

Apprentice Graduates have Fewer Injuries

Are plumbing apprentice graduates safer than their non-apprentice peers? Workers' compensation claims among journey level plumbers by apprenticeship participation

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Overview

Participation in apprenticeship programs is on the rise for many occupations. Apprenticeships include supervised on-the-job training as well as related courses or instruction. Increased workplace safety is assumed to be one of the benefits of apprenticeship training, but there has been little research to provide evidence of reduced injuries among graduates of apprentice programs.

The purpose of this study was to compare injury rates among journey level plumbers who had completed apprenticeship training to those who had not.

By linking Washington State workers' compensation claim information to data for registered apprenticeships, plumber licensing, and employment history, we were able to estimate claims rates by apprenticeship participation for different claim and injury types, among journey level plumbers certified between 2000 and 2018.

Key Findings

- Journey level plumbers who completed a plumbing apprenticeship had lower workers' compensation claim rates than those with no apprentice training.
 - Total claim rates were 31% lower among plumbing apprentice graduates compared to non-apprentices, (73.1 claims per 1,000 FTE vs. 106.4 claims per 1,000 FTE, respectively)
 - Wage replacement/disability claim rates were 38% lower among plumbing apprentice graduates.
- While all plumbers saw declines in claim rates from the years preceding journey-level certification compared to the years after, the decline was greatest among apprenticeship graduates—a 55% reduction in claims among journey-level plumbers who completed an apprenticeship compared to 41% among plumbers with no apprentice training.
 - Declines were most pronounced for acute injury claims, with apprenticeship graduates experiencing a 60% claim rate reduction compared to 43% for non-apprentices.

Impact

Apprenticeships are effective at reducing work-related injuries for journey level plumbers, particularly for acute injuries. Additional research is needed to learn more about how apprenticeships improve workplace safety and how those benefits could inform injury prevention efforts for all workers.

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