Objectives The LIMS databank stores all occupational exposure measurements collected by public health teams in Quebec. The IMIS databank contains exposure measurements collected by the U.S. Occupational Safety and Health Administration inspectors to verify compliance. We investigated differences/similarities between both databanks.

Methods Personal exposure measurements from 1994–2011 were abstracted, and industry from both databanks was recoded according to the Canadian Standard Industrial Classification. Logistic regression was used to explore differences between exposure levels in both databanks for 27 chemicals in common industries, taking into account the type of exposure (short-term or long-term), year, and industry. Ratios of the predicted odds of exposure above the threshold limit value (O_{ER}) for IMIS compared to LIMS were calculated for each chemical for years 1997 and 2008.

Results Our analysis was based on 64,938 LIMS and 53,078 IMIS measurements. Exposure levels were significantly lower in IMIS compared to LIMS for metals (O_{ER} estimated in 1997: 0.43 across agents, 95% confidence interval (CI): 0.30–0.62; O_{ER} 2008: 0.57, 95% CI: 0.42–0.77), and they became similar in recent years for solvents (O_{ER} 1997: 1.47, 95% CI: 0.91–2.38; O_{ER} 2008: 0.99, 95% CI: 0.58–1.69). Short-term exposure levels were on average 3 times higher than long-term ones across the two databanks. Results were unchanged when industry from both databanks was recoded according to the U.S. Standard Industrial Classification or the North American Industry Classification System.

Conclusions Differences between exposure levels in the two databanks may reflect distinct sampling strategies or prevention policies between the two countries.

Poster Presentation

Musculoskeletal

0307

DETERMINANTS OF MODIFIED WORK AS PART OF THE RETURN-TO-WORK PROCESS FOR INJURED WORKERS WITH MUSCULOSKELETAL INJURIES IN BRITISH COLUMBIA, CANADA

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Introduction The longer an injured worker is off work the less likely they are to return to work and modified work is associated with shorter recovery durations. However, low rates of modified work have been found in Canadian compensation jurisdictions. This study investigated the determinants of modified work among workers with musculoskeletal injury compensation claims in British Columbia.

Methods Three cohorts of injured workers were identified from compensation claims for back strain, limb fractures and connective tissue injuries. The effect of age, sex, occupation, wage quintile and prior claim on at least one modified day (yes/no) within the first four weeks of claim was analysed using Poisson regression.

Results In multivariable models, female gender was associated with an increased likelihood of modified work (back strains:

IRR 1.15 [95%CI 1.06, 1.25]; limb fractures: 1.22 [0.91, 1.64]; connective tissue injuries: 1.14 [0.85, 1.52]), while older age (e.g. 55 to 65 years) was associated with a decreased likelihood (back strains: IRR 0.69 [95%CI 0.63, 0.76]; limb fractures; connective tissue injuries: 0.59 [0.43, 0.81]). Higher income was associated with an increased likelihood of modified work for limb fractures (highest quintile: IRR 1.84 [1.27, 2.67]). The effect of occupation was variable on modified work by injury type.

Discussion Unmeasured injury severity may have resulted in residual confounding of disability duration by gender and age. The offer of modified work may be dependent on occupation and the flexibility of higher paying occupations. The overall low rate of modified work for musculoskeletal injuries (<30%) warrants further investigation.

Poster Presentation

Other

0308

A BRAZILIAN LOOK AT OCCUPATIONAL HEALTH AND SAFETY IN THE USA: OBSERVATION AND LEARNING WITH COSH GROUPS

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Labour laws in the United States of America are less protective than the norms of most countries, including Brazilian ones. However, there is a strong militant movement for occupational safety and health in USA, organised in an articulated network that includes university professors and students, trade unionists, community leaders, public agents and various sectors workers.

The successful experience of the social activism of the Committees on Occupational Safety and Health (COSH) groups, which have been advocating for the safety and health of workers in the United States for 45 years, deserves propagation and study because it can inspire similar initiatives in Brazil and in other countries.

This exploratory research collected data through open interviews with workers, lawyers, teachers, researchers and activists heard between October/2013 and March/2014, as well as directed observation and interviews made during three events held in Boston and Baltimore (COSH Network, APHA 2013 and National Worker Safety and Health Conference).

The results show that COSHs are alliances that promote education and advocacy for workers' health and safety. They articulate a national agenda to improve health and safety conditions for immigrant workers under the prevention bias, providing information and support in Spanish and other languages, as well as advocating for just compensation for workers who are ill or injured at work. They also carry out activities to integrate health and safety activism into organised campaigns, as well as advocate for the respect of existing health and safety laws and fight for new protections for workers.