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Suicides among Construction Workers

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Mental Health Trends in the Construction Industry: A Look at Anxiety, Depression, Psychological Distress, Suicides, and Overdoses

Amber Brooke Trueblood, DrPH, Christopher Rodman, MPH, Raina D. Brooks, MPH, William Harris, MS, Jessica Bunting, MPH, Cora Roelofs, ScD, Rick Rinehart, ScD¹

THIS ISSUE

This issue examines U.S. construction worker mental health trends, including anxiety, depression, serious psychological distress, seeing a mental health professional, medication use, suicides, and overdoses.

OVERVIEW

Among all industries, construction has the [highest overdose death rate](#) and the [second highest suicide death rate](#). Previous studies found that among people with an industry reported on their death certificate, [23.1% of overdoses](#) and [17.9% of suicides](#) were in construction. Overall, [7.5% of the workforce](#) is in the construction industry, underscoring the industry's disproportionate burden of [suicides and overdoses](#).

In a recent preliminary [study](#), it was reported that nearly half of construction workers surveyed had experienced or were currently experiencing [depression](#), and that work-related factors are strongly associated with poor mental health. Work-related factors previously [identified](#) include employment instability/insecurity, job demands, lack of support, long work hours, hazardous work, poor psychosocial and safety climate, injuries, and discrimination (e.g., [bullying or harassment](#)). This Data Bulletin examines mental health trends among construction workers, including [anxiety](#), [depression](#), [serious psychological distress](#), [seeing a mental health professional](#), medication use, suicides, and overdoses.

We used three data sources in the Data Bulletin. The first was the National Health Interview Survey (NHIS), which provided data on self-reported anxiety, depression, psychological distress, medication use, and seeing a mental health professional (Charts 1-8). It should be noted that estimates before and after 2018 may not be directly comparable due to [survey redesign](#). The newer design includes a [rotating core](#) of questions that did not collect industry and occupation information in 2019 and 2022. Detailed mental health assessment questions are only asked in the years industry and occupation are not collected. The latest year of data included is 2021. NHIS 2020 data collection and sample sizes were impacted due to the [COVID-19 pandemic](#).

Second, deaths resulting from suicides and overdoses come from the National Center for Health Statistics National Vital Statistics System (NVSS) Mortality Multiple Cause-of-Death data (Charts 9-12). Suicide and overdose deaths as the [cause of death](#) were identified using International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes that are recorded on death certificates as the cause of death. See Definitions on pages 5 and 6 for a detailed explanation of terms used in this Data Bulletin. NVSS data do not capture employment status (full-time, unemployed, retired, etc.) at time of death but indicate the industry in which the decedent usually worked. Construction workers are defined in NVSS data as those whose usual industry was construction aged 16 to 64 years old, including individuals: currently employed, retired, or no longer in the workforce. Fatal work injuries (Chart 9) come from the third data source, the U.S. Bureau of Labor Statistics, Census of Fatal Occupational Injuries.

KEY FINDINGS

In 2021, 15.4% of construction workers reported having anxiety or depression, based on symptoms or medication. *Chart 3*

A majority (84.3%) of construction workers who reported anxiety or depression did not see a mental health professional in the last 12 months. *Chart 7*

More than 1 in 6 people aged 16 to 64 years old who died by overdose in the U.S. were construction workers.

There were 5.2K suicide deaths among construction workers in 2022. *Chart 9*

Synthetic opioids were involved in 3 out of 4 overdose deaths among construction workers in 2022. *Chart 12*

NEXT DATA BULLETIN

Hispanic Workers in Construction: Employment, Business Owner, and Injury Trends

Correspondence to: datacentre@cpwr.com.

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RESEARCH ARTICLE

Suicides among construction workers in the United States, 2021

William Harris MS¹ | Amber B. Trueblood DrPH, MPH¹ | Thomas Yohannes MPH¹ | Christopher P. Rodman MPH² | Rick Rinehart ScD³

Abstract

Background: Construction workers have the second highest suicide death rate; despite this, there is limited literature examining suicides in the industry, which is necessary to identify those at higher risk of death by suicide. The objective of this study was to examine the characteristics of those who died by suicide in construction to address this knowledge gap.

Methods: Data from the National Center for Health Statistics National Vital Statistics System 2021 public use Mortality Multiple Cause-of-Death file were used to identify deaths by suicide, while denominator data for rates come from the 2021 Current Population Survey.

Results: In 2021, construction workers were disproportionately affected by suicide deaths. Almost a fifth (17.9%) of deaths by suicide with a reported industry code were in construction, despite construction workers accounting for only 7.4% of the workforce. Male construction workers accounted for a majority (97.8%) of suicide deaths. The highest percent of deaths by suicide were among individuals who were white, non-Hispanic, completed high school or equivalent, and single, across construction and all industries for males and females.

Discussion and Conclusions: Male and female construction workers had the highest rates of suicide across all characteristics when compared to all industries. Our findings support the need for ongoing prevention efforts within the industry. Future research is needed to understand suicide risk among certain characteristics and occupations. In addition, the work environment or other work-related factors should be studied to understand how the unique nature of the construction industry may be associated with higher suicide rates.

KEYWORDS

construction industry, injury prevention, mental health, occupational health, suicide, workplace suicides

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RESEARCH ARTICLE

A method to assess bullying and harassment as an upstream determinant of construction worker mental health

Cora Roelofs ScD | Chris Rodman MPH | Amber Trueblood DrPH  | Chris T. Cain

Abstract

Background: Bullying and harassment in the workplace are increasingly recognized as hazardous exposures associated with poor mental health and suicidality. The construction sector has one of the highest rates of suicide among all occupations and is actively engaged in efforts to destigmatize mental health support. However, there has been less focus on reducing factors that may be contributing to poor well-being among construction workers.

Methods: As a step toward addressing work-related determinants of mental health in construction, we collaborated with a large construction union to survey members about their experiences of abusive conduct. We adapted standardized questionnaires to better suit the sector, such as by assessing "hazing that went too far" and apprenticeship status. Additionally, we included questions on reporting of abuse, concern about the impacts of abuse, and an open-response to allow participants to share their perspectives.

Results: We developed and tested a carefully-tailored survey of abusive conduct. The responses to the survey (over 3300, including 500 narrative responses) will facilitate data-driven interventions with the potential to prevent and address abuse. This paper describes the survey development process in collaboration with the union, domains of abuse that are relevant to the construction context, and the survey protocol.

Conclusion: Through a collaborative effort, we developed an instrument to understand abusive conduct in construction and benchmark success in reducing adverse experiences of bullying and harassment. We recommend its use throughout the sector to reduce exposure to this well-being hazard.

KEYWORDS

bullying, construction, mental health, survey methods

1 | INTRODUCTION

Workplace bullying, harassment, and other abusive behavior are remarkably common in American workplaces. While definitions and measures differ, experiences of bullying, hostile work environments, harassment, and other abusive behavior at work have been reported by over 30% of employees in diverse surveys.¹⁻³ Rates in the construction sector may be considerably higher. Dennerlein et al.'s survey of construction workers in the Boston area found almost 60% had experienced workplace harassment.⁴ Apprentices are particularly impacted. Nearly one-third of construction apprentices in a 2019 Australian survey experienced bullying in the prior 6 months.⁵ The dynamics of abusive behavior toward apprentices is described in this focus group report from the Boston study:

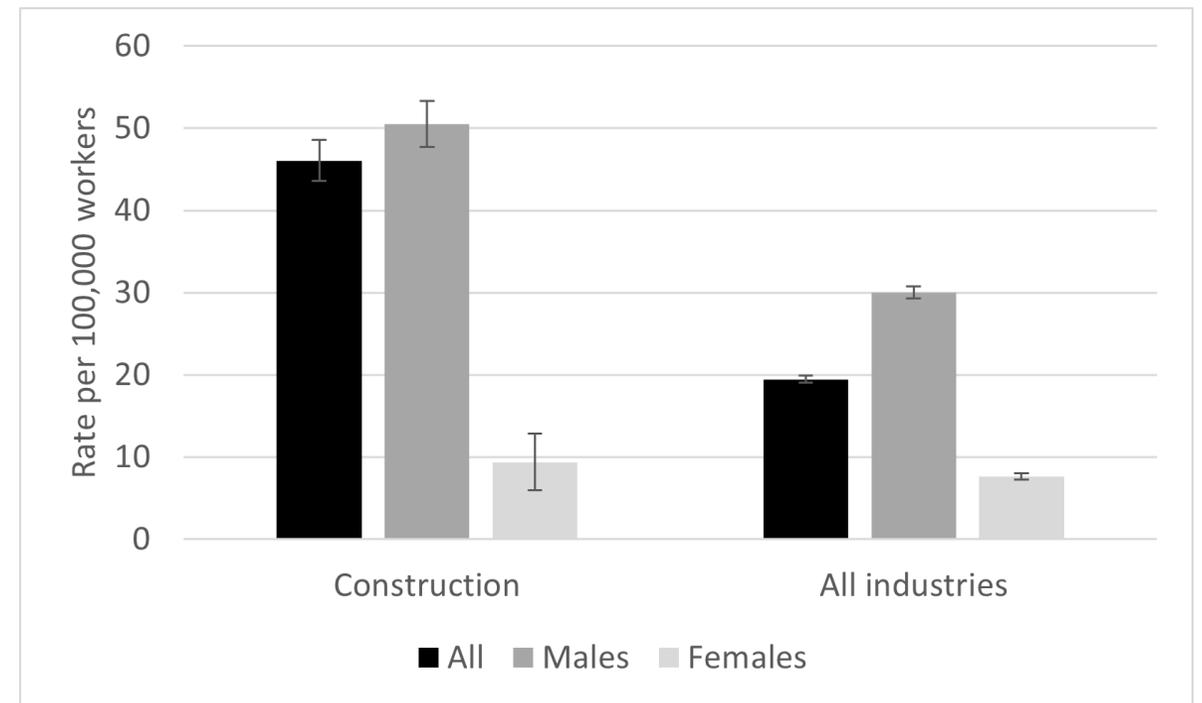
Correspondence: Cora Roelofs, ScD, CPWR—The Center for Construction Research and Training, 8484 Georgia Ave, Suite 1000, Silver Spring, MD 20910, USA. Email: croelofs@cpwr.com

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Suicides among construction workers in the United States, 2021

- Suicide death rate for workers in construction was **2.4** times higher than in all industries
 - **46.1** versus **19.5** per 100,000 workers
- Male suicide rate in construction was **50.5** per 100,000 workers, compared to **30.0** per 100,000 workers for all industries



Suicides among construction workers in the United States, 2021

- Male Suicide Rates
 - **Highest Rates:** 55 to 64 years old, American Indian or Alaskan Native, non-Hispanic, completed high school or equivalent, single
 - Highest rate was among single males which was **1.8** times higher than all industries
 - **77.9** versus **43.4** per 100,000 workers
- Female Suicide Rates
 - **Highest Rates:** 55 to 64 years old, completed high school or equivalent, single
 - Highest rate was among those who completed high school or equivalent which was **1.3** times higher than all industries
 - **14.3** versus **11.3** per 100,000 workers

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Mental Health Resources

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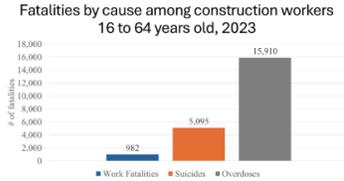
Mental Health in the Construction Industry

Construction workers have significantly higher rates of injuries, fatalities, death by suicide, and overdose deaths than American workers overall. For example, although construction workers are only about 7% of the entire workforce, they were 20% of on-the-job fatalities and 16% of opioid overdoses. As the chart to the right shows, in 2023 there were 982 fatal injuries among construction workers — and 15,910 fatal overdoses and 5,095 suicides.

CPWR has developed free, practical tools — including toolbox talks, infographics, hazard alerts, and training programs — to help prevent opioid overdoses and suicides and to improve worker well-being. We've contributed to the peer-reviewed literature on these topics as well. These tools and research outputs are available on the following pages, which also offer important resources from others.

- [Resources to Prevent Opioid Deaths in Construction](#)
- [Resources to Prevent Suicide Deaths in Construction](#)

Fatalities by cause among construction workers 16 to 64 years old, 2023



Cause	# of fatalities
Work Fatalities	982
Suicides	5,095
Overdoses	15,910

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REASON Newsletter

New Newsletter on Addressing Suicide and Opioids

NABTU and CPWR have launched a newsletter to help the construction industry prevent suicides and deaths from opioids. REASON (Resources and Effective programs Addressing Suicides and Opioids Now) responds to these pressing issues by sharing comprehensive solutions, important research, and free resources that highlight positive steps being taken.

[Subscribe now](#) to receive future issues and read the previous ones:

- Issue 1 (May 2024) — [Peer-to-peer support](#)
- Issue 2 (August 2024) — [Increasing access to naloxone](#)
- Issue 3 (December 2024) — [Trades Embrace Getting the Word Out about Mental Health](#)
- Issue 4 (February 2025) — [Three New Studies to Reduce Construction Worker Deaths from Suicide and Opioids](#)

If you or someone you know needs immediate help, please contact:

 **National Suicide Prevention Lifeline**— a free and confidential (U.S.) resource that connects individuals with skilled, trained counselors 24/7. Call 988 or 1-800-273-TALK (1-800-273-8255)
Use the [online Lifeline Crisis Chat](#)
or reach out to the Crisis Text Line by texting “HELLO” to 741741 to connect with a crisis counselor.

Other CPWR Resources

- [Mental Health Trends in the Construction Industry: A Look at Anxiety, Depression, Psychological Distress, Suicides, and Overdoses](#)
- [Construction Worker Mental Health Data Dashboard](#)
- [Suicides among Construction Workers Key Findings](#)
 - Provides an overview of the AJIM manuscript highlighted today.
- [A Method to Assess Bullying and Harassment as an Upstream Determinant of Construction Worker Mental Health Key Findings](#)
- [Suicides Among Construction Workers in the United States \(2021\)](#)
 - Link to the published paper on suicides.

Thank you!

Questions?

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