

# Responding to the Nation's Drug Overdose Crisis Preventing Overdose, Supporting Worker Recovery

PARSE 2023: Recovery Friendly Workplace Symposium

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# More than one million people have died since 1999 from a drug overdose

- Opioids—mainly synthetic opioids (other than methadone)—are currently the main driver of drug overdose deaths.
- Nearly 88% of opioid-involved overdose deaths involved synthetic opioids.
- Prescription opioid-related overdoses remain a challenge
  - 45 people die each day from prescription opioid overdose.
  - From 1999 to 2021, nearly 280,000 people died in the United States from overdoses involving prescription opioids
  - Prescription opioids were involved in nearly 21% of all opioid overdose deaths in 2021.
- Heroin-involved overdose death rates decreased by nearly 32% from 2020 to 2021, but still accounted for more than 9,000 deaths in 2021. **11%** of all opioid deaths involved heroin.

## 1 in 22 Deaths in US Due to Opioids in 2021

- Similarly, the percentage of all deaths that were attributed to opioid toxicity increased from 1.8% in 2011 to 4.5% in 2021.
- By 2021, opioid toxicity was responsible for:
  - o 10.2% of all deaths among those aged 15 to 19 years
  - o 21.7% of deaths among those aged 20 to 29 years
  - o 21.0% of deaths among those aged 30 to 39 years
- Years of life lost (2011-2021) increased 276% to nearly 3 million life years lost.
- Today, there is an urgent need to support people at risk of substance-related harm, particularly men, younger adults, and adolescents.

## Provisional 2022 Data: 109,680 Deaths from Drug Overdose

- Predicted number of drug overdose deaths for 2022 show an increase of 0.5% from the 12 months ending in December 2021 to December 2022, from **109,179 to 109,680**.
- The biggest percentage increase in overdose deaths in 2022 occurred in Washington and Wyoming, where deaths were up 22%.
- Of these deaths, about 80% involve opioids.
- Increases in overdoses also seen with cocaine and other psychostimulants with abuse potential (such as methamphetamine).

## **Substance Use Disorders in Workers**



- 1 in 12 workers has an untreated substance use disorder (SUD).
- Construction, mining, and service occupations have the highest rates of alcohol and other drug use disorders – and jobs in these industries are often <u>safety-sensitive</u> positions.
- Industries with higher numbers of workers with alcohol use disorders also have more workers with illicit drug, pain medication, and marijuana use disorders.

# **Exploring the Link: Substance Use and Work**



Lack of employment

Insecure employment, new employment arrangements Hazardous work and increased risk of work-related injury

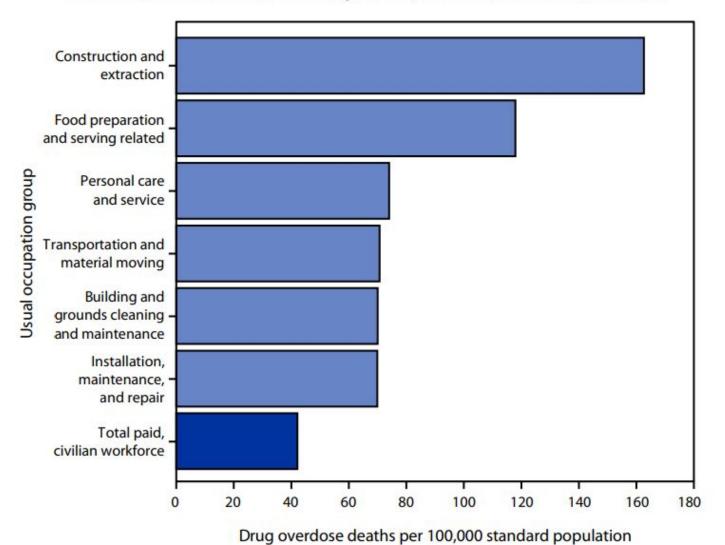
Wages, working conditions that can predispose to chronic health problems or pain

Lack of benefits/paid sick leave

Industry/occupational, cultural, and geographic differences

# Age-Adjusted Drug Overdose Death Rates\* Among Workers Aged 16–64 Years in Usual Occupation† Groups with the Highest Drug Overdose Death Rates — National Vital Statistics System, United States,§ 2020





QuickStats: Age-Adjusted Drug Overdose Death Rates Among Workers Aged 16–64 Years in Usual Occupation Groups with the Highest Drug Overdose Death Rates — National Vital Statistics System, United States, 2020. MMWR Morb Mortal Wkly Rep 2022;71:948.

DOI: http://dx.doi.org/10.15585/mmwr.mm7129a5

## Substance Use by the Numbers

According to the Substance Abuse and Mental Health Services Administration, in any given month people in the mining industry abuse substances at the following rates:<sup>1</sup>



Over the course of the year, that same study found that miners report substance use disorder at a rate of **11.8%**.



1 https://www.samhsa.gov/data/sites/default/files/report\_1959/ShortReport-1959.html





About 1 in 100 workers in the mining industry has an opioid use disorder, a higher than average rate, according to a report from the National Safety Council.

## **Potential Contributing Factors**



## Contributing Factors

Mining is a high-risk job where the worker is surrounded by and often operating heavy equipment under strenuous conditions. Here are some of the hazards associated with working in the mining industry<sup>1</sup>:

TRAUMATIC INJURY

**FALLS** 

**ENTRAPMENT** 

**ELECTROCUTION** 

**EQUIPMENT MISUSE** 

**FAMILY SEPARATION** 

**PTSD** 

1 https://oem.bmj.com/content/74/4/259.full



- Physically demanding work
- Heavy workloads
- High stress
- Extremely hazardous conditions
- High incidence of work-related injuries
- Male-dominated industry
- Rostering work arrangement
- Isolation from society
- Separation from loved ones
- Boredom (during free time out of mines)
- Lack of entertainment options at dormitory facilities
- Peer pressure from coworkers

# **Workers in Recovery**



- Each employee who recovers from a SUD saves a company over \$8,500
   on average.
  - Treatment prompted or mandated by an employer is more successful than treatment initiated or encouraged by friends or family members.

## Workers in recovery tend to be strong employees.

Workers in recovery miss fewer days, stay in jobs longer, are less likely to be hospitalized, and have fewer primary care visits.

# NIOSH Recommends *Total Worker Health*<sup>®</sup> Strategies to Combat Substance Use Harms



Total Worker Health® is defined as policies, programs, and practices that protect from work-related safety & health hazards while promoting prevention – all to advance overall worker well-being.

- Effects of substance use are <u>not isolated</u> to either the work or home environments
- Prevention and intervention require comprehensive, integrated solutions that examine and address both <u>work and worker</u> challenges
- Coordinated "systems approaches" are more efficient.
- Organizational strategies (over individual approaches) work best.

# What is Workplace Supported Recovery?



Policy Education Stigma reduction Sensitivity to disparities Resources and support Work environment Workplace substance use climate Health and well-being programs **Employment** Focus on the future workforce

A recovery-supportive workplace aims to **prevent exposure** to workplace factors that could cause or perpetuate a substance use disorder while **lowering barriers** to seeking care, receiving care, and maintaining recovery.

A recovery-supportive workplace **educates** its management team and workers on issues surrounding substance use disorders to **reduce the all-too-common stigma** around this challenge.

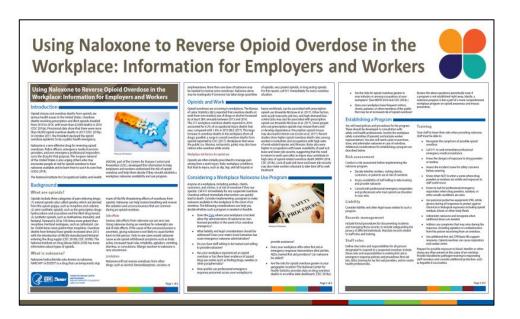
- Workplace Supported Recovery Program | NIOSH | CDC
- New NIOSH Research Addresses an Evolving Crisis | Blogs | CDC
- NIEHS and NIOSH Explore the Expansion of Recovery Friendly Workplace
   Programs | Blogs | CDC
- New NIEHS Resources to Prevent and Address Opioid Misuse and Promote Recovery Friendly Workplace Programs | Blogs | CDC



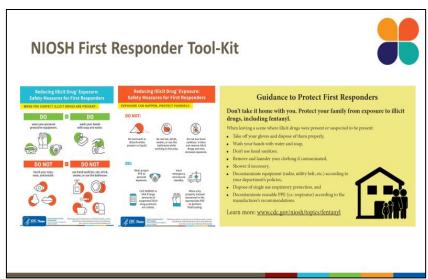
## Federal Partners Committed to Recovery Support

- White House's Office of National Drug Control Policy
- Department of Labor
- Department of Health and Human Services
  - NIEHS, SAMHSA, NIAAA, NIDA, HRSA, CMS
  - CDC's National Center for Injury Prevention and Control and National Institute for Occupational Safety and Health
- Others: VA, HIS, DOJ, HUD, DOD, BOP

# **NIOSH Resources for Employers**









## **WORKPLACE SOLUTIONS**

affect individual workers, their families, and both large and small business-

es. In a 2017 National Safety Council

survey, 70% of employers reported suf-

fering the negative effects of prescrip-

tion drug misuse; noting positive drug

tests, absenteeism, injuries, accidents

and overdoses [Hersman 2017]. In

2013, the total U.S. societal costs of pre

scription opioid use disorder (OUD)

and overdoses were \$78 billion. Of that,

about \$2.8 billion was for treatment

In 2016, individuals with insurance

[Florence et al. 2016].

## **Medication-Assisted Treatment for Opioid Use Disorder**

to claim lives across the country with a This number represents 67.8% of the 70,237 overdose deaths from all drugs) notor vehicle crashes [CDC 2016]. The high injury rates and physically demand truction, mining, or fishing [Massachu etts Department of Public Health 2018: CDC 2018b]. Certain job factors such as high job demands job insecurity and linked to opioid use [Kowalski-McGraw et al. 2017]. Medication-assisted treatased treatment\*) has been shown to be effective for many people with opioid al Academies of Sciences, Engineerin and Medicine 2019]. In addition to providing general information about MAT, this document provides information for employers wishing to assist or support workers with opioid use disorder.

**Treatment** coverage received \$2.6 billion in services for treatment of opioid addiction and overdose, a dramatic increase from

What is medication-\$0.3 billion in 2004 (based on claims \$2.6 billion, \$1.3 billion was for outpa-

worker annually (based on 2012-2014

data) by getting workers into treatment

Despite these findings, 80% of individu

als in need of treatment for a substance

use disorder in 2016 did not receive

treatment [CBHSQ 2017]. Making med-

ication-assisted treatment (MAT) more

readily available to people with OUD

can help diminish the opioid crisis in the

[NSC et al. 2016; NORC].

tient treatment, \$911 million was for for prescription drugs [Cox et al. 2018]. Note that some experts recommend the term "medication-based treatment" or MRT instea-

of MAT. This change in nomenclature aligns with the premise that OUD is a chronic diso for which medications are first-line treatments (often an integral part of a person's long-term tional Academies of Sciences, Engineering, and Medicine 2019). The White House Council of Economic Advisers ICEA 2017) estimated the e

these deaths related to opioids "using conventional economic estimates for valuing life rou tinely used by U.S. Federal agencies." The CEA report "also adjusts for underreporting of opof opioid misuse." CEA estimates that in 2015, the economic cost of the opioid crisis was \$504.0 billion, or 2.8 percent of GDP that year



Challenges related to prescription drug

misuse, illicit drug use, and addiction

Background

**Opioids in the Workplace | NIOSH |** 

# Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers



Using Naloxone to Reverse Opioid Overdose in the Workplace: Information for Employers and Workers

#### Introduction I

Opioid misuse and overdose deaths from opioids are serious health issues in the United States. Overdose deaths involving prescription and illicit opioids doubled from 2010 to 2016, with more than 42,000 deaths in 2016 [CDC 2016a]. Provisional data show that there were more than 49,000 opioid overdose deaths in 2017 [CDC 2018a]. In October 2017, the President declared the opioid overdose epidemic to be a public health emergency.

Naloxone is a very effective drug for reversing opioid overdoses. Police officers, emergency medical services providers, and non-emergency professional responders carry the drug for that purpose. The Surgeon General of the United States is also urging others who may encounter people at risk for opioid overdose to have naloxone available and to learn how to use it to save lives [USSG 2018].

The National Institute for Occupational Safety and Health



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(NIOSH), part of the Centers for Disease Control and Prevention (CDC), developed this information to help employers and workers understand the risk of opioid overdose and help them decide if they should establish a workplace naloxone availability and use program.

#### Background I

#### What are opioids?

Opioids include three categories of pain-relieving drugs: (1) natural opioids (also called opiates) which are derived from the opium poppy, such as morphine and codeine; (2) semi-synthetic opioids, such as the prescription drugs hydrocodone and oxycodone and the illicit drug heroin; (3) synthetic opioids, such as methadone, tramadol, and fentanyl. Fentanyl is 50 to 100 times more potent than morphine. Fentanyl analogues, such as carfentanil, can be 10,000 times more potent than morphine. Overdose deaths from fentanyl have greatly increased since 2013 with the introduction of illicitly-manufactured fentanyl entering the drug supply (CDC 2016b; CDC 2018b). The National Institute on Drug Abuse [NIDA 2018] has more information about types of opioids.

#### What is naloxone?

Naloxone hydrochloride (also known as naloxone, NARCAN® or EVZIO®) is a drug that can temporarily stop

Centers for Disease Control and Prevention National Institute for Occupational Safety and realth

many of the life-threatening effects of overdoses from opioids. Naloxone can help restore breathing and reverse the sedation and unconsciousness that are common during an opioid overdose.

#### Side effect

Serious side effects from naloxone use are very rare. Using naloxone during an overdose far outweighs any risk of side effects. If the cause of the unconsciousness is uncertain, giving naloxone is not likely to cause further harm to the person. Only in rare cases would naloxone cause acute opioid withdrawal symptoms such as body aches, increased heart rate, irritability, agitation, vomiting, diarrhea, or convulsions. Allergic reaction to naloxone is very uncommon.

#### Limitations

Naloxone will not reverse overdoses from other drugs, such as alcohol, benzodiazepines, cocaine, or

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amphetamines. More than one dose of naloxone may be needed to reverse some overdoses. Naloxone alone may be inadequate if someone has taken large quantities situation.

of opioids, very potent opioids, or long acting opioids. For this reason, call 911 immediately for every overdose situation.

#### Opioids and Work

Opioid overdoses are occurring in workplaces. The Bureau of Labor Statistics (BLS) reported that overdose deaths at work from non-medical use of drugs or alcohol increased by at least 38% annually between 2013 and 2016. The 217 workplace overdose deaths reported in 2016 accounted for 4.2% of occupational injury deaths that year, compared with 1.8% in 2013 [BLS 2017]. This large increase in overdose deaths in the workplace (from all drugs) parallels a surge in overall overdose deaths from opioids reported by CDC [2017]. Workplaces that serve the public (i.e. libraries, restaurants, parks) may also have visitors who overdose while onsite.

#### Workplace risk factors for opioid use

Opioids are often initially prescribed to manage pain arising from a work injury. Risky workplace conditions that lead to injury, such as slip, trip, and fall hazards or heavy workloads, can be associated with prescription opioid use [Kowalski-McGraw et al. 2017]. Other factors, such as job insecurity, job loss, and high-demand/lowcontrol jobs may also be associated with prescription opioid use [Kowalski-McGraw et al. 2017]. Some people who use prescription opioids may misuse them and/ or develop dependence. Prescription opioid misuse may also lead to heroin use (Cicero et al. 2017). Recent studies show higher opioid overdose death rates among workers in industries and occupations with high rates of work-related injuries and illnesses. Rates also were higher in occupations with lower availability of paid sick leave and lower job security, suggesting that the need to return to work soon after an injury may contribute to high rates of opioid-related overdose death [MDPH 2018, CDC 2018cl, Lack of paid sick leave and lower job security may also make workers reluctant to take time off to seek

### Considering a Workplace Naloxone Use Program I

Anyone at a workplace, including workers, clients, customers, and visitors, is at risk of overdose if they use opioids. Call 911 immediately for any suspected overdose. Overdose without immediate intervention can quickly lead to death. Consider implementing a program to make naloxone available in the workplace in the event of an overdose. The following considerations can help you decide whether such a program is needed or feasible:

- Does the <u>state</u> where your workplace is located allow the administration of naloxone by nonlicensed providers in the event of an overdose emergency?
- What liability and legal considerations should be addressed? Does your state's Good Samaritan law cover emergency naloxone administration?
- Do you have staff willing to be trained and willing to provide naloxone?
- Has your workplace experienced an opioid overdose or has there been evidence of opioid drug use onsite (such as finding drugs, needles or other paraphernalia)?
- How quickly can professional emergency response personnel access your workplace to



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#### provide assistance?

- Does your workplace offer other first aid or emergency response interventions (first aid kits, AEDs, trained first aid providers)? Can naloxone be added?
- Are the risks for opioid overdose greater in your geographic location? The National Center for Health Statistics provides data on drug overdose deaths in an online state dashboard. [CDC 2018a.]

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- Are the risks for opioid overdose greater in your industry or among occupations at your workplace? [See MDPH 2018 and CDC 2018c.]
- Does your workplace have frequent visitors, clients, patients, or other members of the public that may be at increased risk of opioid overdose?

Review the above questions periodically even if a program is not established right away. Ideally, a naloxone program is but a part of a more comprehensive workplace program on opioid awareness and misuse

#### Establishing a Program

You will need policies and procedures for the program. These should be developed in consultation with safety and health professionals. Involve the workplace safety committee (if present) and include worker representatives. You also will need a plan to purchase, store, and administer naloxone in case of overdose. Additional considerations for establishing a program are described below.

#### Risk assessment

Conduct a risk assessment before implementing the naloxone program.

- Decide whether workers, visiting clients, customers, or patients are at risk of overdose.
- Assess availability of staff willing to take training and provide naloxone.
- Consult with professional emergency responders and professionals who treat opioid use disorders in your area.

#### Liability

Consider liability and other legal issues related to such a program.

#### Records management

Include formal procedures for documenting incidents and managing those records, to include safeguarding the privacy of affected individuals. Maintain records related to staff roles and training.

#### Staff roles

Define clear roles and responsibilities for all persons designated to respond to a suspected overdose. Include these roles and responsibilities in existing first aid or emergency response policies and procedures (first aid kits, AEDs, training for lay first-aid providers, and/or onsite health professionals).

#### Tuninina

Train staff to lower their risks when providing naloxone. Staff must be able to:

- Recognize the symptoms of possible opioid overdose.
- Call 911 to seek immediate professional emergency medical assistance.
- Know the dangers of exposure to drug powders or residue.
- Assess the incident scene for safety concerns before entering.
- Know when NOT to enter a scene where drug powders or residues are visible and exposure to staff could occur.
- Know to wait for professional emergency responders when drug powders, residues, or other unsafe conditions are seen.
- Use personal protective equipment (PPE; nitrile gloves) during all responses to protect against chemical or biological exposures including opioid residues, blood, or other body fluids.
- Administer naloxone and recognize when additional doses are needed.
- Address any symptoms that may arise during the response, including agitation or combativeness from the person recovering from an overdose.
- Use additional first aid, CPR/basic life support measures. Opioid overdose can cause respiratory and cardiac arrest.

Prepare for possible exposure to blood. Needles or other sharps are often present at the scene of an overdose. Provide bloodborne pathogen training to responding staff members and consider additional protection, such as hepatitis b vaccination.

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### Resources





## Get Help



#### 988 Suicide & Crisis Lifeline

Call or text 988 TTY: 1-800-799-4889

Free and confidential support for people in distress, 24/7.

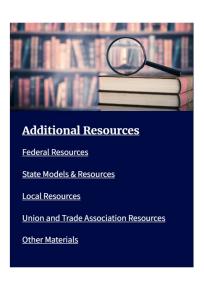
### NATIONAL HELPL NE

### **National Helpline**

1-800-662-HELP (4357)

TTY: 1-800-487-4889
Treatment referral and information,







#### Disaster Distress Helpline

1-800-985-5990

TTY: 1-800-846-8517

Free and confidential support for people in distress, 24/7.

### **Find Treatment**

## FindTreatment.gov

FindTreatment.gov is an online source of information for persons seeking substance use and/or mental health treatment facilities in the United States or U.S. Territories.

Enter a starting location:

Enter your address, city, or zip code

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For more information, contact CDC 1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348 www.cdc.gov

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