

## WORKER EXPOSURE SURVEY

# The seven targeted occupational groups

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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 exposure.

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The second part of this project was to conduct a worker exposure survey (largely via telephone interview) in the seven following occupational groups:

- a. community-based nurses
- b. collision repair workers
- c. construction workers
- d. hospitality workers
- e. clerical workers
- f. sawmill workers, and
- g. agricultural workers.

The survey covered the full range of five occupational exposures including biological, ergonomic, chemical, physical and psychosocial hazards.

### Community-based nurses

- 90% exposed to working in awkward or tiring positions.
- Nearly half reported exposure to environmental tobacco smoke and 63% reported working in hot/warm and cold/damp environments at least a quarter of the time.
- Two in three nurses reported exposure to biological materials (eg patients' urine or blood).
- Bullying appears to be a major issue for nurses (nearly 60%).
- Half of the nurses reported that they had experienced violence at work and 22% reported experiencing violence at their workplace at least sometimes.

## Collision repair workers

- The majority of collision repair workers reported exposure to dust (specifically body filler/paint dust), smoke or fumes, solvents, and paint.
- Nearly 70% of workers reported exposure to biomechanical demands (with the exception of standing) and to tools that vibrate at least a quarter of the time.
- More than three quarters of workers reported working in hot/warm and cold/damp environments at least a quarter of the time, and exposure to loud noise for an average duration of four hours per day.
- Wet work exposure was reported by four in ten workers.
- More than half of workers reported that they used thinners or another solvent to clean their hands/other body parts.
- One-third workers reported that they have to work very fast often or all the time.

## Hospitality workers

- Wet work exposure is an important risk factor; participants reported washing their hands on average 26 times per day and over half reported wet work exposure for an average duration of 2.3 hours per day, both of which are considered risk factors for contact dermatitis.
- A high prevalence of exposure to cleaning products was reported for hospitality workers.
- More than half of hospitality workers reported exposure to biomechanical demands (eg repetitive tasks, working at very high speed) and two-thirds reported working in a hot/warm environment at least a quarter of the time.
- Nearly one in seven workers experienced bullying at work.
- Six in ten workers reported that they have to work very fast often or all the time and less than half reported that they decide when to take a break often or all the time.

## Construction workers

- The majority of workers reported exposure to dust (specifically body filler/paint dust), smoke or fumes, solvents, and paint.
- Seven in ten workers reported exposure to biomechanical demand and to tools that vibrate.
- Three in four workers reported working in hot/warm and cold/damp environments at least a quarter of the time.
- Eight in ten workers reported exposure to direct sunlight for an average duration of 7 hours per day in summer.
- Exposure to loud noise was reported by three quarters of workers for an average duration of five hours per day.

## Clerical workers

- 90% of the sample reported carrying out repetitive tasks and 87% reported sitting a quarter of the time or more.
- 28% of workers had experienced violence at work and 10% reported that violence occurred at least sometimes.
- Around one-quarter of clerical workers also reported that they had experienced workplace bullying and 13% reported that this occurred at least sometimes.
- Almost one-fifth of workers felt that they were pressured to work long hours either, often, or all the time; however, workplace control was generally rated favourably by the clerical workers group.

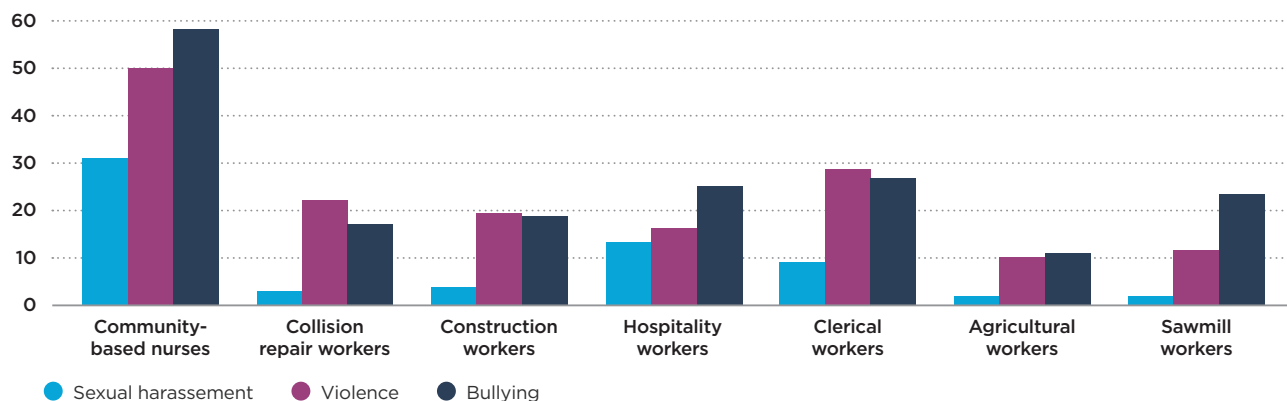
## Sawmill workers

- The vast majority were exposed to loud noise for an average duration of seven hours per day.
- This group reported high prevalences of exposure to dust (specifically wood dust), oils and solvents, and timber treatment chemicals.
- Certain biomechanical demands were high compared to the general population, including awkward or tiring positions (66%), lifting (70%), and repetitive tasks (82%) a quarter of the time or more.
- More than 70% of workers reported working in hot/warm and cold/damp environments.
- More than 40% of workers reported exposure to direct sunlight for an average duration of four hours per day.
- The average number of hours worked per week was high (46 hours) and two-thirds reported working irregular hours.

## Agricultural workers

- Agricultural workers reported on average a 50-hour working week and 57% reported working both long (>48) and irregular hours.
- There were high prevalences of exposure to pesticides, dust, and oils and solvents, as well as the biomechanical demands of lifting and carrying out repetitive tasks.
- Nearly two-thirds of workers reported exposure to biological materials (including animal urine, faeces, and blood) for an average duration of four hours per day.
- More than three quarters reported working in cold/damp and hot/warm environments and 67% reported exposure to loud noise for an average duration of two hours per day.
- Exposure to direct sunlight was reported by the majority of workers for an average of 5 hours per day in summer.

## Prevalence of workers exposed to psychosocial hazards at work



## Study implications and future steps

The study of these seven occupation groups was the first worker exposure survey exploring bullying, sexual harassment and violence at work in New Zealand. Although the survey sample was small, its findings could contribute to developing specific interventions for each targeted occupational group. There are several potential opportunities to expand the survey in the future that could help provide the prevalence of occupational risk factors in the general New Zealand workforce.