

# 2044.0 - Occupational factors are associated with opioid use among construction workers



**Session:** Opioids in the Workplace

**Program:** Occupational Health and Safety

## Abstract

### objective

Construction workers experience high rates of musculoskeletal disorders (MSD) and seek care for MSDs. They also have high rates of opioid use, opioid use disorder (OUD), and the highest overdose fatality rate of any occupational group. We examined rates of pain, medical treatment, and opioid prescriptions among young union carpenters and quantified the incidence of opioid use, chronic use, and OUD from healthcare claims.

### methods

We surveyed 929 construction apprentices about work factors, health behaviors, and health outcomes. We analyzed 3.5 years of health and pharmacy claims from 19,909 workers in their union health plan to determine the risk of developing chronic opioid use and OUD.

### results

Apprentices were young (mean 27.8 years) and new to construction (mean 2.6 years). In the past year, 63% reported musculoskeletal pain, 22% sought medical treatment for musculoskeletal pain, and 12% received an opioid prescription. In multivariable Poisson regression models, high job strain (PR 1.7 [95%CI 1.1-2.8]) and low supervisor support (PR 1.6 [95%CI 1.1-2.5]) were associated with prescribed pain medication (adjusted for work and personal factors). Claims data from all workers showed 43% were treated annually for chronic musculoskeletal conditions; 24% of these received a new opioid prescription and 6.5% a chronic prescription. Workers with chronic MSDs had the highest odds of future OUD (OR: 4.71 [95%CI 3.09-7.37]). Three percent of workers per year had new chronic opioid use (60 or more days prescribed in a calendar quarter), and those with chronic use had nearly a 10-fold increased odds of developing OUD.

## conclusion

Many construction workers experience musculoskeletal pain, seek medical treatment, and are prescribed opioids. Opioids prescribed for musculoskeletal pain were strongly associated with new chronic opioid use and OUD. Working conditions for workers in manual trades like construction may contribute to the opioid epidemic.

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## Learning Areas

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## Keyword(s)

Occupational Health and Safety, Prescription Drug Abuse and Misuse

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