reported MSK pain over the last 12 months in at least one body region at initial assessment. Low back (58%) and neck pain (57%) were the most common regions affected, with the elbow being the least common location (19%). The 12-month prevalence of MSK pain was significantly reduced after the program in all body regions with the greatest improvement noted in the low back. The number of employees reporting MSK pain over the last 7 days also decreased significantly for both the upper and lower back. The improvement in all regions varied between 10% in the foot/ankle and knee and 20% in the low back, neck and shoulder. Employees with low back pain were more likely to report that the pain prevented them from doing their normal work. This was decreased significantly by the end of the program, resulting in 27 employees reporting no back pain over the past 12 months. Based on the known relationship between MSDs and productivity, by having 27 fewer employees with back pain, there was an estimated increase in productivity work of about 92 hours/week just by decreasing low back pain alone. Also, improvements in overall wellness and reduction in personal risk factors for the whole group resulted in cost savings of \$248/employee per year, largely due to decreases in absenteeism.