Overview
Construction is a high-hazard industry, and continually ranks among those with the highest workers’ compensation claim rates in Washington State. However, injury risk is not equally distributed across construction firms.

This study uses administrative workers’ compensation (WC) and unemployment insurance data to identify construction firms most at risk for future WC claims. Regression modeling was used to test whether characteristics from firms with 10–50 employees (n=1,228) during 2011–2013 could be used to predict time-loss claim rates for the following year, 2014.

The purpose of this study was to demonstrate whether administrative WC and unemployment insurance data could be used to proactively identify construction firms at risk for future claims. One advantage of administrative data is that it does not require active data collection.

Key Findings
- Claim rates in 2014 varied by construction industry group:
  - The foundation, structure, and building construction and the highway, street, and bridge construction firms had the highest claim rates, and comprised 18% of the firms in the study.
  - 40% of the firms were classified as either building equipment contractors or nonresidential building construction. These firms had comparatively low 2014 claim rates.

- Firm characteristics beyond industry group classification were found to predict future claim rates. The following characteristics measured during 2011–2013 were significantly associated with firms that had higher WC claim rates in 2014:
  - Higher average WC base premium rate
  - A history of previous claims
  - Increasing number of quarterly FTE workers (growth)
  - Lower average wage rates

Impact
The ability to identify construction firms at risk for future WC claims using firm characteristics obtained from administrative data is demonstrated. This information can be used to direct limited prevention resources and outreach to those firms most at-risk—an important first step toward reducing worker injury and illness.

Find the article here:
https://doi.org/10.1016/j.jsr.2018.02.005