Abstracts

EFFECTIVENESS OF AN AUDIT-BASED OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATION ON FIRM INJURY RATES IN ALBERTA, CANADA

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Objectives To determine if achieving an audit-based occupational health and safety management system certification (OHSMS) is associated with lower firm-level lost-time injury rates.

Methods Firm-level workers’ compensation claims and OHSMS audit data were extracted from eligible industry sectors for the years 2000 to 2015. OHSMS and non-OHSMS firms were matched on observable baseline characteristics using coarsened exact matching methods. A difference-in-difference observational design using population-averaged negative binomial regression models estimated the effect (incidence rate ratios (IRR)) with 95% confidence intervals) of OHSMS certification for large firms (IRR: 0.84, 95% CI: 0.82–0.87). OHSMS certification was most effective in reducing firm injury rates. Effectiveness varied by sector, time period, and small or large firm certification. Sectoral differences in OHSMS effectiveness suggest that the ability to prevent harms targeted by certification may vary by work environment. Further, small firm OHSMS certification may not be identifying safer firms.

Health Inequalities

O7D.1 INVESTIGATING THE DIFFERENCE OF WORK-RELATED HARMs IN NEW ZEALAND BY ETHNICITY

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In New Zealand about 10% of workers are harmed every year, with approximately 2 000 000 claims made to Accident Compensation Corporation (ACC) to cover the cost of injury and illness. Work-related injury and illness outcomes differ between ethnic groups. Māori (indigenous population) workplace fatality rates are 19% higher by industry and 10% higher by occupation than for non-Māori. According to Statistics New Zealand from 2002–2017, Māori were more likely to have higher rates of work-related claims than non-Māori. This study currently underway has used the Integrated Data Infrastructure (IDI) to look at different injury types and explore injury distribution between Māori and non-Māori in terms of age, sex, industry and occupation. WorkSafe applied to Statistics New Zealand (Stats NZ) for access to microdata in the IDI in July 2018 and was granted access in September 2018. In this study, data for people with accepted work-related ACC claims has been linked to 2013 Census to identify the industry that ACC claimants have worked in and their occupations. This data has then been linked to data on sex, age and ethnicity as recorded for the IDI population. Confidentiality of data in this study has followed Stats NZ’s output rules including random rounding to base 3, suppression and aggregation.

O7D.2 HEALTH-RELATED EDUCATIONAL DIFFERENCES IN DURATION OF WORKING LIFE AND LOSS OF PAID EMPLOYMENT: WORKING LIFE EXPECTANCY IN THE NETHERLANDS

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Objectives This study aims to provide insight into health-related educational differences in duration of working life by working life expectancy (WLE) and working years lost (WYL) through disability benefits and other non-employment states in the Netherlands.