

rehabilitation provider: the Accident Compensation Corporation (ACC). Alongside primary self-reported data, electronic hospital discharge data and ACC's compensation and rehabilitation data has been collected.

**Results** Interviews were completed by 81% and 79% of the cohort at the 12 and 24 month time points respectively. Compensation and rehabilitation data has been used to: 1) obtain data for intervening time periods between participant interviews to examine re-injury; 2) provide additional data on compensation exposures, outcomes and costs; 3) validate self-reported work-related cause of injury; and 4) to classify injury on the basis of multiple injury diagnoses. Examples of each use will be provided.

**Conclusions** Linking compensation and rehabilitation data with self-reported survey data has proven valuable by allowing researchers further insight into injury, compensation and rehabilitation factors associated with vocational, functional, and disability outcomes.

#### 198 **DIAGNOSED OCCUPATIONAL CONTACT DERMATITIS COMPARED TO OCCUPATIONAL DERMATITIS WORKERS' COMPENSATION CLAIMS: ARE FEMALES LESS LIKELY TO CLAIM WORKERS' COMPENSATION?**

<sup>1</sup>G Keegel, <sup>1</sup>MacFarlane, <sup>1</sup>Black, <sup>2</sup>Cahill, <sup>2</sup>Palmer, <sup>3</sup>Driscoll, <sup>2</sup>Nixon, <sup>1</sup>Smith. <sup>1</sup>Monash University, Melbourne, Australia; <sup>2</sup>Occupational Dermatitis Research and Education Centre, Skin & Cancer Foundation, Melbourne, Australia; <sup>3</sup>Sydney School of Public Health, The University of Sydney, Sydney, Australia

10.1136/oemed-2013-101717.198

**Objective** To compare diagnosed disease data for occupational contact dermatitis (OCD) with workers' compensation claims data for OCD, thereby characterising potential differences between the two information sources.

**Methods** We conducted a retrospective analysis of OCD diagnosed disease and workers' compensation claims data, for the twelve highest risk occupational groups for the state of Victoria, Australia from 1993–2009. Diagnosed disease data for OCD is collected by the Victorian Skin and Cancer Foundation, which services the state of Victoria. Workers' compensation claims for OCD are from the Compensation Research Database, which is held by the Institute for Safety, Compensation and Recovery Research. Estimates of denominators for the occupational groups are derived from 2001 Australian Bureau of Statistics census data.

**Results** The proportions for diagnosed disease and the workers' compensation claims datasets varied considerably by gender, age and occupational group. There was a much higher rate of females diagnosed with OCD compared to the rate of workers' compensation claims (48% for diagnosed disease dataset vs 33% for workers' compensation claims dataset,  $p < 0.001$ ). These differences by gender were significant in the following occupational groups using diagnosed disease data compared to workers' compensation claims data: Hair and beauty, Automobile workers, Science workers, Trades persons and labourers, Food handlers, and Process workers and packers ( $p < 0.05$ ).

**Conclusions** Females were less likely to claim workers' compensation when compared to males even in occupational groups with a predominantly female workforce such as Hair and beauty. The gender discrepancy between the diagnosed disease dataset and the workers' compensation dataset requires further investigation as to why males were more likely to claim than females, particularly as the gender differences for diagnosed disease do not seem to follow the same pattern. A comprehensive surveillance system for OCD policy and practice intervention, should

integrate diagnosed disease data and workers' compensation claims statistics.

#### 199 **THE PROMISE AND CHALLENGE OF USING WORKERS' COMPENSATION DATA IN COMPARATIVE, CROSS-JURISDICTIONAL RESEARCH**

<sup>1</sup>C B M McLeod, <sup>2</sup>Collie. <sup>1</sup>The University of British Columbia, Vancouver, Canada; <sup>2</sup>Monash University, Melbourne, Australia

10.1136/oemed-2013-101717.199

Comparative, cross-jurisdictional research has the potential to increase our understanding of the causes of work injury and disease and identification of effective prevention and return-to-work policies. Results from comparative research may be more powerful than those from single jurisdiction studies as we are able to control for additional sources of variation that may be driving the results and take advantage of policy and program variation across jurisdictions to identify natural experiments that enable stronger causal inference to be drawn. Single jurisdiction studies attempt to do this using variation over time, but often temporal variation is confounded by other factors or is too small for there to be meaningful inference. While the comparative research approach can be powerful, careful attention needs to be paid to the development of comparable study populations and measures and to understanding the differences and/or comparability of the policies under study. Sources of variations across jurisdictions that could lead to spurious differences in the policy outcome need to be identified and controlled for. Fundamentally this implies the need to study the same population at risk, ensuring that cohorts, measures and outcomes are comparable, as well as accounting for other structural or contextual factors that could affect outcomes across jurisdictions. This synthetic presentation will exemplify these challenges with reference to claims and injury data drawn from the Canadian province of British Columbia and the Australian state of Victoria and in comparing claim rates and return-to-work outcomes in cohorts of workers employed in similar occupations and industries. The presentation concludes with a brief overview of a nascent international collaboration that has the aim of creating a network of researchers and data to conduct comparative, cross-jurisdictional occupational health and safety and workers' compensation research in jurisdictions from Oceania, North America and Europe.

#### Session: Mini symposium IV: Disease surveillance

#### 200 **THE CONTRIBUTION OF SURVEILLANCE DATA TO OCCUPATIONAL BURDEN OF DISEASE STUDIES**

R Driscoll. University of Sydney, Australia

10.1136/oemed-2013-101717.200

**Objectives** To explore methodological issues related to the use of surveillance data in burden of disease studies.

**Methods and Results** Burden of disease methodologies generally rely on the calculation of population attributable fraction (PAF). This in turn typically requires estimates of exposure prevalence and relative risk. An exposure surveillance system can provide the required estimate of exposure prevalence.