

# **Employer Survey on Musculoskeletal Injuries and Illnesses, Risk Factors and Prevention Steps in Washington State Workplaces**

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## **Executive Summary**

Work-related musculoskeletal injuries and illnesses (MSDs) are major contributors to workers compensation claims frequency and lost workdays and pain and suffering. To better understand employers' perceptions about these disorders, workplace risk factors and prevention steps they have taken, we conducted a survey of employers during the spring and summer of 1998. The Gilmore Research Group mailed questionnaires to employers with telephone follow-up for a 6% random sample of Washington State employers, stratified by size and industry. Based on useable addresses and telephone numbers, there was a 75% response rate, 502 refusals and 4,906 completed questionnaires.

Both sudden and gradual onset MSDs were included in the survey questions.

- 33.2% of respondents reported having employees with MSDs, the majority of them (55.6%) were of gradual onset.
- The estimated overall claims rate based on employer reports was 34.8 per 1,000 FTEs. This is similar to the 1996 State Fund rate of 30.1 per 1,000 FTEs. These rates differed significantly by industry sector (highest in construction, lowest in services) and size when no other factors were included in the analysis.
- Upper extremity injuries were most frequently reported (23.2%), followed by back (18.5%) and lower extremity injuries (12.2%). Larger employers were more likely to report having employees with MSDs (78.2%) than medium (56.8%) or small employers (23.4%). MSDs were prevalent across all industry sectors, although they differed somewhat in the distribution across body areas.
- More than half the respondents reported employees exposed to awkward lifting activities (50.9%), followed by working with non-powered hand tools (42.7%), intensive use of a keyboard or mouse (41.0%).
- Large employers reported employee exposure to most risk factors 1.5-2 times as frequently as small employers.
- We used Poisson regression techniques to model overall MSD claims rates as a function of exposures to different risk factors for different periods of time and employer size. In addition to medium size employers having the highest risk, increasing duration of exposure to (or increasing percentage of workforce exposed to) heavy, repetitive and awkward lifting, working above shoulder height and use of vibrating tools were consistently independently related to increased risk of higher claims rates.

Thirty-six percent of respondents indicated having taken steps to prevent or reduce MSDs, primarily to reduce injuries but they also expected collateral benefits such as improved productivity and reduced absenteeism.

- The majority of respondents initiated changes in workstations, tools or equipment to reduce exertion, and used personal protective equipment such as gloves and kneepads.
- Small employers relied more heavily on increasing task variety.
- Employers relied most on trade associations for information about ergonomics and prevention measures, followed by WISHA. Large employers tended to use a variety of resources whereas small

employers relied on trade associations and WISHA. Almost half of small employers (49%) obtained no information.

#### Conclusions

- WMSDs are a widespread problem of great interest to employers
- Workplace risk factors are prevalent in all industry types and sizes of workplaces
- A substantial minority of employers has taken steps to prevent or reduce WMSDs and have generally found their actions successful.
- Almost 2/3 of firms took no steps to prevent or reduce WMSDs.
- Employers rely mostly on trade associations and WISHA for information.
- Many employers believe industry specific guides and best practices would be useful in helping them to address WMSDs as well as information on strategies to reduce workers compensation costs for WMSDs.
- Voluntary efforts are necessary but not sufficient to address WMSDs.