



Prevalence of musculoskeletal symptoms in relation to gender, age, and occupational/industrial group

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ABSTRACT

Although musculoskeletal symptoms (MSS) are common worldwide, little is known about its prevalence amongst the working population in relation to gender, age, and occupational/industrial group. This paper describes the prevalence of MSS in a sample of 3003 men and women aged 20–64 randomly selected from the New Zealand Electoral Roll. MSS experienced during the previous 12 months in 10 body regions was assessed in telephone interviews using a modified version of the Nordic Musculoskeletal Questionnaire (NMQ). MSS prevalence was 92% (for any body region). The highest prevalence was for low back (54%), neck (43%), and shoulders (42%). Females reported a statistically significantly higher prevalence of MSS in the neck, shoulders, wrist/hands, upper back and hips/thighs/buttocks regions compared to males while males reported more symptoms of the elbows, low back and knees. There were no statistically significant differences in prevalence among age groups. In general, participants with heavy physical workloads had significantly higher prevalence of symptoms in most body regions than those with light physical workloads although women with light physical workloads reported more neck symptoms. The study indicates that the New Zealand working population has a high prevalence of MSS and that exposure in the workplace plays a role.

Relevance to industry: The findings of this study imply that efforts to reduce MSS in the workplace should focus on females and employees with high physical workloads.

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1. Introduction

In many countries, musculoskeletal problems are common amongst the general and working population and can result in serious social and economic impacts on individuals and communities (Buckle and Devereux, 2002; Hanson et al., 2006; National Research Council and Institute of Medicine National Research Council/Institute of Medicine, 2001). For example, the United Kingdom Health and Safety Executive estimated, on the basis of

a Labour Force Survey, in 2009–2010 musculoskeletal disorders were the most commonly reported illness types and 37% of working days lost were due to musculoskeletal disorders (Health and Safety Executive and National Statistics, 2010). In the state of Washington between 1997 and 2005, 27% of all state fund-accepted claims were due to work-related musculoskeletal disorders (WMSDs) of the neck, back and upper extremities (Silverstein and Adams, 2007). In South Australia, sprains and strains were the most common claims (35%), and the claims for musculoskeletal and connective diseases were 13.2% during 2008–2009 (WorkCoverSA, 2010). In New Zealand, a report for the National Occupational Health and Safety Advisory Committee (NOHSAC) indicated that 36% of the total compensation cost in 2004–2005 was due to sprains and strains and 14% due to diseases of the musculoskeletal system and connective tissue (Access Economics, 2006).

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