

# Workers in Western Canada More at Risk of Injury



It makes sense that a worker's risk of suffering a workplace injury would vary depending on the kind of industry, type of job, use of any hazardous substances and similar factors. But geography'

According to a recent study by researchers from the Institute for Work & Health, workers in AB, BC and SK have about a 30-50% higher risk of workplace injury compared to workers in Ontario'and this higher risk exists even when taking into account a wide range of factors, including type of industry.

It's clear that workers in Canada's western provinces have a higher incidence of workers' comp claims than workers in Ontario but unclear why. Traditionally, risk of work injury is commonly thought to stem from a mix of personal and workplace-related factors.

And western provinces have historically had a higher proportion of workers in primary production sectors, such as forestry and oil and gas industries, which pose a higher risk of work injury. In contrast, Ontario has a higher proportion of workers in financial and insurance services, which pose a lower risk.

So the researchers looked at geographic differences in work injuries for all workers in Canada, focusing on the relationship between provincial differences and:

- Personal factors, such as age and gender;
- Work characteristics, such as nature of job and industrial sector; and
- Area-level factors, such as a region's socioeconomic status.

The study found that, taking all workers together *across Canada*, a higher incidence of work injury was associated with the following **personal factors**:

- Being male;
- Being under age 55 (and especially between 25 to 34);
- Not completing post-secondary degree (and especially having less than a secondary school education);
- Being Canadian-born as opposed to an immigrant;
- Working full-time;
- Reporting medium or high job stress levels; and
- Working in construction, manufacturing or

agriculture/forestry/mining/utilities.

**Area-level factors** showed little or no association with work injury risk, according to the study. That is, an area's socioeconomic status (household income, education levels, etc.) was slightly associated with risk of work injury, but its labour market status (unemployment rate, percentage of permanent jobs, etc.) and workplace characteristics (size of firms, degree of unionization, etc.) were not.

Lastly, **provincial differences** in work risk were found, even after taking individual and area-level factors into account, including industry mix. Specifically, when compared to Ontario:

- Saskatchewan showed 27% higher risk;
- Alberta, 28% higher risk;
- BC, 49% higher risk;
- Manitoba and Quebec were at comparable risk of work injury;
- Atlantic Canada showed slightly lower risk (by 8%).

*Bottom line:* None of these factors appeared to account for provincial differences, leading the researchers to believe that something else was responsible. For example, broader elements, such as a jurisdiction's economic or health and safety policies, may be acting as risk factors.

'Given that, in Canada, primary responsibility for occupational health and safety falls on the provinces, the finding that important determinants of work injury are potentially operating at a provincial level may be useful to provincial governments in planning prevention strategies,' says IWH Research Operations Coordinator Sara Morassaei, lead author of an article on the study submitted to *Annals of Epidemiology*.