CPWR Opioids Webinar
February 27th, 2020

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Overview

1. Why this is important

2. New data

3. CPWR resources
WHY?
Rate of Opioid Overdose Deaths by Industry, Ohio, 2010-2016*

* Highest and lowest rate industries. Source: Cleveland Plain Dealer
Industry sectors with opioid-related overdose death rates significantly higher than the average rate for all workers, Massachusetts workers, 2011-2015, n=4,302

Rate for construction ~6 times the rate for all workers
New Data in this Webinar

• Three new data sources analyzed:
  • Census of Fatal Occupational Injuries (CFOI)
  • Medical Expenditure Panel Survey (MEPS)
  • National Survey of Drug Use and Health (NSDUH)

• Many Limitations
• Some Surprising Results
Overdose Fatalities at Worksites and Opioid Use in the Construction Industry

Xiaowen Sue Dong, DrPH*, Raina D. Brooks, MPH, Chris Truhan Celn, CBI

Foreword

Construction workers are among the segments of the U.S. population that use opioids most. Recent state-level studies of opioid overdose deaths show that construction workers are six to seven times more likely to die of an opioid overdose than workers in other professions. The impact of opioids on our field led us to make it the focus of this Quarterly Data Report.

Section 1 examines a small subset of construction workers who died of an opioid overdose those who died on a worksite. These are figures for which we have national data, but there is not equivalent national data yet about how many of the 130 Americans who died each day from an opioid overdose work in construction.

This report also reveals other gaps in our understanding of the impact of opioids on construction workers. For example, Section 2 contains the surprising finding that the percentage of construction workers who used prescribed opioids, on average, is slightly lower than workers in all industries combined. Our assumption before conducting this analysis was the reverse, given that construction has one of the highest injury rates of all industries, particularly musculoskeletal disorders that often result in chronic pain and long-term pain management. One possible explanation for this counter-intuitive finding: construction workers are less likely to have health insurance than workers in other major industry sectors, and so they may be less likely to receive a prescription for opioids than workers in other sectors.

While the impact of opioids on the construction industry and its workers is becoming clearer, there remains much we need to learn to understand and respond to the damage they are causing. We look forward to receiving your feedback on this important report and working collectively to minimize the impact opioids have on workers, their families, the industry, and society overall.

Chris Truhan Celn
Executive Director
CPWR

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KEY FINDINGS

- Unintentional overdose fatalities in the construction industry jumped from 7 deaths in 2011 to 65 deaths in 2016, a nine-fold increase in eight years.

- Between 2011 and 2017, one in four (25.3%) construction workers with work-related injuries used prescribed opioid pain relievers, compared to approximately one in ten (8.9%) of their counterparts who were not injured.

- Older construction workers were more likely to use prescribed opioid pain relievers, while younger construction workers were more likely to use illicit drugs.

- Uninsured construction workers were less likely to use prescribed opioid pain relievers, but more likely to use illicit drugs than their insured counterparts.

Introduction

Overdose deaths and opioid use have risen to epidemic levels in the United States. Researchers have found that the risk of overdose fatality and opioid use was higher in construction than in other industries (Dossel, 2017; MOPH, 2018; Issman et al., 2019; MOPH, 2019; Thumunu et al., 2017; Azevedo et al., 2019). In response to this emerging issue, North America's Building Trades Unions (NABTU) established a Task Force in January 2018. CPWR has supported this effort by compiling existing and developing new resources for the construction industry (CPWR, 2019). NABTU has also joined the efforts to address this hazard, and developed a variety of online resources to support workers and employers battling the crisis (NIDEL, 2019a, 2019b). To better understand this increasing epidemic in construction and provide insight for safety and health interventions, this Quarterly Data Report examines the trends of overdose fatalities at workplaces, prevalence of prescribed opioid use and drug abuse, and the association of work-related injuries with prescription opioid use in construction. The data used for this report were obtained from several large, nationally representative datasets, including the Census of Fatal Occupational Injuries (CFOI), Medical Expenditure Panel Survey (MEPS), and the National Survey of Drug Use and Health (NSDUH). Due to the complex measures used in this report, users should review the accompanying notes and text with the charts, as well as the definitions included.
1. Workplace Overdose Fatalities

- **Data Source:** The Census of Fatal Occupational Injuries (CFOI)
  - **2011-2017 Data:** From CFOI research files; calculations by the CPWR Data Center
  - **2018 Data:** BLS website: [https://www.bls.gov/iif/](https://www.bls.gov/iif/)

- **Definition:** Overdose — a category of Event/Exposure in the BLS Occupational Injury and Illness Classification System (OIICS), version 2.01
  - **1125:** Drug overdose—intentional self-harm
  - **1224:** Drug overdose—intent unknown
  - **5510:** Nonmedical use of drugs or alcohol—unintentional overdose
  - **5542:** Drug overdose—accidental overdose from medical injection
The majority of overdose fatalities at worksites were unintentional (All industries, 2011-2017)

Source: Fatal injury data were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data. The views expressed here do not necessarily reflect the views of the BLS.
Unintentional overdose fatalities in construction workplaces increased ninefold from 2011 to 2018, more than twice the increase for all industries.

Source: Fatal injury data in 2011-2017 were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data, including all employment in the construction industry. The 2018 data were obtained from the BLS website, https://www.bls.gov/iif/, and includes fatalities in the private construction sector only. The views expressed here do not necessarily reflect the views of the BLS.
Codes of SOURCE from the OIICS

SOURCE 184*
Drugs
Alcohol
medicines

• 1840: Drugs, alcohol, and medicines, unspecified
• 1841: Alcoholic beverages
• 1842: Drugs—nonmedicinal
• 1843: Medicines, except vaccines (anesthetics over the counter drugs, prescription drugs)
• 1844: Vaccines
• 1848: Multiple drugs, alcohol, and medicines
• 1849: Drugs, alcohol, and medicines, n.e.c.
Nearly half of overdose fatalities at construction worksites were caused by drugs—nonmedical (sum of 2011-2017)

N = 165 deaths

- Drugs (non-medical): 47.3%
- Medicines (except vaccines): 19.4%
- Multiple drugs, alcohol, medicines: 24.9%
- Other: 8.5%

Source: Fatal injury data were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data. The views expressed here do not necessarily reflect the views of the BLS.
About 43% of overdose fatalities in construction workplaces occurred at home/residential sites (sum of 2011-2017)

N = 165 deaths

- Home/Residential: 43.0%
- Industrial places/premises: 29.7%
- Other places: 10.9%
- Street and highway: 6.1%
- Office building: 4.8%
- Restaurant, cafe: 1.8%
- Other commercial store: 1.8%
- Public building, n.e.c.: 1.8%

CFOI Location Codes

**Home:**
- Home, unspecified
- Apartment
- Farm house
- Residential construction site (added 1998)
- Home, not elsewhere classified

Source: Fatal injury data were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data. The views expressed here do not necessarily reflect the views of the BLS.
The number of workplace overdose fatalities was disproportionately high in Residential Building Construction (NAICS 23611) (sum of 2011-2017)

Source: Fatal injury data were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data. The views expressed here do not necessarily reflect the views of the BLS.
The number of workplace overdose fatalities in construction was disproportionately high among self-employed workers (sum of 2011-2017)

**Overdose (N = 165 deaths)**
- Wage-and-salary: 70.3%
- Self-employed: 28.5%
- Others: 1.2%

**Other Causes (N = 6,286 deaths)**
- Wage-and-salary: 79.7%
- Self-employed: 18.0%
- Others: 2.3%

Note: “Others” includes work for family business, volunteer, and type of employment not reported.
Source: Fatal injury data were generated by the CPWR Data Center with restricted access to the BLS CFOI micro data. The views expressed here do not necessarily reflect the views of the BLS.
2. Prescribed Opioid Use

- **Data Source:** The Medical Expenditure Panel Survey (MEPS), a set of large-scale surveys of families and individuals, their medical providers (doctors, hospitals, pharmacies, etc.), and employers across the United States, cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS).
  - Household Component (HC)
  - Medical Provider Component (MPC, supplement to HC)
  - Insurance Component (IC)

- **Three Data Files from HC**
  1. Full Year Consolidated Data File
  2. Medical Conditions File
  3. Prescribed Medicines File

- **Construction Workers**
  - 16+ years old
  - Working in construction at least one of the three survey rounds in the year
  - Regardless of occupation
One in four construction workers with work-related injuries used **prescribed opioids**, compared to one in ten of their counterparts who were not injured (average of 2011-2017).

- **Work-related injury**: Medical condition resulting from an injury that occurred at work.
- **Prescribed opioid**: Outpatient prescribed opioid analgesics purchased (1 or more prescription fills through the survey year) by respondents including narcotic analgesics and narcotic analgesic combinations.

Older construction workers and white, non-Hispanics were more likely to use **prescribed opioids** (average of 2011-2017).

Construction workers without health insurance were less likely to use prescribed opioids (average of 2011-2017).

3. Illicit Drug Use

Data Source: The National Survey on Drug Use and Health (NSDUH), a large national survey directed by the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency in the U.S. Department of Health and Human Services (DHHS)

Definitions:
- **Any illicit drug use in the prior month** refers to the respondents who used cocaine, hallucinogens, heroin, inhalants, sedatives, tranquilizers, stimulants, and analgesics (excluding marijuana) within the past 30 days when the survey was conducted.
- **Marijuana** was measured separately from other illicit drugs. The full drug list can be found online: [https://www.samhsa.gov/data/report/2014-nsduh-mrbquestionnaire](https://www.samhsa.gov/data/report/2014-nsduh-mrbquestionnaire).
- **Illicit opioid** based on respondents’ answers to multiple "yes/no" questions about the use or non-use of specific drugs within that category (see Appendix III. Opioid Drug Name from the NSDUH in the QDR [https://www.cpwr.com/sites/default/files/publications/Quarter4-QDR-2019.pdf](https://www.cpwr.com/sites/default/files/publications/Quarter4-QDR-2019.pdf))
Younger construction workers were more likely to use illicit drugs, while Hispanic workers were less likely to use such drugs (average of 2011-2014)

Unemployed and uninsured construction workers were more likely to use illicit drugs than their counterparts

Construction workers had the highest rate of illicit opioid use in their lifetime, 30% higher than all industries combined.

<table>
<thead>
<tr>
<th>Industry</th>
<th>% of workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>21.0</td>
</tr>
<tr>
<td>Information</td>
<td>18.8</td>
</tr>
<tr>
<td>Mining</td>
<td>17.0</td>
</tr>
<tr>
<td>Professional</td>
<td>16.4</td>
</tr>
<tr>
<td>Retail trade</td>
<td>16.1</td>
</tr>
<tr>
<td>Services</td>
<td>15.8</td>
</tr>
<tr>
<td>Utilities</td>
<td>15.7</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>15.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>15.0</td>
</tr>
<tr>
<td>Finance</td>
<td>15.0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>12.1</td>
</tr>
<tr>
<td>Public admin</td>
<td>11.8</td>
</tr>
<tr>
<td>All industries</td>
<td>16.0</td>
</tr>
</tbody>
</table>

### Multiple Logistic Regressions

Multivariable logistic regression of prescription opioid use (use versus nonuse) among construction workers from 2011-2017 (average), adjusted odds ratios and 95% confidence intervals for significant predictors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Comparison Groups</th>
<th>Adjusted OR*</th>
<th>95% CI (lower)</th>
<th>95% CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>55+ years (Ref = 16-24 years)</td>
<td>1.63</td>
<td>1.01</td>
<td>2.64</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Hispanic (Ref = White, non-Hispanic)</td>
<td>0.52</td>
<td>0.39</td>
<td>0.70</td>
</tr>
<tr>
<td>Occupation</td>
<td>Administrative support/Sales/Service (Ref = Management/Professional)</td>
<td>1.68</td>
<td>1.06</td>
<td>2.65</td>
</tr>
<tr>
<td>Average hours worked per week</td>
<td>&lt;35 hours (Ref = 35-40 hours)</td>
<td>1.50</td>
<td>1.12</td>
<td>2.01</td>
</tr>
<tr>
<td>Insurance coverage</td>
<td>Uninsured (Ref = Insured)</td>
<td>0.60</td>
<td>0.41</td>
<td>0.89</td>
</tr>
<tr>
<td>Work-related injury</td>
<td>Injury (Ref = No Injury)</td>
<td>3.16</td>
<td>2.19</td>
<td>4.56</td>
</tr>
<tr>
<td>General physical health</td>
<td>Good (Ref = Excellent/Very good)</td>
<td>2.84</td>
<td>2.14</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor (Ref = Excellent/Very good)</td>
<td>2.60</td>
<td>1.74</td>
<td>3.88</td>
</tr>
<tr>
<td>Mental health</td>
<td>Fair/Poor (Ref = Excellent/Very good)</td>
<td>2.03</td>
<td>1.26</td>
<td>3.29</td>
</tr>
</tbody>
</table>

*All odds ratios listed are statistically significant.*
Rate of Opioid Overdose Deaths by Industry, Ohio, 2010-2016*

- All workers: 3.7
- Construction: 27.0
- Ag, Forestry, Fishing: 23.9
- Cleaning and ...: 6.7
- Installation and repair: 7.1
- Business and Finance: 0.7
- Business and Finance: 0.7
- Legal: 0.7
- Scientists: 0.8
- Education and library: 0.4

Overdoses per 10,000 workers

*Highest and lowest rate industries. Source: Cleveland Plain Dealer

Industry sectors with opioid-related overdose death rates significantly higher than the average rate for all workers, Massachusetts workers, 2011-2015, n=4,302

Rate for construction ~6 times the rate for all workers
Charge: Establish Path Forward In Response to Societal Crisis
Public Health Model Adopted

Ultimate goal: **Prevent** overdose death

<table>
<thead>
<tr>
<th>Primary Prevention</th>
<th>Secondary Prevention</th>
<th>Tertiary Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent workplace injuries that cause pain</td>
<td>Education on effective treatment of workplace injuries and associated pain</td>
<td>Substance use disorder treatment</td>
</tr>
<tr>
<td>Basic awareness and destigmatization training and communication</td>
<td></td>
<td>Ongoing recovery support</td>
</tr>
</tbody>
</table>
Task Force: What Doesn’t Work

1. Ignoring the problem
2. Ban for life drug testing policies – workers need path forward after positive drug test
3. Non-personal outreach to encourage members into treatment
4. One-size fits all treatment and recovery plans
Task Force: Priorities

1. Resources with consistent information
2. Awareness and destigmatization education for workers and leadership
3. Guidance for a good EAP/MAP
4. Vetted treatment centers
5. Guidance for a peer mentorship program – FSL for behavioral health
6. Fast action!
CPWR Resources

Developed to Support Task Force and Public Priorities

https://www.cpwr.com/research/opioid-resources

- Hazard Alert
- Tool Box Talk
- Physician/Practitioner Alert
- Infographic
- Two hour awareness module
Opioid Deaths in Construction

Construction work can result in painful injuries that are sometimes treated with prescription opioids. One in four people prescribed opioids for long-term pain become addicted and opioid-related deaths are on the rise.

Chris’ Story
Chris strained his back after lifting heavy materials. He tried to ignore the pain, but it wouldn’t go away. Chris went to the doctor and was prescribed an opioid to treat the pain. The pills reduced the pain, but his back never got better. Chris found that he needed the pills to make it through the day. Eventually, his doctor refused to give him another prescription. Chris went to another doctor and got a new prescription. Over time his job performance and family life began to suffer. Chris went back to his doctor and asked for help. His doctor helped him to find treatment for his opioid addiction. Chris is now in recovery and using a non-addictive treatment for his pain.

How can we stay safe today?
What will we do at the worksite to prevent an injury?

1. 

2. 

Remember This

- Your employer must provide a safe work environment to prevent injuries. If you see a hazard on the job, report it to your supervisor or foreman.
- Follow safe work practices to prevent injuries, such as getting help when lifting heavy materials.
- If you are injured, talk to your doctor about non-addictive medications or physical therapy to treat the pain.
- Opioids should be prescribed only when no other treatment is effective.
- Addiction is not a criminal issue. Help is available if you feel you need it.
- Check with your employer to see if they have a substance abuse assistance program.
- Call this confidential hotline for help: 1-800-HELP-4357 or go online at https://resources.facingaddiction.org.


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Physicians’/Providers’ Alert:

Pain Management for Construction Workers

This Alert was developed to help ensure that all construction workers who visit a doctor or other healthcare provider because of pain from an injury are aware of treatment options and understand the potential risks of addiction associated with using prescription opioids. Please:

1. read and print this Alert;
2. keep the “Tips for Talking with Your Doctor”; and
3. fill in the “To My Doctor” form and give it to your doctor to include in your medical records.

Tips for Talking with Your Doctor: What You Need to Know Before Accepting an Opioid Prescription

Opioids, such as Fentanyl (Duragesic®), Hydrocodone (Vicodin®), Oxycodone (OxyContin®), Oxymorphone (Opana®), Hydromorphone (Dilaudid®), Meperidine (Demerol®), Diphenoxylate (Lomotil®), morphine, and codeine are often prescribed to help manage pain. Since these medications can be addictive, they should only be used if other treatment options are not effective. When prescribed, they should be used for the shortest time possible.
Don’t be a statistic. Protect yourself from an opioid overdose.

Construction work can result in painful injuries that are often treated with prescription opioids. Opioids are addictive and should be the last option to treat your pain. Talk to your doctor about non-addictive medications.

REMEMBER: Addiction is an illness that can be treated.
Call this confidential national hotline:
1-800-662-HELP (4357)
Visit: Facing Addiction — https://resources.facingaddiction.org/

1 out of 4 people prescribed opioids for long-term pain become addicted.

In 2016 alone, more than 63,000 people died in the U.S. from an overdose — over 42,000 of which involved an opioid.

Overdose deaths that occur on the job are on the rise.

*Centers for Disease Control and Prevention. https://www.cdc.gov/niosh
Course Objectives

1. Improve knowledge about opioids and related substance use and mental health issues:
   • What are opioids and how they work
   • Why and how construction workers have been so affected by the epidemic
   • How to Prevent, Treat and Recover from Opioid Use Disorder

2. Inspire and motivate trainees to take action:
   • Get more information and share it
   • Identify risk factors and take protective actions
   • Practice a culture of health and wellness
   • Support our brothers and sisters in the trades who are struggling
Topics Covered

• What’s the Problem?
• Understanding Opioids
• Prevention and Harm Reduction
• Understanding Treatment and Recovery
• Overcoming our Common Struggles
CPWR Next Steps

Training Program Rollout, Evaluation, and Improvement

New Communications Research to Inform Framing Prevention Activities

Deep Dive into Peer Support Networks
Questions?

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