



Occupational Exposures in Māori

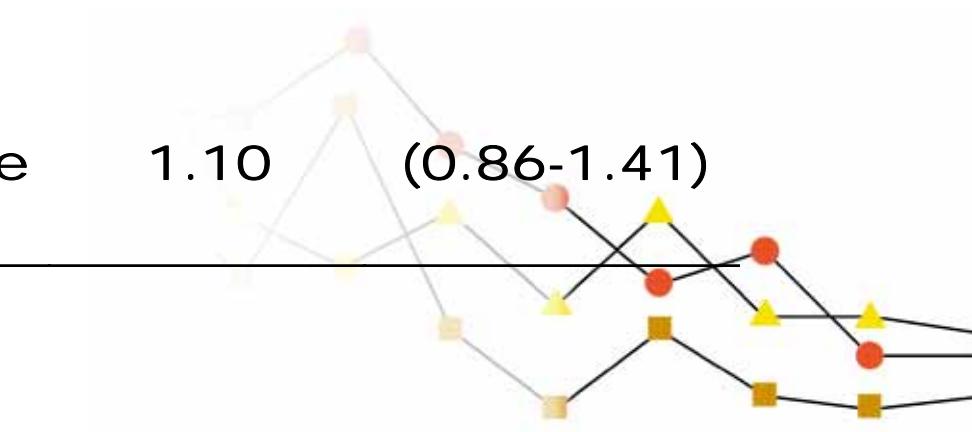
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Background

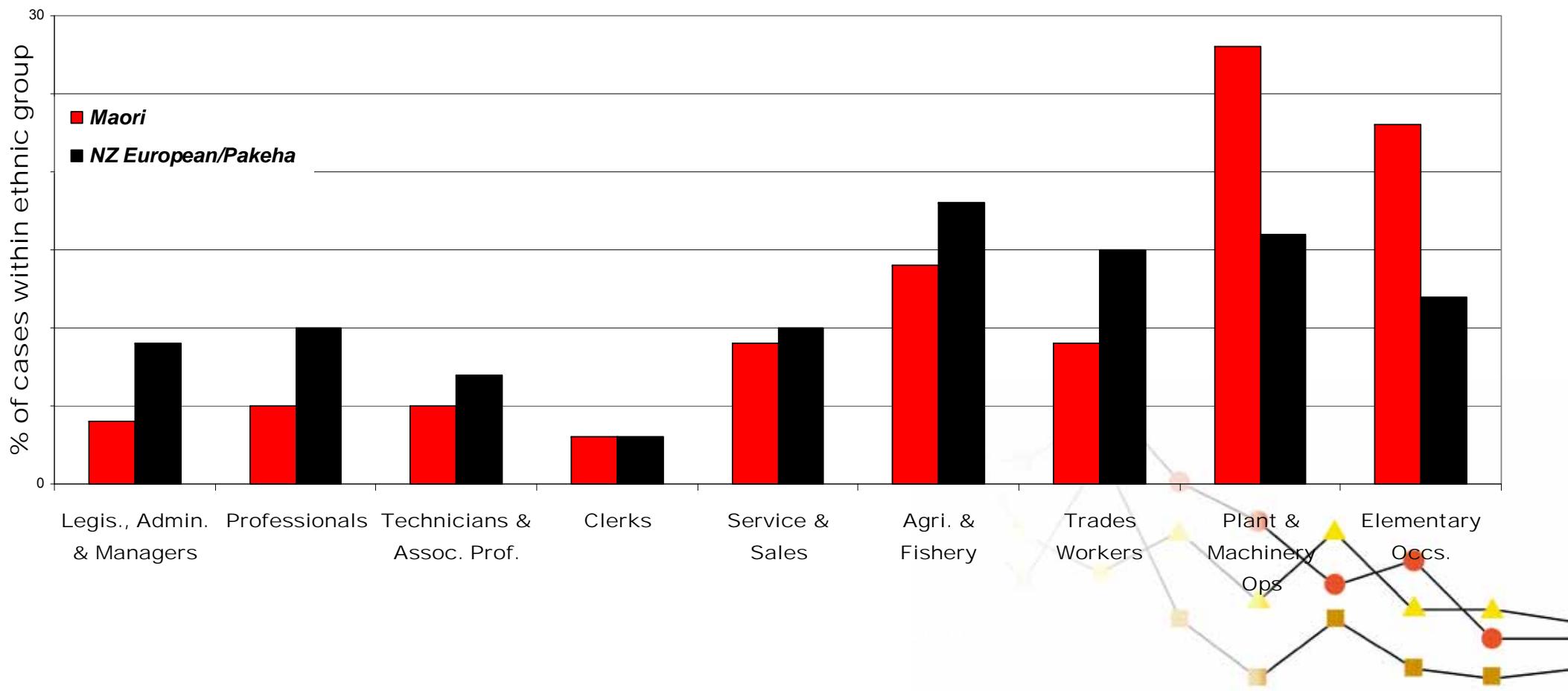
- The NOHSAC report on the burden of occupational disease and injury in New Zealand has noted the lack of ethnicity information in the published research
- Subsequent NOHSAC reports on the surveillance of occupational disease and injury and occupational exposures have also commented on the lack of ethnicity data
- Previous research (McCracken) has compared Maori and non-Maori rates of fatal and non-fatal occupational injury, but the corresponding analyses have not been done for occupational disease



Male Maori and Non-Maori Fatality Rates (per 100,000 workers) (McCracken)

<i>Type of Rate</i>	<i>Maori</i>	<i>Non-Maori</i>	<i>Relative Risk</i>	<i>95% CI</i>
Crude	11.02	8.33	1.32	(1.06-1.65)
Industry Standardised	10.03	Reference	1.19	(0.95-1.50)
Occupation Standardised	9.25	Reference	1.10 (0.86-1.41)	

Distribution of new ACC work-related claims within Ethnic Group (ACC 2001/2002) (McCracken)

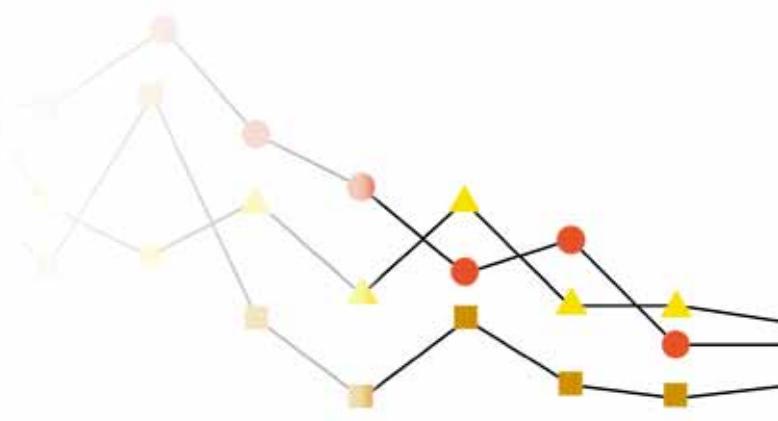


Work Related Injury Rates by Ethnic Group (ACC New Claims 2001/2002) (McCracken)

Type of Rate	N cases	Rate/100 workers	95% CI	Relative Risk
Crude NZ European/Pakeha	146, 662	10.1	(10.0 – 10.2)	Reference
Crude Maori	23,603	13.8	(13.6 – 14.0)	1.37
Age Standardised Maori		13.5	(13.3 – 13.6)	1.34
Occupation Standardised Maori		11.2	(11.0 – 11.3)	1.11
Age & Occupation Standardised Maori		10.9	(10.7 – 11.0)	1.08

Summary (McCracken)

- Fatalities: Occupational distribution explains ~70% of the difference between Maori and Non-Maori
- ACC New claims: Occupational/age distribution explains ~75% of the difference between Maori and NZ European/Pakeha





Occupational exposures and occupational health in Māori

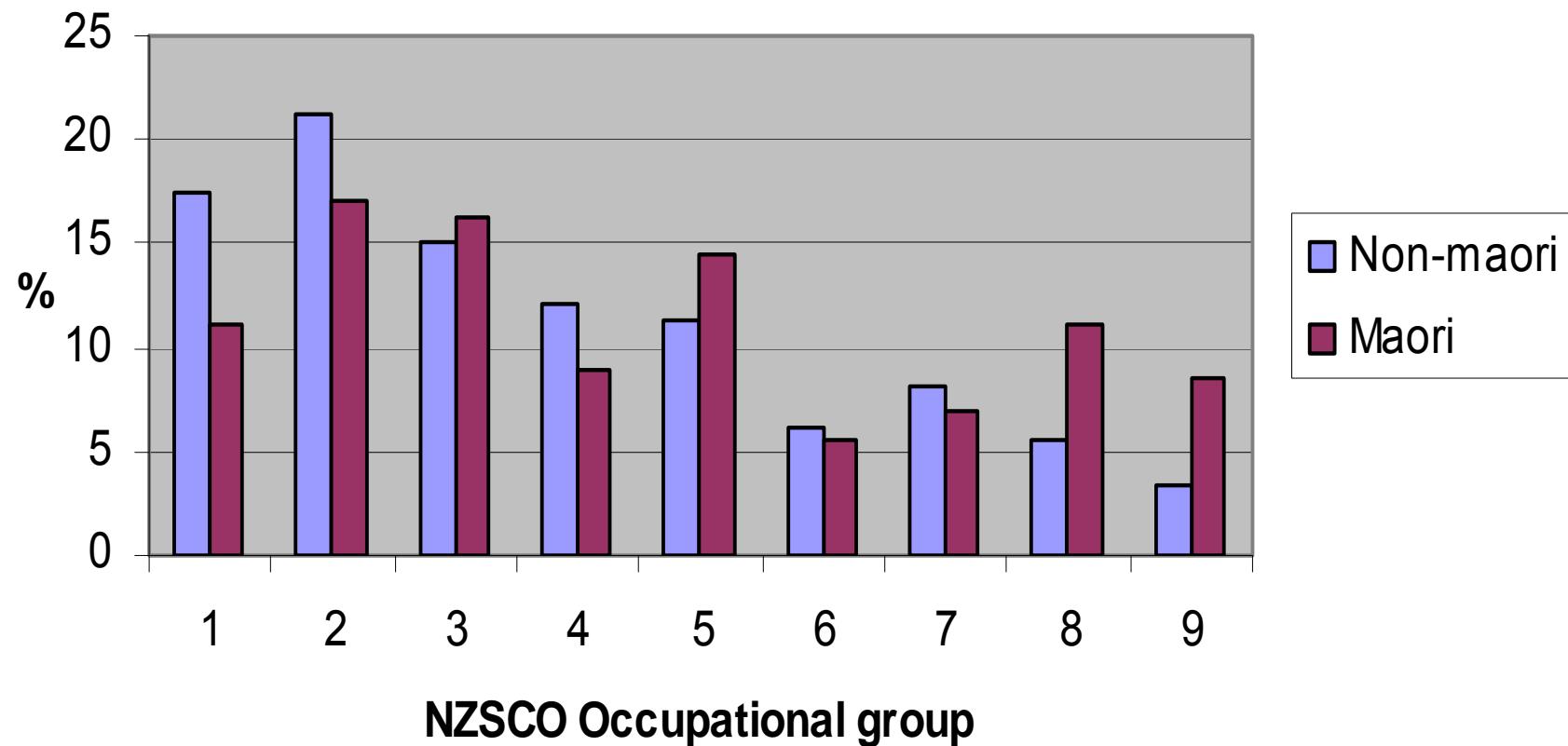
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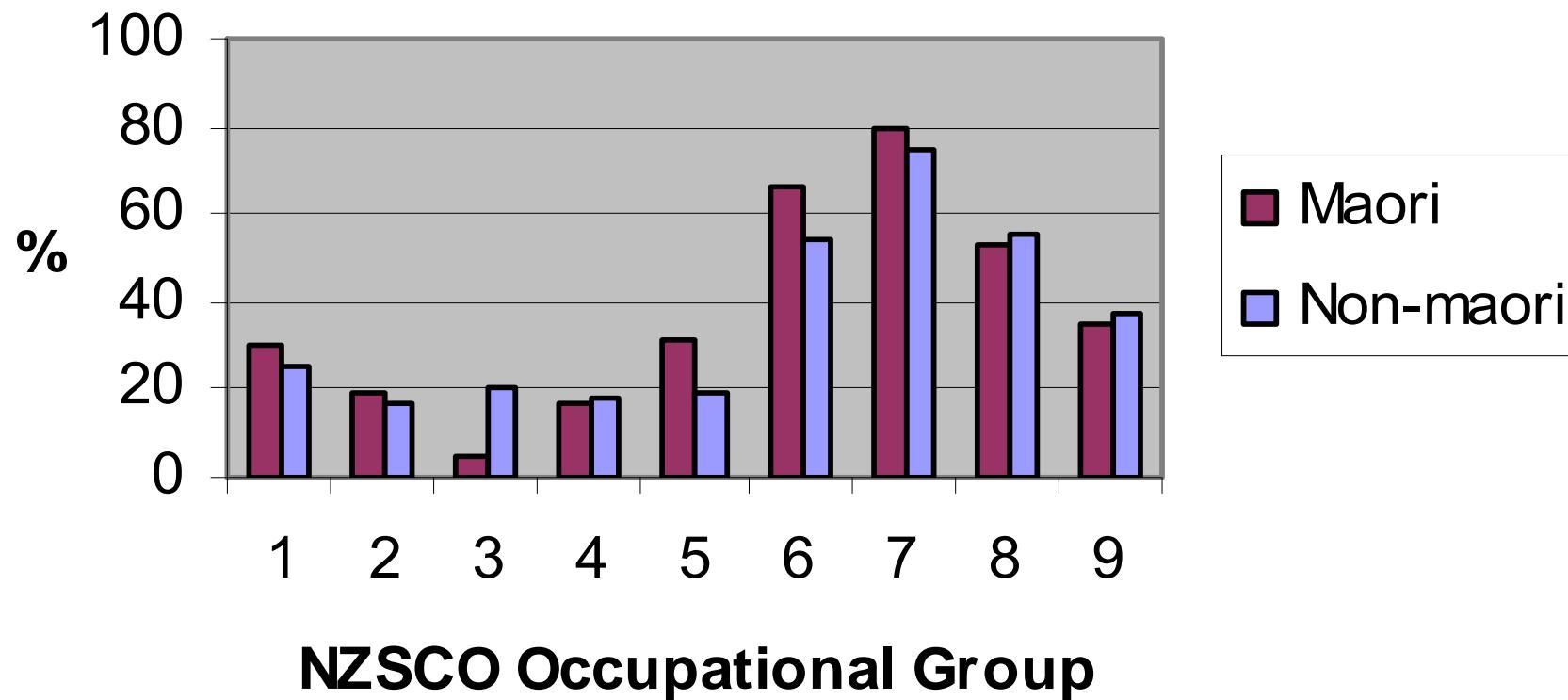
The New Zealand Workforce Survey

Occupation by Ethnicity



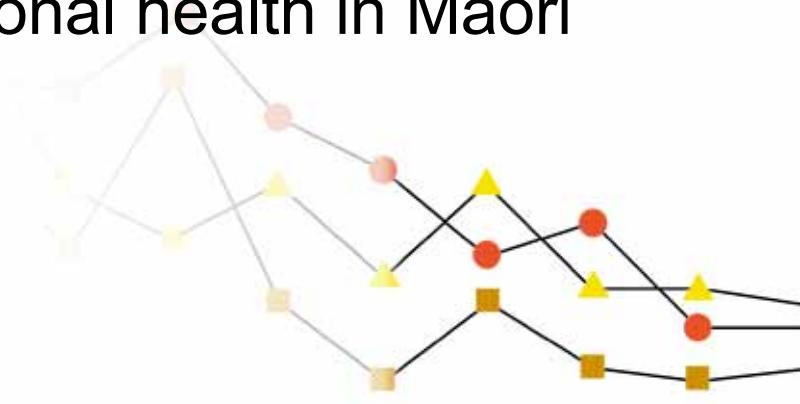
The New Zealand Workforce Survey

Dust Exposure by Ethnicity



Occupational exposures and occupational health in Māori

- Builds on the New Zealand Workforce Survey which was identified as a priority by ACC/DoL/HRC and funded under an RFP
- NOHSAC report identified the lack of information on occupational exposures and occupational health in Māori



Occupational exposures and occupational health in Māori

Study aims

- To assess current and historical occupational exposures and work practices in a random sample of Māori workers
- To assess current morbidity from work-related disease in these workers and its associations with current and historical occupational exposures
- To assess the overall burden of work-related disease in Māori and its relative importance for overall Māori mortality and morbidity
- To establish a prospective cohort of Māori workers in order to monitor future morbidity and mortality patterns in occupational health and workplace exposure

Occupational exposures and occupational health in Māori

What does the study involve?

- We will survey current and historical exposures and work practices in a random sample of Māori identified through the Electoral Roll
- We will interview 2,200 Māori workers to collect baseline information on physical and chemical exposures, and physical and organisational factors; including psychosocial factors and information on morbidity from conditions that may be caused by occupational exposures.
- We will examine the associations with current and historical occupational exposures

Occupational exposures and occupational health in Māori

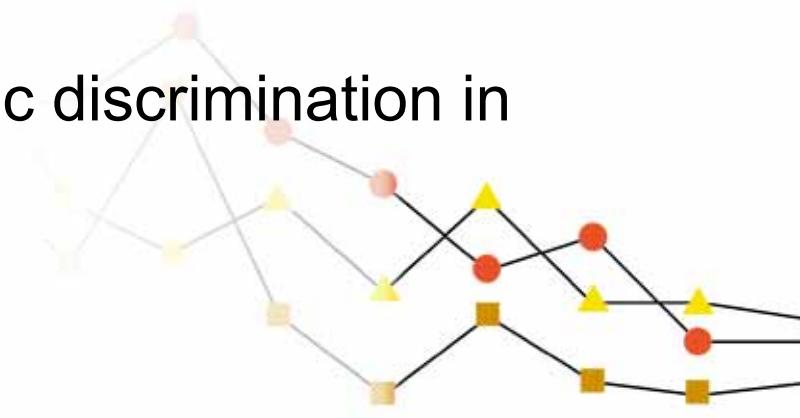
What does the study involve?

- We will combine this information with a recently developed New Zealand Job-Exposure-Matrix (NZ JEM) to estimate current exposures in Māori workers
- Using census data on the numbers of Māori employed in various occupations, and the numbers of deaths and hospital admissions from various causes, we will estimate the current burden of occupational ill-health in Māori
- Participants will be actively followed up through the collection of further data at five yearly intervals and through record linkage with the Cancer Registry, hospital admissions and death registrations

Occupational exposures and occupational health in Māori

What does the study involve?

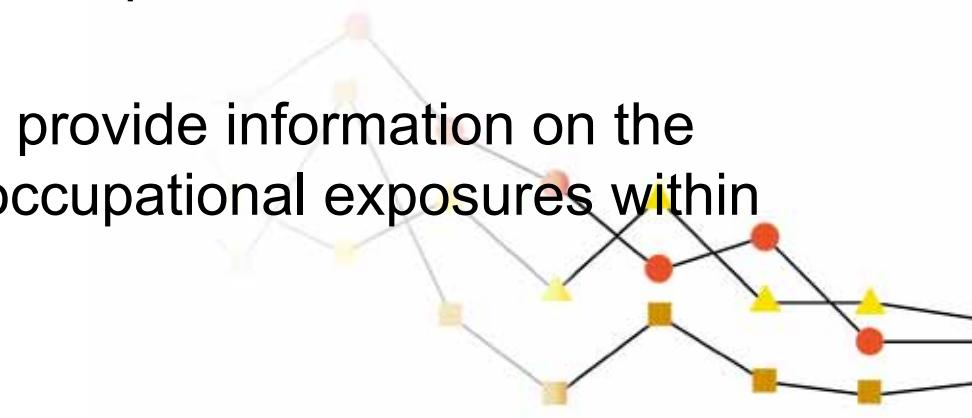
- We will examine Māori knowledge and practices which includes questions on a range of indicators such as ethnic identity, involvement/visits to marae, ability in te reo, whanau involvement, Māori land ownership
- questions on verbal abuse and ethnic discrimination in the workplace (social hazards)



Occupational exposures and occupational health in Māori

What does the study contribute?

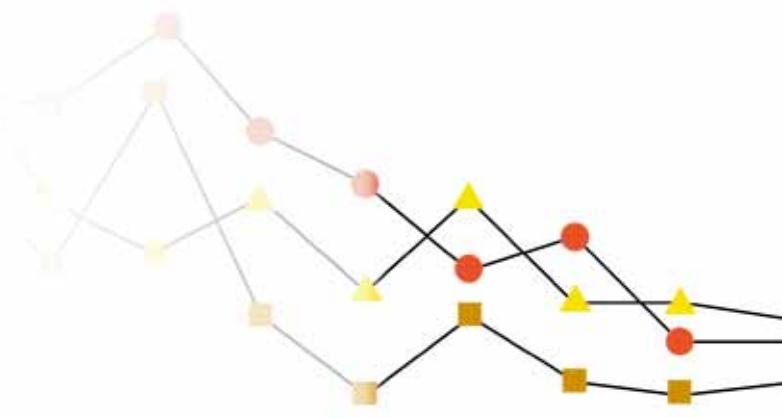
- Previous survey was random general population sample and involved 2,680 non-Māori and 331 Māori. New survey of 2,200 Māori to achieve roughly equal numbers of Māori and non-Māori
- We will be able to estimate the current burden of work-related disease and the overall contribution of work-related disease to Māori mortality, cancer incidence and hospitalisation rates and to monitor this over time
- Follow-up of the study population will provide information on the future health, working patterns, and occupational exposures within this population of Māori workers



Occupational exposures and occupational health in Māori

Investigators

- Prof Chris Cunningham
- Ms Tania Slater
- Ms Shelley Gray
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- Prof Neil Pearce
- Prof Hans Kromhout
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Occupational exposures and occupational health in Māori

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