



Factors Associated with Opioid Use Among U.S. Workers

SUMMARY

In 2020, the Chief Evaluation Office (CEO) funded contractors Mathematica and the University of Connecticut Health Center to conduct a study of factors associated with opioid use among U.S. workers.

The first report from this study, *Factors Contributing to Variation in Nonmedical Use of Prescription Pain Relievers Among U.S. Workers: 2004-2014*, analyzed secondary data to understand how nonmedical use of prescription pain relievers varied across states, industries and occupations, and other worker characteristics.

The second report from this study, *The Impact of Local Labor Market Conditions on Opioid Transactions: Evidence from the COVID-19 Pandemic*, implemented a quasi-experimental design to understand how changing labor market conditions associated with the pandemic affected opioid use.

This Department of Labor-funded study contributes to the labor evidence-base to inform [substance use disorder and work](#) programs and policies and addresses Departmental strategic goals and priorities.

Key Takeaways

Factors Contributing to Variation in Nonmedical Use of Prescription Pain Relievers Among U.S. Workers: 2004-2014:

- Nonmedical use of prescription pain relievers varied widely across states; it also varied considerably by workers' industry, occupation, and demographic characteristics such as age, sex, and race/ethnicity.
- States that have higher proportions of workers with less than high school education, in the construction industry, or in public administration, tend to have higher levels of nonmedical use of prescription pain relievers.
- States that have higher proportions of workers ages 50 to 64; higher proportions of workers who are Black, non-Hispanic, or Hispanic; or more hospitals per capita; tend to have lower levels of nonmedical use of prescription pain relievers.
- Differences in nonmedical use of prescription pain relievers between industries and occupations are largely explained by demographic differences between workers in those industries and occupations.
- Policies to prevent nonmedical use of prescription pain relievers among U.S. workers might need to consider individual risk factors beyond occupation and industry.
- Regional influences on access to health care should be considered in policies designed to prevent nonmedical use of prescription pain relievers.





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- The report analyses did not include use of heroin or illicitly manufactured synthetic opioids and stopped in 2014, so do not fully capture how the opioid crisis has shifted in the last decade. Future research could examine broader types of opioids, including heroin and fentanyl.

The Impact of Local Labor Market Conditions on Opioid Transactions: Evidence from the COVID-19 Pandemic:

- The COVID-19 pandemic was a substantial, unexpected shock to employment, but counties varied widely in their vulnerability to job loss due to the pandemic.
- Worsening labor market conditions led to an increase in opioid transactions relative to what they would have been in the absence of this unexpected shock of the pandemic, though the magnitude of this impact varied by geographic region.
- This finding has implications for early stages of future epidemics and pandemics that lead to widespread closures of businesses, schools, and government entities. Locations more affected by a contraction in employment might experience a sharp increase in opioid transactions. The increase in opioid transactions could, in turn, increase health emergencies related to opioid misuse and put stress on emergency medical providers.
- The study measured the employment-related effects of the COVID-19 pandemic on legal opioid transactions, which are likely to be strongly correlated with both medical and nonmedical opioid use as well as overdoses. However, the report findings might be underestimating the effect on overall opioid use including illicit use, which is responsible for a substantial and growing share of opioid deaths in recent years.

[SEE FULL STUDY](#)

TIMEFRAME: 2018-2021

SUBMITTED BY: Mathematica

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PARTNER AGENCY: Office of Workers' Compensation Programs (OWCP)

SPONSOR: Chief Evaluation Office

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