

WORKER EXPOSURE SURVEY

Overview

In 2017 WorkSafe New Zealand commissioned the Centre for Public Health Research (Massey University) to deliver a New Zealand Workforce Survey of self-reported occupational exposures.

The purpose of the survey was to gather information across all industry groups and occupations in the New Zealand workforce to establish the prevalence of a wide range of occupational risk factors. The first part of the project involved a re-analysis of data collected previously in 2004–2006 and 2009–2010. This combined study addresses a wide range of work related risk factors for over 5,000 workers from a range of occupations and industries across the New Zealand general population.

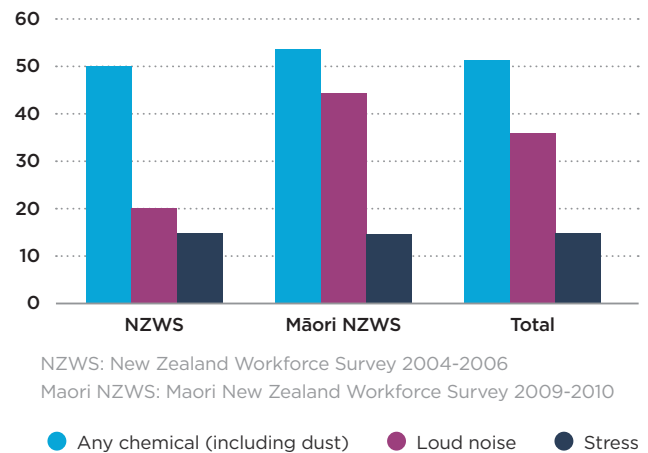
Occupational exposures

More than half of the workers reported exposure to any chemical. Dust was the biggest chemical hazard at work (accounting for one third of all chemical exposure), followed by oils and solvents; and smoke or fumes (approximately one in every five workers). Nearly 90% dust exposure at work was road dust, wood dust, household dust, construction dust and metal dust.

One in three workers reported exposure to loud noise. Other major physical hazards included repetitive tasks; awkward or tiring positions; working at very high speed and working to tight deadlines.

More than 70% of workers reported that they were satisfied or very satisfied with their current job. However, nearly one in six workers reported having extremely stressful jobs.

Percentage of workers exposed to workplace hazards



Exposure by industry

The majority of exposure to dust/chemical and physical factors were concentrated in the agriculture, forestry and fishing, construction and manufacturing industries.

There was a high prevalence of working long and irregular hours in the agriculture, forestry and fishing, transport and storage and accommodation, cafes and restaurants industries.

Exposure to pesticides, acids, alkalis and lifting had the highest prevalence for agricultural workers.

Exposure by occupation

The majority of these potentially hazardous occupational exposures were disproportionately experienced by workers in the 'manual' occupational groups (ie the trades (NZSCO7), agricultural and fishery (NZSCO6), plant and machine operators and assemblers (NZSCO 8), and elementary occupational groups (NZSCO 9)) with prevalence results which appear to be similar to that found by overseas workforce surveys.

Plant and machine operators (NZSCO8) had the highest prevalence of current smoking and obesity; working night shifts and outside the hours in 7.00 am – 8.30 pm.

The elementary occupational group (NZSCO 9) reported the highest prevalences of exposure to repetitive tasks, working at very high speed, and standing.

The burden of occupational risk factors was concentrated in certain high risk groups, however, exposures also occurred in other occupational groups not traditionally associated with hazardous exposures. E.g. one in five workers in the non-manual occupational groups reported exposure to dust.

Personal protective equipment (PPE) use

Use of PPE was generally high, but use for relevant exposures was low e.g. for those workers exposed to loud noise – only 30–40% of workers reported wearing hearing protection at work; and about 30% of workers exposed to dust reported wearing simple dust mask.

Survey implications

The survey re-analysis addresses organisational factors, job satisfaction, specific occupations; and, specific exposures. The results from this analysis provide WorkSafe with a baseline from which future population exposure monitoring efforts can be repeated and easily compared, and provide indicators to track the progress of the Health and Safety at Work Strategy 2018–2028.