



Implementing Effective Workplace Solutions to Prevent Opioid Use Disorder: **A Resource Guide for the Mining Industry**



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The goal of this guide is to provide mine operators, occupational safety and health managers, and others with actionable tools to more effectively plan, implement, and integrate a range of workplace interventions to prevent prescription opioid misuse, illegal opioid use, and opioid use disorder among mine workers. It was developed collaboratively by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH). Feedback from mining community constituents, existing workplace opioid use disorder prevention guidance, and the prevention research literature informed the design of this guide.

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Disclaimers

This informational document is not a standard or regulation, and it creates no new legal obligations. It contains recommendations as well as descriptions of mandatory safety and health standards. The recommendations are advisory in nature, informational in content, and are intended to assist employers in providing a safe and healthful workplace. The Occupational Safety and Health Act requires employers to comply with safety and health standards and regulations promulgated by OSHA or by a state with an OSHA-approved state plan. In addition, the Act's General Duty Clause, Section 5(a)(1), requires employers to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm.

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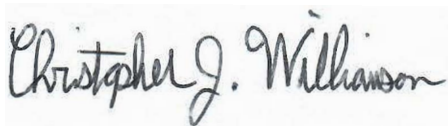
As leaders of the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH), we proudly present "Implementing Effective Workplace Solutions to Prevent Opioid Use Disorder: A Resource Guide for the Mining Industry." This collaborative effort aims to address the significant impact of opioid use disorder on mine industry workers, their families, and communities. By improving awareness and access to resources, we aim to assist mine operators and workers in preventing and recovering from opioid use disorder.

The guide offers actionable tools for mine operators and occupational safety and health managers to implement effective workplace prevention strategies, ensuring a safe and supportive environment for mine workers. While these evidence-based practices are provided, we acknowledge that opioid use disorder can have varying risk factors across different regions. Therefore, regular attention and review are necessary to ensure their ongoing effectiveness.

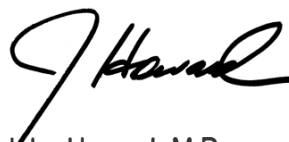
This comprehensive guide represents a collective commitment from both agencies, as well as numerous partners within the mining community who share our goal of normalizing conversations about opioid use disorder, breaking down barriers and stigma, and providing support for mine workers struggling with substance use disorders.

We extend our gratitude to everyone involved in this important initiative. Together, we are advancing our mission to protect the well-being of mine workers and foster a healthy and safe mining community.

Sincerely,



Christopher J. Williamson
Assistant Secretary
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John Howard, M.D.
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ACRONYMS

ADA	Americans with Disabilities Act
CDC	Centers for Disease Control and Prevention
DOL	U.S. Department of Labor
EAP	Employee Assistance Program
ERAS	Enhanced Recovery After Surgery
FMLA	Family and Medical Leave Act
HIPAA	Health Insurance, Portability and Accountability Act
HR	Human Resources
MAP	Member Assistance Program
MHPAEA	Mental Health Parity and Addiction Equity Act
MSD	Musculoskeletal Disorders
MSHA	Mine Safety and Health Administration
NIDA	National Institute on Drug Abuse
NIEHS	National Institute of Environmental Health Sciences
NIH	National Institutes of Health
NIOSH	National Institute for Occupational Safety and Health
OD	Opioid Use Disorder
SAMHSA	Substance Abuse and Mental Health Services Administration
SUD	Substance Use Disorder

GLOSSARY

Opioid Use Disorder—Use of opioids in a manner that meets at least two of 11 diagnostic criteria. Examples of criteria include continued use despite negative consequences, craving for opioids, a pattern of taking larger amounts of opioids over a longer period than intended, and withdrawal symptoms in the absence of opioids. [\[CDC\]](#)

Prescription Opioid Misuse—Prescription opioid misuse includes taking the medication in a manner or dose other than prescribed, using someone else’s prescription, or taking the medication just for the feeling it causes.

Prevention¹

Primary Prevention—Approaches that aim to prevent disease conditions from developing.

Secondary Prevention—Approaches that seek to identify a health condition as early as possible to halt or slow its progression.

Tertiary Prevention—Approaches that strive to minimize acute negative consequences among those who have a disease while promoting recovery and the management of long-term effects to improve overall well-being.

Recovery—Overcoming or managing substance use disorders to regain health and social function. Recovery is a process of change through which people improve their health and well-being, live self-directed lives, and strive to reach their full potential. [\[NIDA\]](#)

Substance Use—Refers to the use of selected substances, including alcohol, tobacco products, drugs, inhalants, and other substances that can be consumed, inhaled, injected, or otherwise absorbed into the body with possible dependence and other detrimental effects. [\[CDC\]](#)

Substance Use Disorder—A treatable mental health disorder that affects a person’s brain and behavior, leading to their inability to control their use of substances like legal or illegal drugs, alcohol, or medications. Symptoms can be moderate to severe, with addiction being the most severe form of an SUD. [\[NIH\]](#)

PURPOSE AND APPROACH OF THIS GUIDE

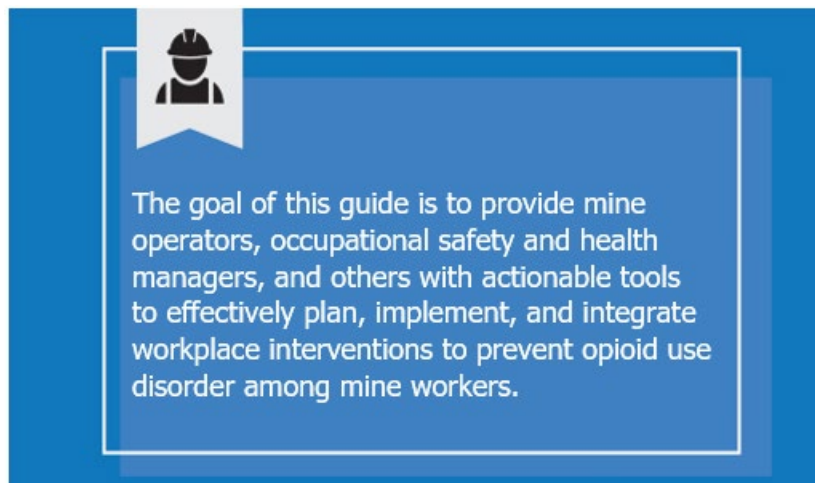
Opioid overdose deaths have disproportionately impacted workers in some industries, such as mining and construction.² Further, the COVID-19 pandemic has spotlighted the importance of worker mental health and well-being more broadly.

Workers in the mining industry have experienced greater burden from illegal opioid use, and overdose relative to workers in other industries^{2,3,4} Among major industry groups, mine workers also have the highest rates of suicide for males.⁵ Difficult working conditions can put mine workers at greater risk for injury and psychosocial stress which in turn can increase mine workers' risks for adverse substance use and mental health outcomes.⁶ The good news is that workplace programs can be effective in improving workers' overall health and well-being.^{7,8}

The goal of this guide is to provide mine operators, occupational safety and health managers, and others with actionable tools to effectively plan, implement, and integrate a range of workplace interventions to prevent opioid use disorder (OUD) among mine workers. This guide includes:

- Overviews of 10 distinct strategies that occupational safety and health managers can implement.
- A Workplace Health and Well-Being Model to facilitate planning and implementation of prevention strategies.
- Evidence-based practices employers can use to maximize success of prevention efforts.
- Potential assessment, planning, implementation, and evaluation activities to consider for each prevention strategy.
- Links to existing resources to support assessment, planning, and implementation of prevention strategies.

This OUD prevention guide was developed for the mining industry by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH). Because many employers are vertically diversified, including multiple lines of business (e.g., mining, construction, production, and supply), the guide uses flexible language that can apply across industries and occupations. Feedback from the mining community, existing workplace guidance for OUD prevention, and prevention research literature informed the design of this guide. It does not offer a one-size-fits-all solution. Rather, it provides employers and others with tools to effectively implement and tailor prevention strategies to their needs. Depending on organizational size and resource constraints, some employers may not be able to implement all strategies. However, over time, integrating multiple prevention strategies is likely to be more effective in addressing the needs of the workforce.



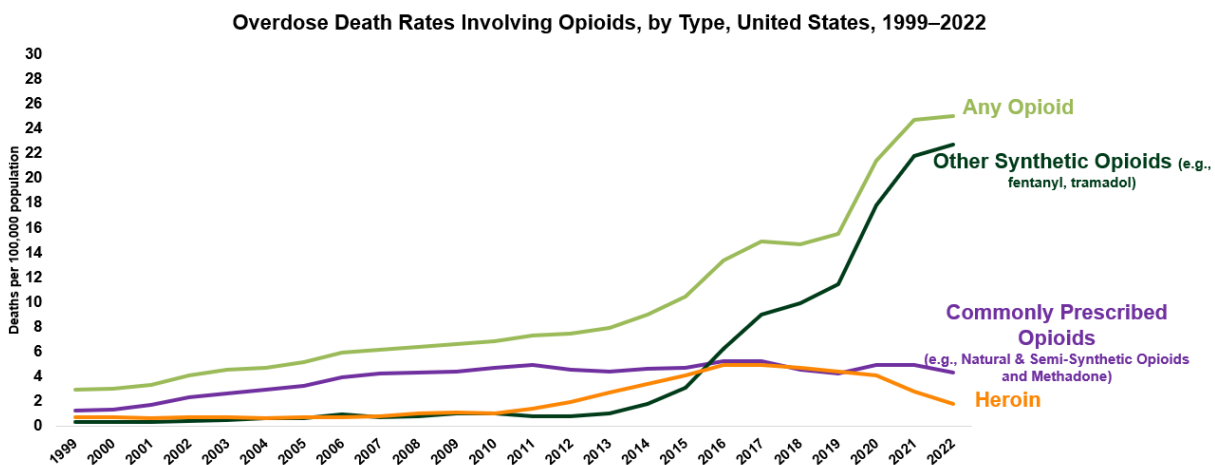
THE IMPACT OF THE OPIOID OVERDOSE EPIDEMIC ON MINE WORKERS

Background

Since 1999, drug overdoses have risen primarily due to opioids. In 2022, over three-quarters of all overdoses involved an opioid, and almost 90% of those involved synthetic opioids.^{9,10} Figure 1 depicts the devastating increase in opioid overdose deaths attributable to three waves:

1. The first wave reflects deaths associated with increased opioid prescribing rates in the 1990s.
2. The second wave beginning in 2010 shows rapid increases in overdose deaths involving heroin.
3. The third wave began in 2013 with significant increases in overdose deaths involving synthetic opioids, especially illegally made fentanyl.

Figure 1. Overdose Deaths Involving Opioids



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA. US Department of Health and Human Services, CDC, 2024. <https://wonder.cdc.gov/>.

In 2017, the U.S. Department of Health and Human Services declared the opioid crisis a public health emergency. Drug overdose deaths have now surpassed other leading causes of death such as motor vehicle crashes.¹¹ In April of 2024, an estimated 101,168 individuals lost their lives to a drug overdose in the preceding 12 months.¹²

While opioid overdose rates continued to rise from the 1990s, they began to level off in 2022. In August 2023, estimated annual rates for the preceding 12 months began to trend downward. These decreases continued through April 2024 (the latest data available) signifying an estimated 10% decrease in opioid overdose deaths.¹³ Estimated rates for 2023 were 3% lower than rates for 2022. The data suggest a decrease in overdose deaths involving synthetic opioids but an increase in deaths involving cocaine and psychostimulants like methamphetamine.¹⁴

The Concern about Opioids

Opioids are pain-relieving medications that can be made from natural or synthetic substances. They work on brain cells to block pain messages and boost more pleasurable feelings. Taken at higher dosages, opioids can slow breathing and heart rate, resulting in death. The Centers for Disease Control and Prevention (CDC) released the updated [*Clinical Practice Guideline for Prescribing Opioids for Pain*](#)¹⁵ in November 2022 which provides recommendations for clinicians providing pain care, including prescribing opioids. Even taken as prescribed, opioids can cause drowsiness, interfere with memory, and reduce attention and balance, thus posing a safety risk.



Source: SAFEProject.US

Opioids are extremely addictive. Using a prescribed opioid for as little as five days increases the risk of long-term use of prescription opioids,¹⁶ and long-term use increases risks of OUD and opioid overdose.¹⁷ OUD is “a problematic pattern of opioid use leading to problems or distress,” demonstrated by specific diagnostic criteria such as using opioids in larger amounts or over longer periods than intended, cravings, and difficulty fulfilling work, school, or home obligations.”¹⁸ OUD may increase the risk of exposure to illegally made drugs like fentanyl subsequently increasing risk of overdose. Further, the current illegal drug market is much more lethal today than in the past. Overdose deaths with evidence of counterfeit pill use, potentially containing illegally made fentanyl and other deadly drugs, increased from 2019 through 2021, with varying increases by region.¹⁹

The opioid overdose epidemic has had a substantial impact on the workforce. In 2019, three-quarters of employers surveyed by the National Safety Council reported they believed their workplace was affected by opioids (e.g., absenteeism, impaired worker performance, injury). Yet only 17% felt well-prepared to address the issue.²⁰ Moreover, in 2022, almost 10% of all workplace occupational injury deaths (525) were due to overdose.²¹

Pathways to Adverse Opioid-Related Health Outcomes

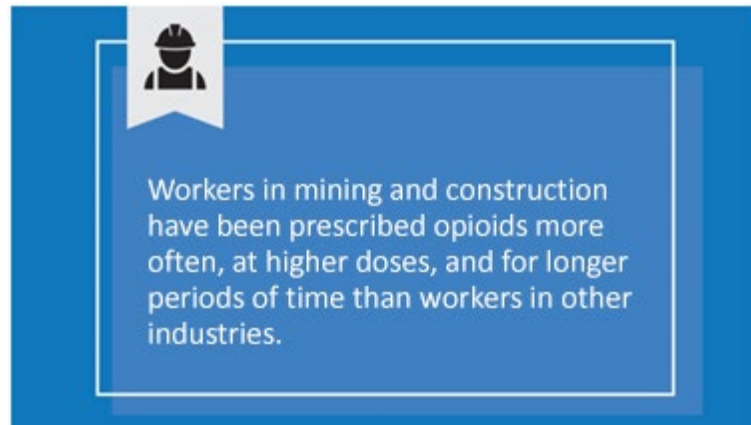
Two plausible pathways to OUD include pain from occupational injuries and work-related stress.⁶ These interact in complex ways to increase mine workers’ risks for adverse health outcomes.

Pain and Injury Contribute to OUD

Work-related pain and injury increase workers’ chances of being prescribed an opioid and subsequent risks of worker prescription opioid misuse, long-term opioid use, and OUD.^{22,23} In a national survey, almost two-thirds of individuals (62.6%) who reported misusing pain medications did so to relieve physical pain.²⁴ Mine workers experience higher rates of occupational injuries and cumulative strain compared to workers in

most other industries which, in part, are attributable to physically demanding working conditions.^{6,25,26} From a national health survey, researchers found that mine workers reported more pain than workers in all other manual labor industries, specifically leg pain, lower back, and joint pain.²⁷ A review of research studies found that mine workers most often experience musculoskeletal disorders (MSDs) related to lower back, neck, upper limb, lower limb, and knee.²⁸

Individuals hurt on the job have a 33% higher odds of receiving an opioid prescription than individuals with non-occupational injuries.²⁹ Those with occupational injuries also receive opioid prescriptions for longer periods (i.e., more days) than individuals with other injuries.²⁹ In fact, those with work-related injuries receive on average 12 days of supply, which is more than twice that of those without work-related injuries.



Opioid prescribing patterns also differ across industries. A Workers' Compensation report using data from 27 states in 2014 and 2015 indicates that workers in mining and construction received opioids more often, at higher doses, and for longer durations than workers in other industries.³⁰ It is also important to note that prescribing rates have decreased since the timing of this report and continued surveillance of prescribing patterns is necessary to assess for ongoing changes (in either direction).¹⁵

Work-related Psychosocial Factors Contribute to Harmful Opioid Use and OUD

Characteristics of work can influence individuals' social or psychological health, which can contribute to harmful opioid use, OUD, and other substance use disorders (SUDs).⁶ Examples of stressful work factors include:

- Nonstandard shift schedules.
- Physically demanding tasks.
- Numerous hazardous exposures.
- Work insecurity.
- Job strain (i.e., demanding jobs with low control).
- Lack of social support.
- Poor work-life fit.

Taking a Holistic View of Opioid-Related Harms

Harmful opioid use is not determined solely by pain and work-related psychosocial factors. These can interact and are influenced by family and community characteristics (e.g., financial and other life stressors, degree of social support within communities).^{31,32} Therefore, taking a holistic view of the risks of harmful opioid use can inform our understanding of the multiple potential contributing factors and solutions. Other risk factors related to harmful opioid use include the following:

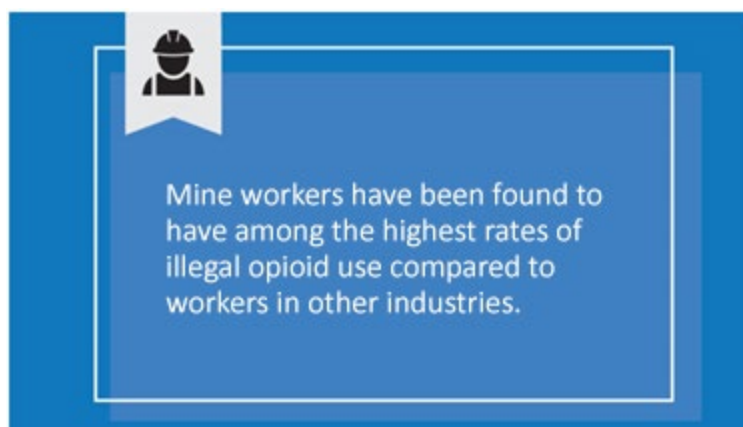
- **Other substances:** Because individuals rarely struggle with opioids alone, workplace solutions that address the potential of concurrent alcohol use disorder and other SUDs will likely be more effective.³³
- **Mental health disorders:** Occupational injury and job strain both can contribute to depression.^{6,34} Roughly half of individuals with a mental health disorder have a co-occurring SUD at some time in their lifetime, and vice versa.³⁵ Depression, the leading cause of disability in the United States and globally, affected 17.5 million Americans in 2018 and costs the United States over \$326 billion annually, with 61% of that cost placed on the workplace (e.g., absenteeism and diminished productivity).^{36,37}

Mine Workers are at Greater Risk

Injuries and psychosocial factors can contribute to adverse health outcomes for mine workers which may include harmful opioid use, OUD and SUDs, overdose, suicide, and mental health symptoms or disorders.⁶

Mine workers have high rates of illegal opioid use compared to workers in other industries.³ Extraction and construction workers also have the highest rates (19%) of SUDs, more than twice the rate of all U.S. workers at nearly 9%.³⁸

Workers in extraction (mining, oil, and gas)³⁹ and construction have the highest rates of opioid-related deaths relative to other industries.²



In a study using 2015 to 2018 health claims data for construction workers, almost half (46.4%) of construction workers in the sample had claims for musculoskeletal conditions. About a third of workers with MSDs received opioid prescriptions of which 19% were long-term prescriptions (i.e., > 60 days in a calendar quarter).²³ The study also found that the odds of developing an OUD were considerably greater for workers prescribed opioids for more than 7 days and 60 days compared to workers with shorter prescriptions (7- and 10-times higher odds for OUD respectively).

Finally, SUDs and mental health disorders increase worker risks of suicide.⁴⁰ Among major industry groups, mining, followed by construction, has the highest rates of suicide for males.⁴¹ Moreover, suicides involving opioids have increased, particularly in the 55-64 age group.⁴²

MAKING THE BUSINESS CASE FOR PREVENTING HARMFUL OPIOID USE

The Mining Industry Faces a Labor Shortage

By 2029, mining workforce projections estimate that over half of the current mining workforce will retire and will likely need to be replaced.⁴³ The Society for Mining, Metallurgy & Exploration notes that the mining industry will need to add jobs consistently over the next decades. However, a McKinsey survey of employers found that 86% of mining executives reported difficulty in recruiting and retaining workers, especially in specialized fields, and that the mining industry is not attractive to workers.⁴⁴

In the past few years, workers in general appear to be more willing to leave their jobs. A McKinsey survey of workers across industries found that workers' primary reasons for quitting their jobs were: (1) not feeling valued by their organizations, (2) not feeling valued by their managers, and (3) not feeling a sense of belonging at work.⁴⁵ The authors suggested that the mining industry "make bold moves on the social agenda" to address workforce capacity challenges. Mine operators may consider addressing social issues among their workers as well as in the communities where they reside.

The opioid overdose epidemic has affected broad swaths of society and many mining communities have been significantly impacted.² Implementing OUD prevention programs demonstrates a positive organizational health culture and communicates that the company recognizes that job-related factors can have an important impact on worker well-being.⁴⁶

The Cost of Substance Use Disorders is Substantial

Research from NORC at the University of Chicago, with the National Safety Council (NSC), supported the development of the [Substance Use Employer Cost Calculator](#), which highlights the many costs associated with prescription opioid misuse and SUDs.⁴⁷ The researchers noted that workers with SUDs miss almost 50% more days of work than workers without SUDs. They also noted that workers with SUDs tend to report more than one employer in the previous year, and 41% of mine workers with an SUD report multiple employers in the prior year. Finally, the researchers estimated the cost of untreated SUD across industries. Untreated SUD among mine workers costs employers almost \$9,000 per capita for avoidable healthcare use, absenteeism, and turnover.

The Substance Use Employer Calculator allows an employer to personalize the business case for prevention based on organizational inputs. Once an employer enters information on the business' state, number of employees, and industry category, the Calculator provides an estimate of the annual costs associated with SUDs based on national survey data. For illustrative purposes, the following screenshot from the Calculator shows the results for a mine operator based in Arizona with 150 employees (fictitious case). The resulting report estimated that annually, the mine operator will lose approximately \$41,070 in lost time and spend \$59,325 for hiring/retraining due to job turnover and \$44,738 for healthcare costs.



In a recent survey,⁴⁸ almost one-fifth of U.S. workers stated that their mental health was poor or fair. Shown in Figure 2, workers who rated their mental health as fair or poor (19%) had four times as many unplanned absences compared to their peers who rated their mental health better. Further, younger workers and female workers were more likely to report poor mental health (Figure 3).

Figure 2. Number of Missed Workdays per Year by Self-reported Mental Health Status

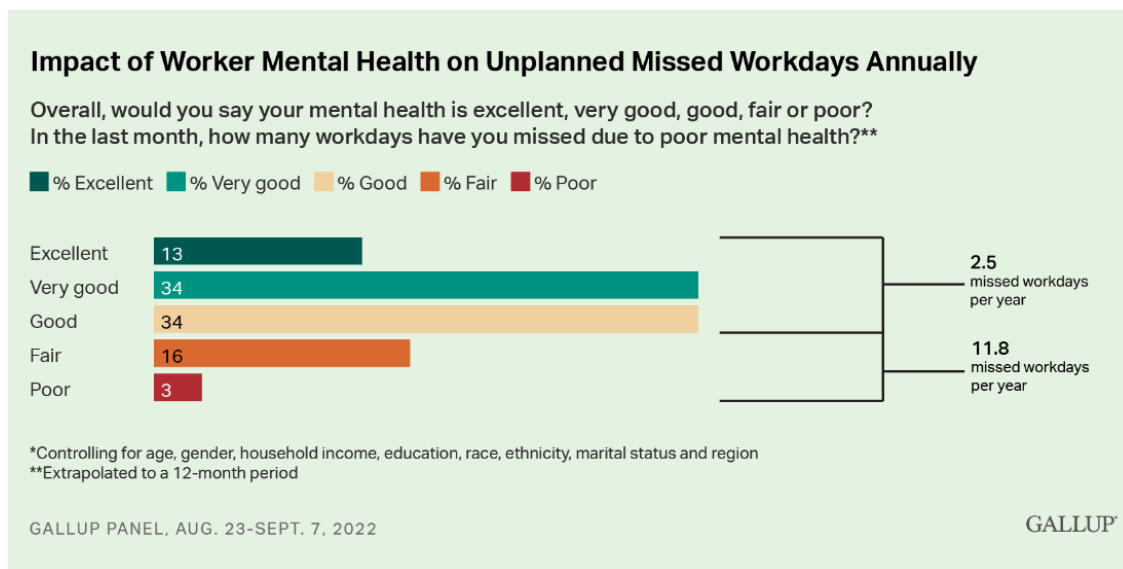
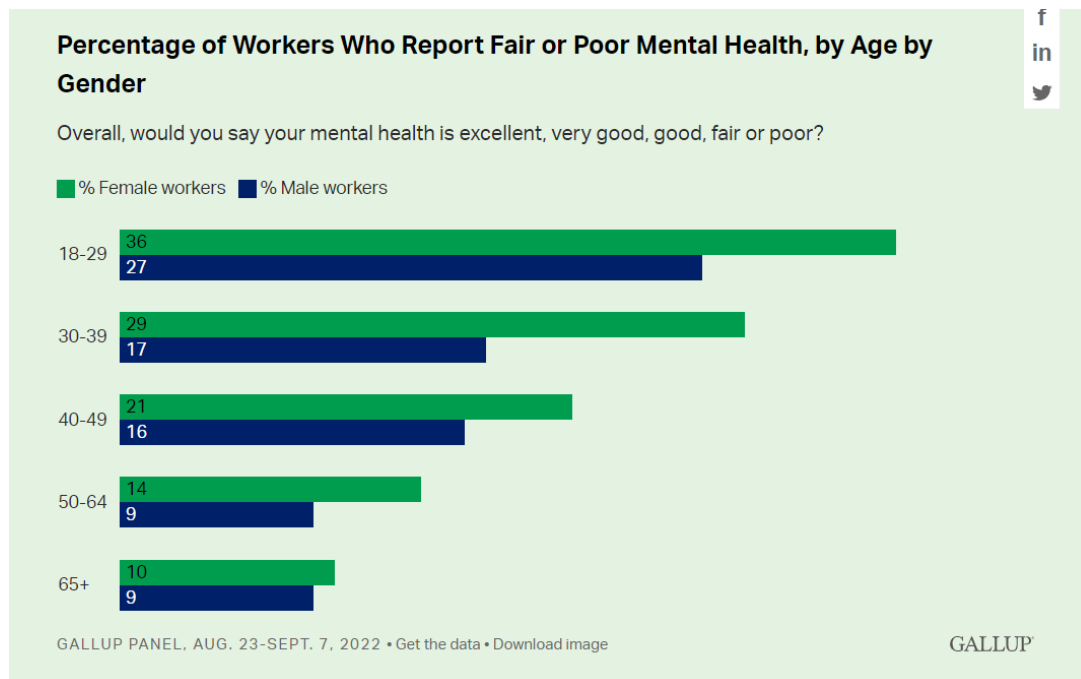


Figure 3. Percentage of Workers with Fair or Poor Mental Health by Age and Sex



The [Depression Calculator for Employers](#), from the Center for Workplace Mental Health, supports the case for workplace mental health promotion. The screenshot below shows an example output from the Depression Calculator that estimates the costs of depression for a mine operator of 150 employees in the west region of the United States (this is an example case for illustrative purposes using default values provided). In addition to the cost of workdays lost and the financial cost, the Depression Calculator estimated that nine employees were likely affected by depression.



Hiring and Retaining Workers in Recovery is Good for Business

Helping workers gain access to treatment for SUD can benefit workers and employers. This is particularly true in mining and construction in which one in every five workers (19%) has been estimated to have an SUD.³⁸ NORC researchers found that workers in recovery miss fewer workdays (9.5 vs. 14.8) and have lower job turnover (23% vs. 36%) than workers with an untreated SUD.⁴⁷ They noted that costs for workers in recovery are similar to or lower than those of workers in the same industry who have never had an SUD. Workplaces that support workers in recovery benefit from increased productivity, decreased medical costs, and decreased incidents related to substance use.⁴⁹ NORC researchers estimated that construction and

extraction employers save an estimated \$8,934 in turnover, absenteeism, and health care costs for each employee in recovery compared to employees with SUDs who are not in recovery.³⁸

Workers Expect Support for Their Health and Well-being from Employers

In 2022, Surgeon General Dr. Vivek Murthy released the report, [Workplace Mental Health & Well-Being](#), outlining the key role that employers can play in supporting the health and well-being of workers. The report includes findings from recent surveys to convey that workers are more readily asking for and expecting support for their mental health from employers ([Mind Share Partners 2021 Mental Health at Work Report](#) and [American Psychological Association's 2022 Work and Well-being Survey results](#)). One survey found that 76% of U.S. workers reported at least one symptom of a mental health condition⁵⁰ while another noted that 81% of workers reported that they will be looking for workplaces that support mental health in the future.⁵¹ While the surveys suggest that work can be a significant contributor to workers' poor mental health, work and the workplace can also significantly promote worker health and well-being.

As younger workers enter the workforce, it is important for employers to recognize changes in values and expectations across generations. Younger workers are more likely to report mental health concerns.⁵⁰ They also want more mental health support from employers (e.g., flexible work hours, remote work, and workplace cultures that respect time off).⁵¹

OVERVIEW OF PREVENTION

What is Prevention?

The goal of prevention is to keep a person as healthy as possible by intervening as early as possible to avoid or reduce negative health outcomes. As for other chronic but treatable medical conditions, it is important to identify and mitigate the underlying factors that can lead to a health issue. Collectively, the three levels of care below are adapted from the “continuum of care” for SUDs.⁵² In the broader disease prevention literature, these levels are referred to as primary, secondary, and tertiary prevention.

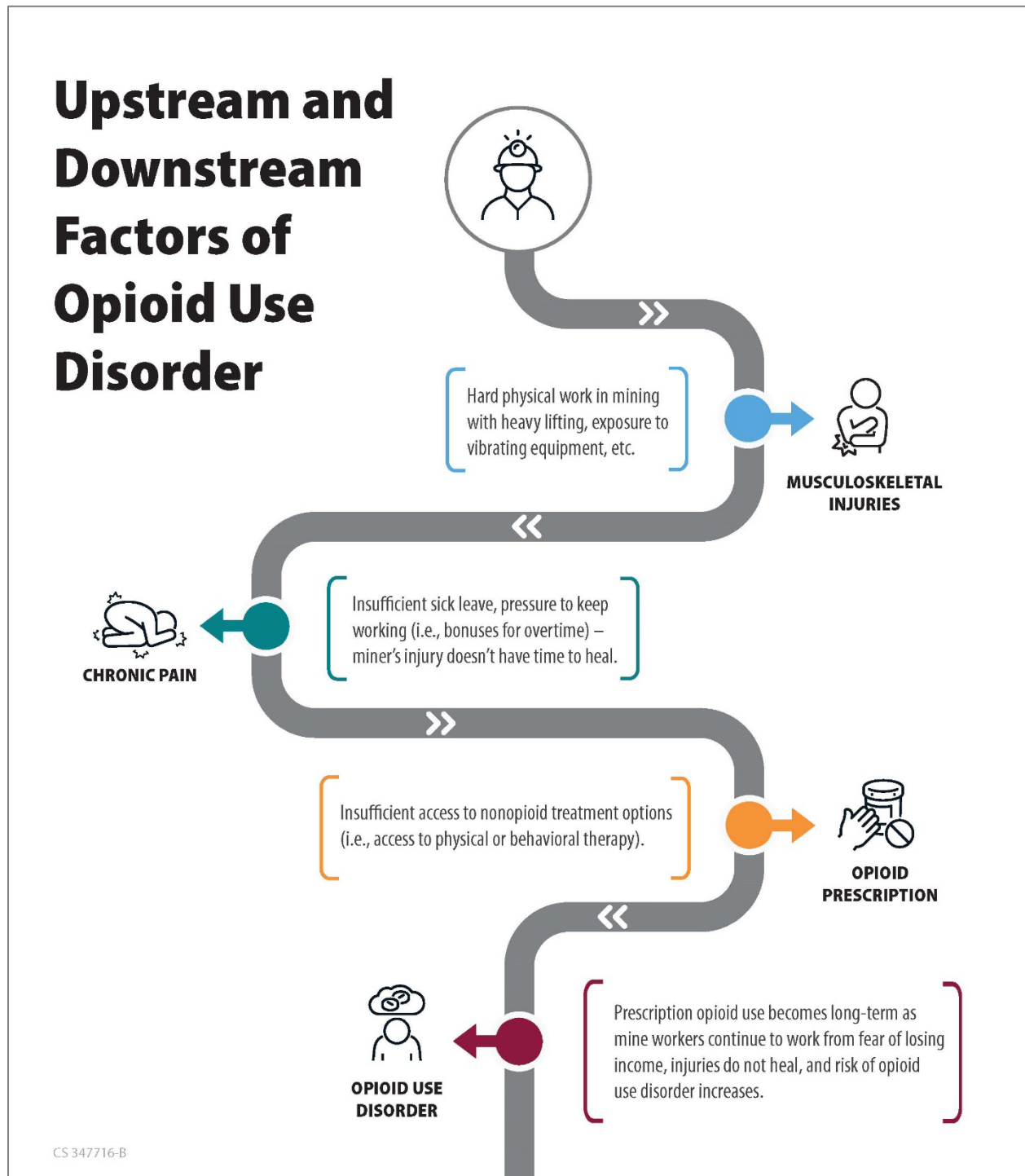
Prevention	Treatment	Recovery
Reduce behaviors and risk factors for harmful substance use and SUD and boost protective factors to avoid harmful use before it occurs.	Provide medical and behavioral therapy designed to help people move toward recovery.	Overcome or manage SUDs to regain health and social function. “Recovery is a process of change through which people improve their health and well-being, live self-directed lives, and strive to reach their full potential.” ⁵³

The Workplace is an Essential Setting for Prevention

Workplace prevention is important as employees spend much of their awake time at work. Further, it is good business to mitigate work-related stress and injuries that increase risks for worker harmful opioid use and mental health concerns.

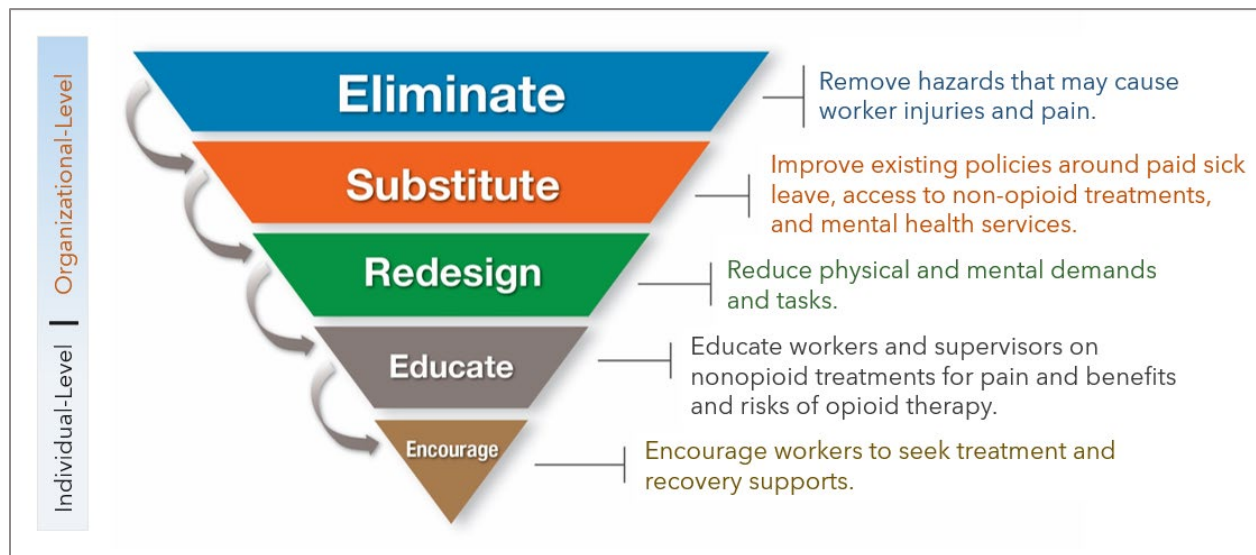
Figure 4 provides an overview of potential factors that can lead to OUD. Many “upstream” factors affect a person’s health “downstream.” For example, the hard, physical nature of work in mining (e.g., non-neutral postures, heavy lifting, vibrating equipment, and other ergonomic factors) can lead to musculoskeletal injuries and disorders.²⁸ This may lead to chronic pain that requires management. Clinicians maximize the use of non-pharmacologic (e.g., physical therapy, manual therapy, psychological therapy, spinal manipulation, massage, acupuncture, mind-body practices, nerve blocks or injections) and nonopioid therapies for the treatment of chronic pain as appropriate, but even with evidence that supports the use of these options, access can be a barrier.¹⁵

Figure 4. Potential Factors that Can Contribute to Opioid Use Disorder



Employers can use a modified [Hierarchy of Controls](#) to prioritize health and safety improvement efforts. Eliminating or reducing the upstream organizational factors that can contribute to worker injuries and stress, for example, is more effective in addressing workplace hazards and health behaviors than implementing worker-level prevention strategies solely.⁵⁴ Figure 5 applies the hierarchy of controls to suggest organizational actions that employers can take to eliminate upstream hazards, improve policies, and redesign work that can reduce workers' risks of OUD.

Figure 5. The Hierarchy of Controls Applied to Opioid Use Disorder Prevention



In summary, workplaces are ideal settings for OUD prevention, treatment, and recovery support. Proactively identifying and minimizing hazards that can lead to acute or chronic injuries not only protects workers but also can increase workplace productivity and reduce healthcare costs.⁵⁵

HOW TO BUILD COMPREHENSIVE WORKPLACE PREVENTION

What Works in Prevention

Workplace and other prevention research highlight promising practices that may be relevant for preventing substance use disorders and specifically OUD.^{8,56,57} These practices are summarized in Figure 6.

Figure 6. Promising Practices in Workplace SUDs Prevention

Promising Practices in Workplace SUD Prevention	
Use a systematic and intentional approach.	Worker health and safety are complex problems. There's no quick fix. Use the Workplace Health and Well-Being Model to structure efforts in a systematic way. Each of the four phases (assessment, planning, implementation, and evaluation) prompts consideration of essential practices and tools.
Build comprehensive, integrated programs over time.	It is more effective to use multiple strategies to address risk and prevent adverse health outcomes. From an organizational level, a range of policies, practices, and programs—across the continuum of care—can better address the needs of workers. These strategies are believed to be more effective when integrated—that is, aligned and complementary—and not at odds. ⁵⁸ This process takes time so be persistent.
Approach worker health from a systems perspective.	Think big picture. Make sure to align health strategies across departments (Human Resources, Occupational Safety and Health, Operations) and employee roles (workers, supervisors, middle managers, executives). Also consider aligning strategies with external parties including labor, families, and the community.
Communicate, coordinate, and collaborate with others (3Cs).	The 3Cs are essential to integrated and effective solutions. While communication is important, it cannot be one-way. To maximize effectiveness, a cross-section of all constituents contributing to the exchange of ideas and solutions is preferred. The quality of the 3Cs matters.
Actively engage workers.	Worker engagement can be a critical driver of effectiveness. Actively plan ways for workers to voice their opinions of problems and solutions through surveys, town halls, health committees, and other leadership opportunities. Token interaction does not work.
Empower leaders at all levels.	It is important that C-Suite, middle managers, and supervisors understand the rationale for the health initiative and work from the same playbook. Buy-in and visible support from C-Suite is key.
Build a positive organizational culture.	A strong organizational culture of health not only contributes to the success of prevention strategies but also leads to higher-performing organizations. Trust between workers and employers is essential.
Use data to drive decision-making.	Data enable a systematic, well-planned approach to prevention. Upfront, establish key metrics to help identify problems, plan solutions, monitor implementation, and drive improvement. Consider using an annual organizational survey to assess perceptions of culture, well-being, challenges, strengths, and attitudes.

Effective occupational safety and health practices integrate traditional safety and risk management with health promotion and prevention efforts across employer functions.^{59,60,61} They also integrate physical health and mental health, cut across organizational and individual factors, and consider non-work settings.

[Total Worker Health®](#), developed by NIOSH, is an organizational-level workplace approach or framework that is founded on many of the evidence-based practices outlined in the previous table. Total Worker Health is defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness-prevention efforts to advance worker well-being. The previous modified Hierarchy of Controls framework highlights that organizational-level strategies are more effective in preventing workplace safety and health hazards than strategies aimed at changing worker-level characteristics and behaviors.

Employers, workers, labor representatives, and others can use Total Worker Health resources such as the workbook, [Fundamentals of Total Worker Health Approaches](#), to inform planning and implementation of OUD and other health prevention strategies. Importantly, formalizing workplace prevention efforts using Total Worker Health facilitates workplace use of promising practices and thus increases the effectiveness of intervention efforts.

When all the pieces of prevention work in unison, comprehensive prevention programs are greater than the sum of the individual parts. In contrast, “random acts of wellness” are not often effective.⁵⁹

Using the Workplace Health and Well-Being Model

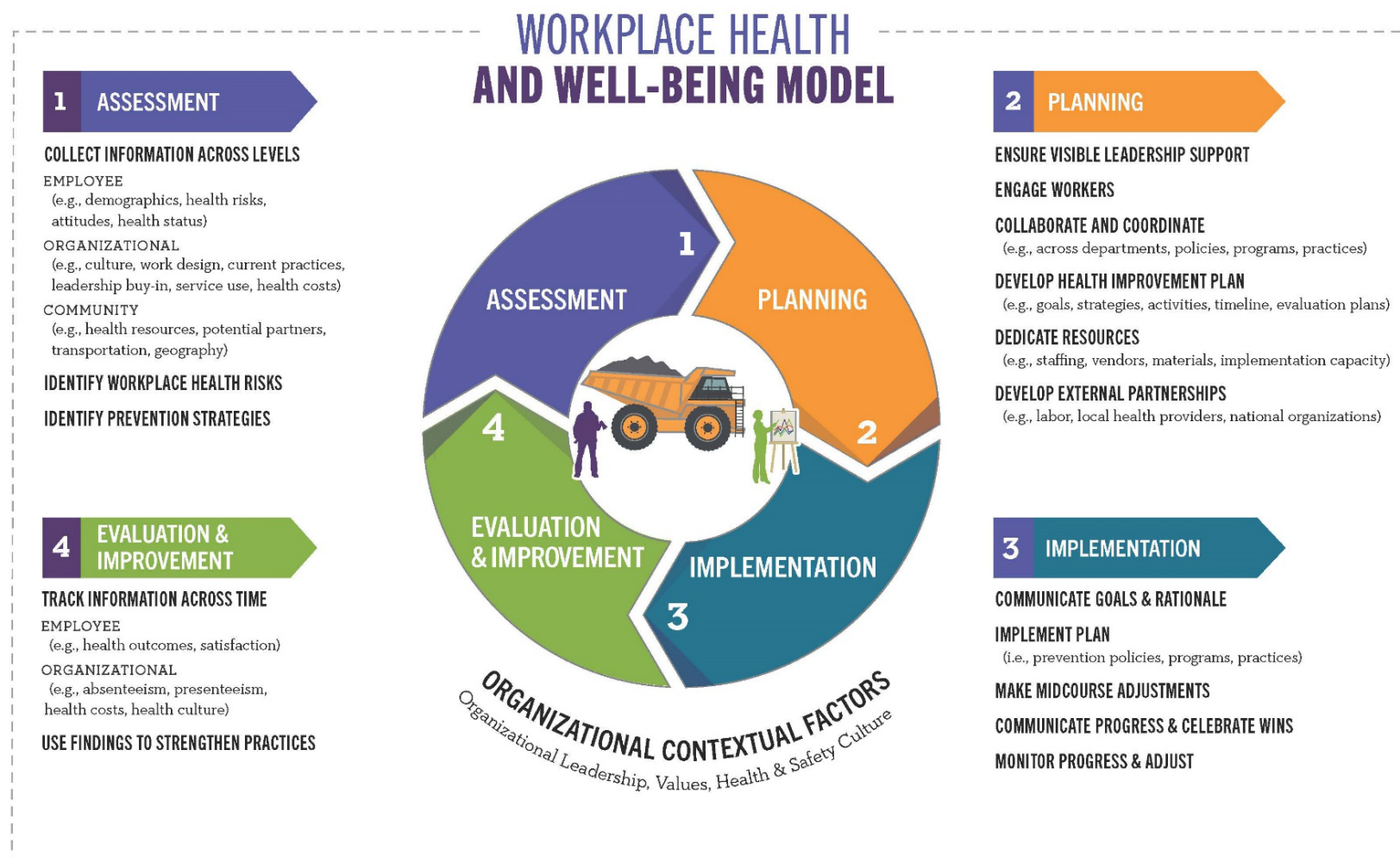
Following a systematic model to develop and implement OUD prevention strategies promotes better worker health outcomes. The Workplace Health and Well-Being Model shown in Figure 7 provides a four-stage framework that mine operators can use to identify health risks and implement prevention strategies. This model is adapted from the [Workplace Health Model](#) developed by the CDC⁶² to align with the Total Worker Health Hierarchy of Controls, and highlight the promising practices outlined in Figure 6.

Step 1: Workplace Health Assessment

The first step in health improvement initiatives is to document worker needs within the current organizational context to identify gaps and potential solutions. While collecting data to inform decision-making is a primary focus, this is an ideal time to strategically incorporate evidence-based prevention practices, specifically engaging and empowering workers to actively participate in the process. Facilitating open dialogue across the organization will build trust.

To support planning and prevention effectiveness, multiple sources of data and varied collection strategies can be used. To be most informative, it is often best for data to represent diverse perspectives and capture information about the work environment and the workforce (Figure 7) for specific data types within and across levels).

Figure 7. Workplace Health and Well-Being Model: Actions to Support Effectiveness of OUD Prevention



In addition to using organizational operational data, employers can use strategies to define employee and organizational needs more fully. Surveys are efficient and provide an ideal way to gather feedback on multiple topics on a regular basis (i.e., annually or biannually). Surveys can assess worker well-being, challenges, attitudes, and needs as well as perceptions of organizational climate, benefits, support, and other practices. Surveys provide quantitative data that can be compared across individuals, locations, and time to track trends.

Qualitative feedback also is important to collect. Workplace listening tours, focus groups, and town halls provide an opportunity to openly discuss concerns and solutions. Employers also can create ways that workers can provide anonymous feedback (e.g., comment card boxes, email). The resulting information often provides a richer sense of what is happening on the ground and why.

Step 2: Planning the Program

Investing sufficient time upfront to thoroughly define and understand the problem will yield better results. Continue to actively collaborate with workers and all organizational departments. As shown in Figure 7, once all the right people are “at the table,” important planning activities include:

- Identifying the range of potential solutions across the hierarchy of controls, prioritizing organizational and design of work factors.
- Developing a health improvement plan describing the goals, prevention strategy and activities, timeline, training, and other capacity building that may be needed for implementation, timeline, and communication plan.
- Allocating sufficient resources.
- Developing partnerships with external service providers or advocates.
- Drafting evaluation plans and measures to determine the impact of prevention efforts.

It is often more effective to start small, evaluate, and then expand solutions that show promise. This comprehensive approach will benefit more workers and impact health and well-being more holistically.

Tips for Collaboration

Middle management—Consider including middle management across all departments that address health and/or safety issues (e.g., human resources, operations, occupational safety and health, information technology, and EAP services). Consider establishing a cross-department advisory group charged with aligning health improvement efforts that meets regularly. It is important to identify gaps between departments or overlaps, particularly when policies and practices are contradictory.

Workers—Giving voice to and engaging in active problem solving may involve different methods. The [Healthy Workplace Participatory Program](#) provides an example of an approach as well as training.

External parties—Identify external constituents that can further prevention goals and objectives. If relevant, establish labor-management collaborations and partnerships with community health centers.

Step 3: Implementing the Program

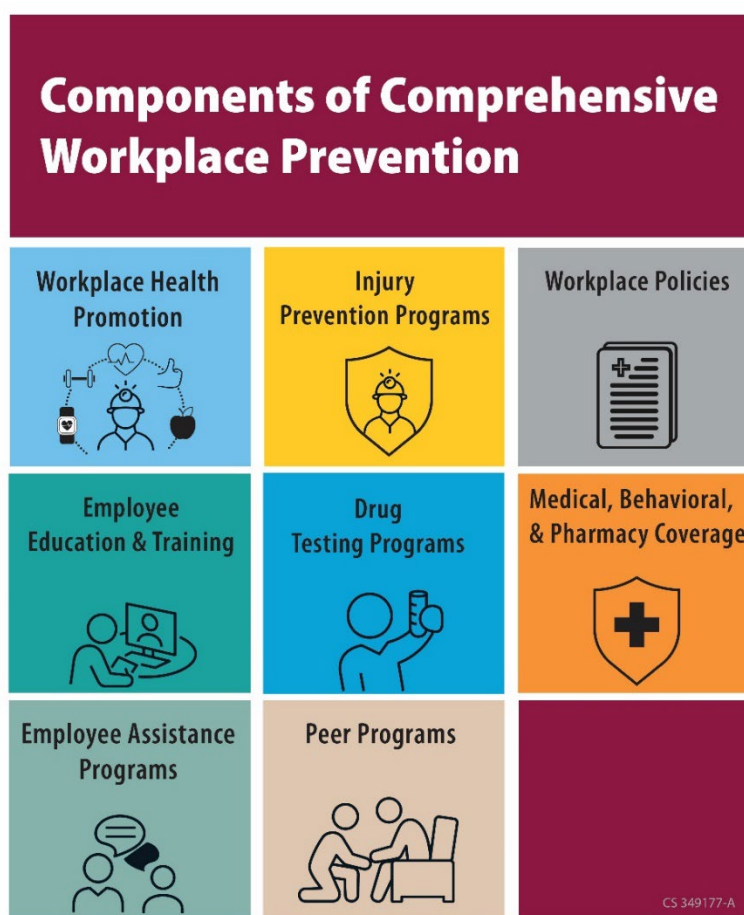
In the early stages of implementation (Figure 7), it is important to communicate the need and rationale for the selected workplace strategies. It is important to have an executive leader and supervisor support, training, and preparation in place before starting. It is also important to have plans in place to monitor progress, challenges, and successes in real time so that adjustments can quickly be made. Provide multiple ways that employees can give feedback such as in discussion groups and through anonymous email or suggestion boxes.

Step 4: Evaluating and Improving the Program

Use of data is a consistent theme throughout all four phases. Data collected during the assessment phase informs planning but also provides the baseline to measure changes over time. As shown in Figure 7, plan for evaluation upfront, making sure to document the benefits and other outcomes of the prevention initiative. In addition to return on investment, consider measuring value on investment which goes beyond concrete dollar amounts to include indirect costs such as presenteeism,⁶³ job satisfaction, and morale (see the following resources). These often are short-term outcomes that drive long-term costs.

Components of a Comprehensive Prevention Program

This guide includes sections on each of the eight prevention strategies illustrated here⁶⁴ as well as two additional emerging workplace strategies. These strategies minimize workers' risks and allow supportive services to be tailored to employers' workforce needs. Further, they span the prevention, treatment, and recovery continuum of care for OUD and mental health. While a comprehensive workplace program may include most, if not all, of these strategies, it takes time to build, and the process of strengthening and improving upon what already exists in the workplace will be ongoing. Tailoring prevention programs to the context and needs of the employer and workforce is crucial. Small workplaces may not have the resources to implement all these components, at least initially. However, it is important to increase workplace prevention capacity in a coordinated and linked manner rather than as disconnected, stand-alone efforts.



The following sections summarize the importance of each strategy, its limitations, and actionable steps to implement and improve prevention efforts. Each section also includes an illustration of using the Workplace Health and Well-Being Model (Figure 7) to plan and implement that strategy. Each section provides example activities that align with promising practices and are not intended to be exhaustive.

Resources for Applying the Workplace Health Model

Assessment and Evaluation

[Opioids and the Workplace: An Employer Toolkit for Supporting Prevention, Treatment, and Recovery](#), Kentuckiana Health Collaborative

This toolkit provides a thorough review of multiple measures that can be used to assess workforce needs and evaluate prevention activities over time. See p. 16 and the appendices in this toolkit.

[Worker Well-Being Questionnaire \(WellBQ\)](#), NIOSH

Respondent: Workers; Length: 15 minutes

This survey collects reports from workers in five areas: Work Evaluation and Experience; Workplace Policies and Culture; Workplace Physical Environment and Safety Climate; Health Status; Home, Community, and Society.

[Healthy Work Survey](#), The Healthy Work Campaign

This online survey helps identify sources of stress at work and measure health and productivity outcomes (e.g., mental and physical health, burnout, sick leave). It highlights potential solutions based on the results. There is also a survey for [Unions/Worker Advocates](#).

[HERO Health and Well-being Best Practices Scorecard](#)

Respondent: Employer

A free, web-based tool to help organizations learn about best practices for promoting workplace health and well-being and to discover opportunities to improve and measure progress over time. Results are compared with others nationally.

Planning and Implementation

[Implementing an Integrated Approach: Weaving Worker Health, Safety, and Well-being into the Fabric of Your Organization](#), Harvard TH Chan School of Public Health

The guidelines provide a step-by-step guide with real-world examples to help organizations plan, implement, and evaluate integrated health, safety, and well-being programs.

[Fundamentals of Total Worker Health® Approaches: Essential Elements for Advancing Worker Safety, Health, and Well-being](#)

This guide helps organizations identify opportunities to strengthen prevention related to workforce health and well-being and to measure progress. This helps organizations to better integrate workplace policies and practices and align with the elements of Total Worker Health.®

[Healthy Workplace Participatory Program](#), Center for Public Health in The New England Workforce

This toolkit provides support for engaging employees to develop health workplace interventions.

Workplace Health Promotion



Importance of Workplace Health Promotion

The workplace directly influences the health, safety, and well-being of workers, their families, and communities. As a place where adults spend a great deal of time, it is an ideal setting to promote worker health and prevent injury and illness.⁵⁹ Workers with certain chronic diseases may have a higher risk of injury,⁶⁵ and some injured workers may be more likely to use opioids.⁶⁶ Workplaces focused on improving health and well-being may reduce harmful opioid use.

Health promotion encompasses workplace policies, programs, and practices designed to improve health for the entire workforce. Workplace health promotion programs can generate cost savings and improve recruitment and retention, absenteeism, productivity, and employee engagement.⁶⁷ Health and well-being services can include:

- An onsite athletic trainer or physical therapist.
- Health education and coaching for behavior change (e.g., tobacco cessation, physical exercise, nutrition).
- Health screenings (e.g., blood pressure, cholesterol, depression, substance use).
- Disease prevention and management (e.g., diabetes prevention programs).
- Linkages to community resources.

An effective strategy can be to start small, providing a greater variety of options over time. Consider using surveys and conducting listening sessions to gather worker feedback to more effectively tailor health and well-being programs to align with your workforce's priorities.

How to Get Started with Health Promotion Strategies

Using the Workplace Health and Well-being Model (Figure 7) to guide planning and implementation of workplace health promotion, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Identify common illnesses and health risk factors among workers

Request de-identified information on medical claims for illnesses from an insurance administrator. Conduct focus groups or health risk assessments to identify priorities to start.

Collect feedback from workers on preferences for promotion programs

Identify several options and survey workers about their priorities. Consider having supervisors discuss ideas with workers before a shift.

Identify community-based resources with whom to partner

Inventory health-promoting resources in the community and explore potential discounts they might provide. Consider partnering with one or more community providers (e.g., local gym, athletic trainer) to reduce or eliminate out-of-pocket costs. For example, consider having an athletic trainer onsite one or more days per week to address proper lifting techniques and assist with flex and stretch.

2 PLANNING

Use data to decide which initiative(s) to offer

Based on the results of the initial assessment, identify which service(s) to provide. Create specific, measurable, attainable, relevant, and time-bound objectives related to the service (e.g., 25% of workers will complete a mental health or substance use screen within 1 year).

Collaborate across departments to align services with the overall workplace prevention program

Include HR, employee assistance programs (EAPs), supervisors, and worker representatives on the planning team. Identify areas of potential overlap and opportunities for coordination. Coordination can occur through shared personnel and finances, data and reporting systems, and decision-making.

Promote worker engagement in the design and implementation of services

Make sure that worker representatives contribute to the design and implementation of the service.

Define measures for tracking intervention success

Identify how worker health improvement will be measured (e.g., medical claims, EAP data, health surveys). If using external consultants, decide on the measures that will be reported upfront.

3 IMPLEMENTATION

Promote the benefits of available services and how they can be accessed

Make sure that workers understand the purpose, benefits, and access to services.

Gather feedback from workers and supervisors on a regular basis

Monitor use of services over time, barriers to accessing the service, and employee satisfaction. Talk with supervisors to obtain their feedback including how they think workers benefit. Use information to improve services in real-time.

4 EVALUATION

Plan to evaluate upfront and use the results to improve the process

Use the same data that was gathered during the planning process to evaluate progress. Identify specific outcome measures upfront that will help determine progress toward meeting the established goals and objectives.

Resources for Health Promotion

Integration of Health, Safety, and Well-being Programs

[Implementing an Integrated Approach: Weaving Worker Health, Safety, and Well-being into the Fabric of Your Organization](#), Harvard TH Chan School of Public Health

The guidelines provide a step-by-step guide with real-world examples to help organizations plan, implement, and evaluate integrated health, safety, and well-being programs.

[Fundamentals of Total Worker Health® Approaches: Essential Elements for Advancing Worker Safety, Health, and Well-being](#)

This workbook helps organizations assess current status and identify initial steps to improve workforce safety, health, and well-being, and to help employers measure progress. This helps organizations to better integrate workplace policies and practices and align with the elements of Total Worker Health.®

Substance Use Screening

The [CAGE-AID](#) is a common, very brief (four questions) tool that screens for potential alcohol and other drug use concerns. See Substance Abuse and Mental Health Services Administration's (SAMHSA) [Workplace Prevention Basics](#) (p. 13) for more information.

Health Risk Assessments

[NIOSH Worker Well-Being Questionnaire](#), NIOSH

Respondent: Workers; Length: 15 minutes

The survey assesses five areas: Work Evaluation and Experience; Workplace Policies and Culture; Workplace Physical Environment and Safety Climate; Health Status; Home, Community, and Society.

[CDC Worksite Health ScoreCard](#), CDC

Respondent: Employer; Length: 60 minutes

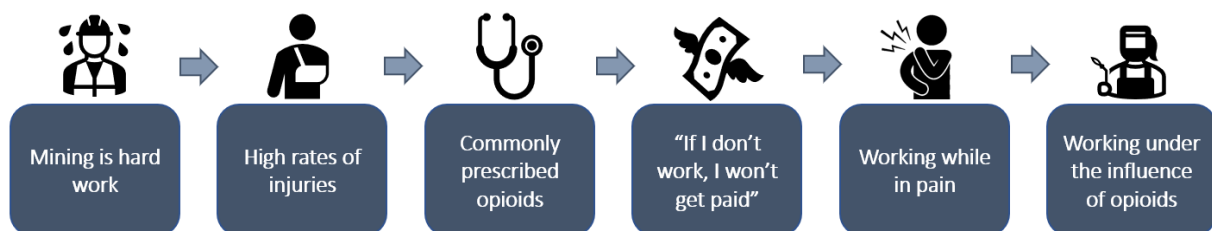
This online tool is designed to help employers assess their worksites to determine whether they have implemented evidence-based health promotion interventions or strategies. The tool allows employers to identify gaps in health, well-being, and safety programs, and to prioritize high-impact strategies for worksite programs on a variety of health topics.

Injury Prevention Programs



Importance of Injury Prevention

Mining is physically demanding and can lead to both acute and chronic musculoskeletal injuries. These injuries contribute to higher proportions of mine workers receiving opioid prescriptions than workers in other industries.³⁰ The “Pain Train”⁶⁸ graphic illustrates injury as one possible pathway to worker prescription opioid use and related safety hazards in the workplace.



The Pain Train demonstrates that difficult work tasks can lead to injuries, which may be treated with opioids, and if pain becomes chronic, prescription opioid use can become long-term

Acute injuries in mining are often the result of handling of materials and powered haulage machines in the workplace. Injuries may lead to workers' compensation claims, time lost from work, and the need for immediate medical intervention such as surgery and physical therapy.

Chronic MSDs develop over time, are associated with ergonomic exposures,⁶⁹ and are a common cause of pain in mining.²⁷ MSDs are the leading cause of disability among working-age (18–64 years) U.S. adults.⁷⁰ The U.S. Department of Labor highlighted mining as among the most hazardous occupations related to ergonomics.⁷¹ The common causes of MSDs include repetitive motions, non-neutral postures, vibrations, and lifting heavy or awkward objects.^{28,70} The most common MSDs among mine workers affect the back, neck, shoulders, and hands.⁷²

Because acute musculoskeletal injuries are reportable and more easily attributable to work, they have traditionally received more attention by employers. Key examples that could decrease the potential for pain treatment that includes opioids include employer prevention efforts that focus on reducing both acute and chronic MSDs. This can involve designing work to minimize ergonomic risks.

Strengthen Injury Prevention

There are several steps employers can take to decrease risks for MSDs and prevent the potential for pain treatment that includes opioids that result from these MSDs. These include:

- Assess, identify, and mitigate underlying work conditions that lead to common injuries.
 - Use available tools for root cause analysis
 - Examine work conditions in three domains: physical environment, work organization, and psychosocial environment.⁷³
- Adopt ergonomic programs to decrease chronic overuse injuries.
- Educate workers on the known risks and realistic benefits of opioid therapy and prepare them to discuss non-opioid pain management options with their medical providers.
- For workers needing surgery, ask the benefits coordinator or insurance broker to identify facilities that offer Enhanced Recovery after Surgery protocols, which have been shown to have shorter hospital stays, fewer complications, and reduced use of opioids for pain management.^{74,75}

Refer to the Resources for Injury Prevention that follow. Although some relate to construction and other industries, they can be adapted to fit the needs of mine operators.

How to Get Started with Injury Prevention Strategies

Using the Workplace Health and Well-Being Model (Figure 7) to guide planning and implementation of worksite injury prevention, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Evaluate common injuries among workers to establish priorities

Request de-identified information from the insurance administrator about medical claims for acute and chronic injuries. Use MSHA data and research literature to identify the most common injuries for mine workers. [NIOSH's ErgoMine](#) is an ergonomics audit tool that mine operators can use to assess slips, trips, and falls; evaluate MSD risk factors; and track solutions.

Identify gaps in practice by identifying the underlying causes of most common injuries

Target relevant working conditions (i.e., physical environment, work organization, and psychosocial environment) to identify important factors that contribute to the injury. (See pp. 30-32 of [Harvard's Guidelines for Implementing an Integrated Approach](#) for more information.)

2 PLANNING

Use data collected to assess priorities and develop an injury prevention plan

Based on data from the needs assessment, identify the prevention strategy best tailored to the organizational context to reduce injuries. Use a systems approach for planning, focusing on organizational-

level policies and practices first (e.g., environment and job design improvements). Second, consider worker-centric strategies (i.e., education and training) that can enhance the impact of the initiative. NIOSH provides examples of ergonomic solutions in [Simple Solutions for Surface Mine Workers](#) and training for workers in [Ergonomics and Risk Factor Awareness Training for Miners](#).

Establish visible leadership support

Leaders can effectively increase buy-in among supervisors and workers by openly expressing their support for the new initiative.

Engage worker representatives

Worker representatives are essential in identifying risks in the workplace and recommending potential solutions. Make sure that workers contribute to all aspects of the design and implementation of the initiative.

Define metrics for success

Create specific, measurable, attainable, relevant, and time-bound objectives related to the injury (e.g., decrease acute back injuries by 10% within one year). Employer injury reports, medical claims, workers' compensation data, health surveys, and injury investigations can be used to understand common injuries and trends. Walkthroughs, risk assessments, task analyses, review of policies, employee and supervisor interviews or focus groups, observation of work practices, and employee health or feedback surveys provide useful information about working conditions.

3 IMPLEMENTATION

Inform workers about the initiative

Workers are more likely to positively respond to the injury prevention initiative if they understand the reason behind it and how it will benefit them. Engage worker representatives as messengers and champions of the effort to increase overall workforce buy-in.

Maintain ongoing communication

Make sure to communicate with workers, supervisors, and leadership throughout the process. Request feedback and respond to input in a timely manner. Provide occasional progress reports in a company newsletter or during pre-shift meetings.

4 EVALUATION

Evaluate the impact of injury prevention initiatives

Use the same data gathered during the assessment, planning, and implementation phases to assess outcomes and trends over time. Identify specific outcome measures upfront that will help to determine progress toward meeting the objectives.

Resources for Injury Prevention

Ergonomics Resources

[Mining Topic: Ergonomics and MSD Prevention](#), NIOSH

Includes links to several documents that assist operators in reducing ergonomic risk factors, e.g., Ergonomics Process, Risk Factor Awareness, and Practical Demonstrations of Ergonomics Principles.

[Musculoskeletal Disorder Cost Employers Billions](#), National Safety Council MSD Pledge

By taking the pledge to reduce MSDs among workers, employers will gain access to a community sharing solutions and insights as well as free tools to assess and improve ergonomics.

[Best Built Plans Ergonomics Guides & Checklists](#), The Center for Construction Research and Training

Provides links to apps, trainings, and programs. This resource includes the NIOSH lifting equation, portable power-tools training and checklist, vibration training and checklist. While focused on construction, it can still be helpful for other industries developing ergonomics programs.

Step-by-Step Guide for Improving Safety and Health

[Implementing an Integrated Approach: Weaving Worker Health, Safety, and Well-being into the Fabric of Your Organization](#), Harvard TH Chan School of Public Health

Step-by-step guide to implementing improvements in integrated health and safety. Discusses the various types of work conditions (physical environment, work organization, and psychosocial environment) that impact injuries and provides examples and recommendations of how to assess their impact on injuries and health.

Resources to Assist Working with Healthcare Providers on Pain Management

[Physicians'/Providers' Alert: Pain Management for Construction Workers](#), The Center for Construction Research and Training

Handout for workers who are seeing healthcare providers for pain. This resource includes questions to ask regarding non-opioid pain management options and whether the medications prescribed can affect the mine workers' safety at work. Although this version is for construction workers, it can be adapted for other groups of workers.

[CDC: Working Together with Your Doctor to Manage Your Pain, Centers for Disease Control and Prevention](#)

Website that provides tips on working with healthcare providers to manage pain.

Workplace Policies



Importance of Substance Use Policy

Policies provide a critical foundation to support organizational functioning and can align with company culture and values to help maximize their effectiveness. SAMHSA recommends that employers develop workplace substance use policies.⁷⁶

Strengthening Use of Policy for OUD Prevention

Historically, zero-tolerance policies (i.e., termination for a violation) have dominated workplace substance use policy even though termination is not required by the Drug-Free Workplace Act of 1988.⁷⁷ While the Act requires employee sanctions and remedies, employers can require employees with violations to complete a treatment or rehabilitation program as opposed to termination. Yet, fear of repercussions from their employer is a major barrier preventing workers from seeking treatment for OUD and other SUDs.⁷⁸ There has been increased recognition that workers and employers benefit by implementing policies that allow workers to maintain employment during substance use treatment and recovery and allow mine operators to retain valuable, experienced workers.

Employment is an important component of successful treatment and recovery from OUD. Maintaining employment may provide employees with health care benefits, access to treatment and recovery services, financial stability and work-related social connections. These factors improve a worker's chances of recovery.⁷⁹

Similarly, employing workers in recovery is good for business. Mining has been among several industries having higher turnover rates due to SUDs than other industries,⁸⁰ exacerbating labor shortages. Workers who are in recovery miss fewer workdays and have less job turnover than workers without SUDs.⁴⁷ Workplace cultures that support workers in recovery can promote job satisfaction and higher retention among all workers.

Mine operators can integrate policies that are designed to promote safety while balancing organizational and worker interests. While zero-tolerance policies specifying termination may be appropriate for serious violations of policy, an overreliance on these policies can be harmful to workers. The following policies support the needs of employers and workers more holistically.

- **Second Chance Policy:** Rather than immediately terminating an employee with a positive drug test, an employer may make continued employment contingent upon the employee completing treatment, passing return-to-duty requirements, and remaining drug-free. As an example, a “Contingency Management” approach can help to motivate employees and support recovery using incentive-based methods.⁸¹ Another example from an Indiana law provides a [sample second chance hiring and employment protocol](#). These policies work better if employees are ready to accept help and employers are ready to offer benefits and other recovery supports.

- **Return-to-work Policy:** Similar in practice to returning to work after medical or surgical conditions, this policy is often used with second chance policies to specify the conditions for return after treatment for OUD. For these policies to be successful, job accommodations are crucial.
- **Job Accommodations Policy:** Like modifications that might be helpful for an injured worker, flexibility with their work schedules to attend appointments and take prescribed medications may benefit employees returning to work after treatment for OUD. Temporary, modified duties may also be helpful for these workers and others who are prescribed opioids by a physician related to an injury or surgery. Consider policies explicitly requiring employees to proactively report opioid prescription in these cases.
- **Naloxone Policy:** Strongly consider implementing a naloxone program to help prevent fatal opioid overdoses on work sites. Ensure that your naloxone policy specifies program procedures and training and reporting requirements. Refer to the section later in this guide for more about implementing naloxone programs.

Ultimately, implementing these integrated, recovery-friendly policies can help to strengthen employee trust, reduce stigma and discrimination, and support worker and organizational well-being.

Importantly, employers may wish to obtain legal counsel before implementing such policies to ensure compliance with applicable laws and regulations. Strongly consider the limitations and protections provided by the ADA and Family and Medical Leave Act. Some states are enacting legislation to provide additional support for worker health by promoting second chance policies and limiting liability for employers who implement naloxone policies.^{82,83}

How to Get Started Strengthening Policies for OUD Prevention

Using the Workplace Health and Well-Being Model (Figure 7) to strengthen workplace policy, the following illustrates steps employers can take during each of the model's four phases.

1 ASSESSMENT

Review current substance use policies and identify opportunities for improvement

Assess whether organizational policies provide treatment and recovery support options for workers with SUDs, facilitate continued employment, and avoid stigmatizing language.

Identify potential barriers to strengthening policies to support workers with SUDs

Assess leadership buy-in for supportive policies (e.g., second chance and return-to-work). Evaluate the capacity to coordinate work across departments, recognizing that oversight may be distributed across multiple departments. Evaluate whether policies are explicit and applied uniformly (i.e., policies that are vague may be open to interpretation, allowing policies to be applied unfairly between workers).

2 PLANNING

Collaborate across departments to strengthen policies

Work with operations, EAP, HR, and employee representatives to determine which policies will be added or revised. For example, consider adding a second chance policy and extending current policies (e.g., return-to-work) for medical conditions to include SUDs. Address discrepancies between drug-free workplace policies and more supportive policies.

Identify resources, roles, and responsibilities for managing workers in recovery

Identify who will manage workers covered by second chance and other policies (e.g., HR, EAP, external provider). Establish policies and procedures to ensure confidentiality for affected workers. For example, privacy is a concern for workers that may benefit from modified schedules.

Build capacity by making sure supervisors fully understand and can apply policies

Provide training to supervisors to explain the rationale for revisions to policies. Ensure open discussion so that any concerns are addressed before implementing the policy. Supervisor buy-in helps reinforce more support and trust among workers.

3 IMPLEMENTATION

Make sure employees understand policy updates

Provide information on updated policies in multiple ways (i.e., via email, flyers, and town hall meetings). Make sure that employees have a way to communicate concerns in a confidential or anonymous way.

Monitor supervisor attitudes and concerns

Monitor supervisor experiences with policies to address concerns as they arise.

4 EVALUATION

Evaluate the impact of policy changes

Monitor the frequency with which policies are used to highlight potential barriers and successes. Determine if the number of workers who have been terminated for substance use changes over time. Work with the EAP to determine if there are changes in the number of workers requesting support for OUD.

Resources to Support Policy Development

[Develop a Policy](#), SAMHSA

As part of SAMHSA's Drug-Free Workplace program, this resource provides information on components of a drug testing policy.

[Drug- and Alcohol-Free Policy Sample](#), Kentucky Comeback

This is a sample Drug- and Alcohol-Free Policy, including procedures for first, second, and third offenses that can be adapted to meet workplace needs.

[Naloxone Policy](#), The Alliance for Naloxone Safety in the Workplace

Provides a free, customizable template for developing a workplace naloxone policy (fillable PDF and Word document options).

[Return to Work, Resource Center](#), Health Links

This website offers several return-to-work policy samples as well as a modified-duty policy sample.

[Second Chance Policy and Agreement, Return to Work Agreement](#), Hamilton County (Ohio) Public Health

Recovery Friendly Hamilton County User Manual provides examples of these and other policies and agreements. Enter password "R3c0v3ry" to access the manual. See Chapter 3, p. 59. Developed and shared by Hamilton County Public Health.

Employee Education & Training



Importance of Employee Education

Education and training are important tools to ensure that all employees (employers, managers, supervisors, workers) have the knowledge and skills to identify and prevent health and safety concerns. Training helps to get everyone on the same page and facilitate buy-in and commitment to solutions.

Employee awareness training and education can include multiple learning objectives enabling workers to:

- Identify and reduce risks of prescription opioids for management of injuries, prescription opioid misuse, and OUD.
- Seek help for themselves.
- Recognize possible impaired work performance in a coworker.
- Help a coworker access help and supportive services.
- Respond appropriately to a potential overdose event.
- Reduce stigma by supporting open discussion and increasing knowledge.

The design and delivery of training is often strategic and intentional. Maximize the benefits of training by using the following [principles of adult education](#).

Clearly communicate why the training is important and relevant. Sharing personal stories can be very helpful in engaging workers about OUD, overdose, and suicide. Peers who are willing to share their stories can be very effective champions of OUD prevention efforts.

Incorporate visual, auditory, and hands-on elements to cater to different learning styles. Whenever possible, promote interactive, small-group discussions and active problem solving and minimize lectures.

Tailor training to workers' roles and responsibilities. Workers with safety sensitive jobs may benefit from additional training, while supervisors and managers may also benefit from additional training to support leadership responsibilities.

It can be helpful to provide training to managers and supervisors before workers. If supervisors aren't committed to the prevention efforts or aren't adequately prepared to provide leadership and support, educational efforts may fail.

Finally, some people continue to believe that having OUD or a SUD is a personal failing, rather than a chronic medical condition that can be treated successfully.⁸⁴ Employee education can help overcome this misunderstanding by providing non-judgmental information about work-related risk factors that can lead to SUDs, thus reducing stigma.

How to Get Started Educating Employees about Opioids

Using the Workplace Health and Well-Being Model (Figure 7) to guide planning and implementation of employee education, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Ask workers about their perspectives

Consider conducting site visit discussions, focus groups, or surveys with workers to understand their perspectives on opioids as treatment for pain, prescription opioid misuse, and OUD. For example, ask workers for feedback on workplace stressors, challenges, and perceived risks of taking prescribed opioid medications for pain. Ask workers to identify barriers to prescription opioid misuse prevention goals (e.g., using non-opioid pain management).

Identify gaps in addressing education and training

Document what training is currently provided for each group of employees (e.g., mine workers, supervisors, managers) and when the training occurs.

Anticipate challenges upfront

Define challenges to providing training such as limited resources, less than optimal management support, competing priorities for worker time, and worker distrust. Be sure to consider creative solutions to these challenges and engage these solutions in planning and prior to implementation.

2 PLANNING

Define goals, objectives, and timeline for training

Repeat training regularly to reinforce and update workers' knowledge. Make sure training raises awareness about risk factors for prescription opioid misuse and OUD and workplace policies and procedures.

Use a variety of instructional methods and formats

Maximize group discussion to promote learning. Consider providing a comprehensive training to larger groups and then following up to reinforce key messages using toolbox talks, EAP presentations, posters in breakrooms, virtual content, and wallet cards. In many cases, incorporating small group discussions within their training programs will improve worker experiences.

Select relevant training materials and personnel

Review and identify educational materials for mine workers and supervisors. Adapt training materials, posters, and fact sheets from other organizations as needed. Consider what personnel are best positioned to support training (e.g., obtain training approvals, adapt materials, conduct training) and partners (e.g., labor, health and benefit providers) who can deliver training or reinforce health messages.

Reinforce key messages within a training and over time

Repeat key messages using a variety of formats, across settings, and delivered by different messengers. Adults retain more information when messages are repeated and personalized.

Build capacity among trainers

Ensure trainers receive the education and resources to feel comfortable and confident in their trainings can benefit all parties.

3 IMPLEMENTATION

Collect employee feedback in real-time to support improvements

Collect feedback from attendees at the end of the training using a variety of strategies (e.g., anonymous surveys, email, observation). Assess what went well and what can be improved. Make suggestions to facilitate worker engagement and active participation.

Share training progress often

Build support and buy-in by communicating progress, feedback, and related training improvements with management and workers at a regular time interval (e.g., quarterly).

4 EVALUATION

Evaluate impacts of training

Establish measures of success during planning, including qualitative and quantitative data. For example:

- Document the number of trainings provided and employees who attended.
- Use brief post-training surveys to assess worker knowledge, attitudes, and satisfaction.
- Use periodic employee surveys to examine changes in attitudes and workplace culture.

Resources for Employee Education

Fact Sheets and Tip Cards

[Injured on the Job or at Home? Ask Your Health Care Provider These Questions Before Accepting Opioids](#), NIEHS Worker Training Program

[Preventing an Opioid Overdose: Know the Signs. Save a Life](#), Tip Card, CDC

[Conversation Starters: If You Have Chronic Pain](#), CDC

Toolbox Talks

[Contractor Resources](#), Associated General Contractors of America

Includes toolbox talks, podcast, videos, practice guides, and others. The [12-pack of toolbox talks](#) spans a variety of topics including mental health, reducing stigma, stress, how to get help, opioid and other pain medicines, suicide awareness, and feeling fatigued, among others.

Resources for Employee Education (continued)

Leadership and Supervisor Training

[Impairment Recognition and Response Training for Supervisors](#), National Safety Council

This is a one-hour eLearning course designed to prepare supervisors to recognize and address impaired work performance and support worker safety and well-being.

[Opioids & the Workplace: Leadership Training](#), NIEHS Worker Training Program

This course is intended for leaders from organizations who have influence on organizational policy, procedures, and culture. The course focuses on identifying gaps and opportunities to prevent and respond to prescription opioid misuse and illegal opioid use.

Employer Prevention Guides and Toolkits

[Workplace Prevention Basics](#), SAMHSA

An interactive employer guide to identify and prevent prescription opioid misuse, illegal opioid use, and other substance use in the workplace.

[Employer Guide to Preventing Opioid Harms in the Stone, Sand, and Gravel Mining Sector](#), Center for the Promotion of Health in the New England Workplace

This guide describes strategies that can be used to support OUD prevention, treatment, and recovery and provides links to a variety of resources.

[Workplace Guidelines to Prevent Opioid and Substance Abuse for the Construction Trades](#), Healthier Workforce Center of the Midwest

The guidelines help employers, unions, and union health funds evaluate their OUD prevention planning and implementation of strategies.

Worker Education

[Opioid Hazard Awareness for Stone, Sand and Gravel Miners MSHA Refresher Training](#), Center for the Promotion of Health in the New England Workplace

This 45-minute training was designed for sand and gravel workers and meets the requirements of the health requirement of MSHA's Part 46 Health and Safety Refresher Training. This module is also available as a narrated video training.

[Opioid Awareness Training Program](#), The Center for Construction Research and Training

This one-hour training is designed to promote awareness of risks, support workplace prevention, and promote help seeking. The module is intended for experienced instructors and includes presentation slides, a facilitator's guide, and a participant handout.

[Naloxone Training](#), The Alliance for Naloxone Safety in the Workplace

This video course informs workers of the danger of opioid overdoses, how to identify them, and how to use naloxone nasal spray to help save someone's life. This [poster](#) advertises the course and provides a QR code to access the free course. These [Naloxone FAQs](#) may also be useful.

Drug Testing Programs



Importance of Drug Testing Programs

Some non-federal employers (e.g., with federal grants, some contracts, and/or workers in [safety sensitive jobs](#)) are required to establish [Drug-free Workplace Programs](#) that include written policies and drug-testing requirements.⁸⁵ Although not required by MSHA, employers frequently use drug testing for pre-employment screening, random screening, and reasonable suspicion testing.

Drug testing programs can serve important functions as part of a comprehensive workplace substance use prevention program. They can identify workers who potentially pose safety risks in the workplace and who may benefit from treatment services for prescription opioid misuse or a SUD. However, drug testing programs also have significant limitations when addressing SUDs in workplaces.

Limitations of Drug Testing Programs

Drug testing programs have limitations and challenges:

- Drug testing underestimates the detection of opioids among workers. Some 5-panel tests do not reliably detect synthetic or semi-synthetic opioids (e.g., fentanyl, oxycodone, methadone, buprenorphine). Be aware that opioids generally last for 1–4 days in a person’s system.⁸⁶
- Drug testing does not assess impaired work performance in real time. Evidence is inconclusive that drug testing decreases employee drug use and improves workplace safety.⁸⁷ Tests are also susceptible to tampering or alteration.
- Drug testing has involved litigation related to worker privacy, wrongful discharge, defamation, and discrimination.⁸⁸ The variations in state laws pertaining to drug testing and drug use, particularly cannabis, creates additional challenges.
- Strict policies, particularly when zero-tolerance is the predominant response for a failed test, can negatively impact morale and organizational culture.

Improving Drug Testing Programs for OUD Prevention

Instead of relying solely on drug testing programs, integrating and connecting multiple strategies may improve the effectiveness of OUD prevention. According to SAMHSA, in addition to drug testing, drug-free workplace programs can include clear policies, employee education, supervisor training, and an employee assistance program. Refer to [SAMHSA’s Drug-Free Workplace Toolkit](#) for more detail.

Interest in alternative approaches to assessing an employee’s ability to work safely in the workplace is growing. These approaches focus on real-time assessments of a worker’s cognitive⁸⁹ and psychomotor⁹⁰ abilities to determine safe work performance. Employers may also be more likely to proactively identify safety risks before an incident by training supervisors to identify and address impaired work performance more broadly, regardless of cause. In addition to drug use, work ability may be affected by fatigue, pain, acute or chronic health conditions (including mental health conditions), psychosocial stressors, family

demands, and stressful life events. Approaching safety holistically also is more actionable. The National Safety Council provides virtual [Impairment Recognition Training for Supervisors](#).

How to Get Started to Strengthen Drug Testing Programs for OUD Prevention

Using the Workplace Health and Well-Being Model (Figure 7) to strengthen workplace drug testing programs, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Identify opportunities to strengthen OUD prevention

Use the National Safety Council or SAMHSA resources (See Resources to Support Drug Testing Programs) to identify possible gaps in the drug testing program. Examine strengths and challenges that arise related to drug testing policies and procedures.

Collect organizational-level data about how drug test results are interpreted and used

When collecting this information, consider how many potential or current employees have been lost because of positive tests and how many employees have positive tests but have a valid prescription.

2 PLANNING

Collaborate across departments to expand options for employees with positive tests

Include relevant departments such as HR and occupational safety and health in updating policies relevant to drug testing. Update the policy to add recommended components. Consider implementing a second-chance policy.

Build capacity and support among supervisors

Provide training to supervisors to strengthen their understanding of the limitations of drug-testing in detecting use of prescribed opioids, prescription opioid misuse, and OUD. Provide [Impairment Recognition and Response Training for Supervisors](#) to better prepare them to recognize safety concerns in real-time. Make sure supervisors are fully aware of any updated policies, understand the rationale and benefits, and can apply the policies appropriately.

3 IMPLEMENTATION

Implement changes to policies and practices surrounding drug testing

Implement strategies to strengthen policies to prevent OUD and support workers with OUD. Make sure that workers receive education specifically on the risk of opioids, not just on what the substance use policy states. Identify ways to support workers with OUD.

Monitor use of policies

Monitor frequency of use of policies (i.e., frequency of positive tests that result in second chances, how often return-to-work policies are used for workers with OUD).

4 EVALUATION

Evaluate the drug testing program before and after changes

Compare drug testing results before and after updating the program. Work with the EAP to determine if there are changes in the number of workers requesting support for OUD. Monitor employee perceptions of organizational culture over time (e.g., do they report a more trusting, caring, less stigmatizing environment).

Resources to Support Drug Testing Programs

[Impairment Recognition and Response Training for Supervisors](#), National Safety Council

A one-hour eLearning course that provides frontline supervisors, safety professionals, and managers with the knowledge and skills to recognize and respond to perceived impaired work performance, no matter the cause.

[Drug Testing and Opioids](#), National Safety Council

Provides information on key steps in developing drug testing policies and programs.

[Workplace Prevention Basics](#), [Drug-Free Workplace Toolkit](#), SAMHSA

A Drug-Free Workplace resource that provides information on components that should be included in addition to drug testing, including employee education, supervisor training, written policies, and employee assistance programs.

[What Can Employers Ask Employees About Prescription Drugs?](#), RTI International

Fact sheet with information on what employers can ask about prescription drugs (e.g., opioids) before and during employment.

Medical, Behavioral, & Pharmacy Coverage



Importance of Health Benefits

Ensuring that mine workers have access to adequate medical, behavioral, and pharmacy benefits is beneficial for OUD prevention, treatment, and recovery. To improve employee use of eligible benefits, employers and unions providing benefits can take steps to help minimize barriers. For example, out-of-pocket expenses, inadequate availability of local providers, long wait times, and organizational factors (e.g., stigma, punitive safety and health climate, lack of supervisor support, and fear of termination) can derail prevention, treatment, and recovery.

For mine workers who have pain, coverage for non-opioid pain treatments may prevent workers from initiating opioid use. These treatment options may include one or more of the following:

- Physical or occupational therapy.
- Chiropractic care.
- Acupuncture, massage, and mindfulness treatments.
- [Non-opioid medications](#) (e.g., anti-inflammatories, nerve pain medications, antidepressants).
- Behavioral health (e.g., cognitive behavioral therapy).
- Procedures such as nerve blocks or injections.

Improving Health Benefits for OUD Prevention

Covering treatment costs and improving awareness of and access to various treatment options are important steps in encouraging more workers to access treatment. Providing recovery support can decrease workers' risks related to recurrence of OUD or other SUDs.⁹¹ Treatment and recovery plans can also be tailored to each person's unique needs. Coverage for evidence-based screenings and treatments such as the following can be included:⁹²

- Screening, Brief Intervention, and Referral to Treatment (SBIRT).
- Inpatient treatment.
- Outpatient treatment.
- Medications for OUD (i.e., methadone, buprenorphine, and naltrexone).
- Individual and group therapy/counseling.

In short, OUD prevention can be improved by increasing available benefits, reducing barriers to accessing services, and integrating health benefits with other substance use prevention strategies.

How to Get Started Strengthening Health Benefits for OUD Prevention

Using the Workplace Health and Well-Being Model (Figure 7) to strengthen employer health benefits, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Identify current medical, behavioral, and pharmacy benefits

Survey HR, health plan, and insurance personnel to document the benefits that are currently available to workers related to screening for SUDs, non-opioid pain management, and OUD or other SUDs.

Document service utilization and prescribing patterns

Request de-identified data from health plan, insurance, and pharmacy benefits administrators to assess the following indicators:

- Conditions for which opioids are prescribed.
- Types of pain treatments that members receive.
- Frequency of diagnoses for SUDs and OUD.
- Use of medications for OUD.
- Use of behavioral therapy for OUD.

Analyses can highlight potential prevention strategies.

2 PLANNING

Identify ways to strengthen employee health benefits

Explore the feasibility of broadening treatment options for pain and OUD, including financial resources and availability of treatment options locally and virtually. Consider the following characteristics when determining upgrades to benefits:⁹²

- **Coverage limitations**—Limiting length of stay, number of visits, or total spending can turn into barriers to appropriate treatment.
- **Cost-sharing**—Members who cannot afford co-payments or deductibles related to treatments for pain and OUD may be unable to access appropriate services.
- **Utilization management**—Examine how often denials occur for pain treatment and OUD and the justification for these denials.
- **Network adequacy**—Make sure that the health plan includes enough providers for pain management and OUD treatment. Without adequate providers who participate in the health plan, workers will not receive timely, convenient, and high-quality care, forcing them to forego care or assume substantial costs on their own for out-of-network care.

Coordinate with benefits administrators to decrease risk of long-term opioid use and OUD

Work with the pharmacy benefits administrator to implement the [2022 Clinical Practice Guideline for Prescribing Opioids for Pain](#) so that all patients with pain receive treatment that provides the greatest benefit relative to risk.¹⁵ Ask the pharmacy benefits administrator if there is a program to help reduce prescription opioid misuse, such as Prescription Drug Monitoring Programs. These programs help to decrease the ability of patients to receive opioids from more than one provider.

3 IMPLEMENTATION

Communicate changes to the workforce

Use multiple methods (e.g., newsletters, emails, flyers, posters, announcements) to inform the workforce of changes to benefits. Make sure that workers understand how to access updated services.

Monitor use of new health benefits

Monitor utilization rates of the services that have been added to the benefits package. Consider anonymous surveys to obtain feedback on services and whether workers have problems accessing them in a timely manner. Assess awareness of new services informally (i.e., conversations with workers) or formally (anonymous surveys).

4 EVALUATION

Determine if upgrades to coverage strengthens OUD prevention

Without reviewing individual medical records, continue to work with health benefits provider(s) to evaluate for changes and efficacy in the types of pain and OUD treatments used by workers. For example, determine if use of non-opioid pain management treatments increases and opioid prescriptions decrease. Similarly, determine if workers show increased use of OUD treatments including medications for OUD and behavioral therapies.

Resources for Benefits

Benefit Design

[Opioids and the Workplace: An Employer Toolkit for Supporting Prevention, Treatment, and Recovery](#), Kentuckiana Health Collaborative

Section 4 (pp. 202-27 of the resource PDF) provides comprehensive information on health benefits including design, pain management, treatment options, and additional supportive benefits.

[Workplace Guidelines to Prevent Opioid and Substance Abuse for the Construction Trades](#), Healthier Workforce Center of the Midwest

This document (pp. 28-30) provides additional information on health benefits.

[Navigating Benefits and Health Care Data](#), Opioids at Work Employer Toolkit, National Safety Council

This document addresses coverage components and using data to understand workforce needs (e.g., pharmacy benefits, workers' compensation claims, legal concerns).

Benefit Trends

[2024 Workforce Mental Health: Trends Forecast](#), Lyra Health

Survey of global company employee benefits personnel about workplace mental health.

Treatment Locators and Help Seeking

[National Helpline, 1-800-662-HELP](#) (4357), SAMHSA

The National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or SUDs. Available by telephone or on the [internet](#).

[SAFEProject Support and Treatment Locator](#), SAFEProject

Search confidentially from a comprehensive list of substance use treatment/prevention support and treatment resources.

Employee Assistance Programs



Importance of Employee Assistance Programs

Employee Assistance Programs (EAPs) are benefits provided by companies to help employees with various personal or work-related issues. Examples include stress, anxiety, SUD, work or family conflict, work-life fit, and financial or legal problems. EAP professionals primarily address workers' needs through:

- Employee education.
- Evaluation and referral for further care/treatment.
- Short-term counseling.
- Treatment monitoring and recovery support (i.e., return-to-work).
- Employee and supervisor trainings.

Unions offer similar benefits through member assistance programs (MAP).

Investing in EAPs can provide a good return on investment, with a return of \$3–\$10 for every \$1 investment.⁹³ Evidence suggests that EAPs can reduce presenteeism, absenteeism, and improve worker health and well-being.^{94,95}

Challenges Related to EAPs

Not all workers have access to EAPs or MAPs. While roughly half of all private-sector employers provided EAPs in 2021, small employers less frequently provide EAP services (29% of employers with under 50 employees).⁹⁶

Research also shows that EAPs are underused, with only about 4% of employees using these services.⁹⁷ According to Mental Health America, the three main reasons that employees do not use their EAP include:

- Lack of awareness of EAP programs and services and how to access them.
- Concerns about the confidentiality and privacy of using benefits.
- Stigma associated with seeking help for mental health and substance use issues.

Other challenges can include difficulty navigating the system, long wait times for appointments, limited-service options and frequency, and limited access to qualified behavioral health and substance use professionals, especially in rural areas.

Strengthening EAP Effectiveness

Recent research suggests the most effective EAP models often offer a wide range of services that can, for example, support employees, their families, and individual managers.⁹⁸ Enhanced EAPs may integrate workplace health and well-being programs, employee education, risk screening, consultation for management, and critical incident response support, for example. As a result, utilization rates are higher at 10%–15%.⁹⁸

Integrating EAP services that focus on individual workers' needs with broader organization-wide efforts to strengthen workplace health culture can improve the effectiveness of SUD prevention overall.⁹⁹ For example, implementing supportive policies such as second chance and return-to-work not only supports those with SUD but also decreases stigma and promotes a more positive culture for all workers.

How to Get Started to Implement or Strengthen EAP Services

Using the Workplace Health and Well-Being Model (Figure 7) to add or strengthen EAP services, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Assess services provided by the current or potential EAP provider

Review current services or compare service offerings across alternative providers. Assess the availability of behavioral health and substance use treatment providers, typical wait times, and telehealth options. Assess whether the EAP provides support for workers including health and well-being programs, screening, and recovery and return-to-work oversight. Make sure that the EAP screens for substance use and factors associated with harmful substance use, as well as provides multiple options for inpatient and outpatient treatment for OUD. [SAMHSA](#) and the [Healthier Workforce Center of the Midwest](#) provide guidance on assessing to current or potential EAPs.

Track EAP measure for success over time

Request utilization metrics from the EAP such as number of workers and family members using EAP services, by types and frequency. EAPs are not allowed to provide details on individual employees and thus data will be de-identified. Other important measures of success include employee satisfaction, presenteeism, absenteeism, recruitment/retention, and other business metrics to assess Return on Investment and Value on Investment.

2 PLANNING

Develop internal leadership and capacity to support the EAP

Vocal support from leadership and unions is also important. Engaging an advisory group of employees to provide feedback on EAP design and marketing can promote trust across the workforce. Train supervisors about available services and the procedures for referring employees.

Expand resources so that mental health and substance use treatment services are timely and accessible

Employees seeking help for mental health and substance use treatment services deserve timely and streamlined access to services. It is beneficial to provide services when workers are ready for treatment. Build the diversity of network options over time including service options such as telehealth. Provide time off or flexible scheduling for workers to attend treatment and eliminate out-of-pocket costs, if possible, to reduce barriers to participation in treatment.

Plan marketing and communication of EAP services

Develop easy-to-understand communication materials to share with employees through multiple means (e.g., new-hire orientation, posters, flyers, emails, newsletters, toolbox talks, and annual training). Consider conducting a mental health and OUD awareness campaign including external EAP and healthcare partners so workers understand what is available and how to access services.

3 IMPLEMENTATION

Increase worker knowledge of EAP services

Share information about accessing EAP services often and using a variety of methods through the marketing plan developed during the planning phase. Emphasize that use of services is confidential.

Actively seek feedback from employees to monitor progress and improve services

Ensure that the EAP provider regularly shares performance metrics. Include questions on annual employer surveys that ask about EAP knowledge, access, and satisfaction.

4 EVALUATION

Evaluate the impact of EAP services

Continue to track EAP metrics and overall data on employee well-being over time. Establish milestones to achieve to facilitate continued improvement (e.g., minimum utilization rates for EAP counseling services, referrals for treatment).

Resources for Employee Assistance Programs

[Employer Resources, Employee Assistance Programs](#), SAMHSA

This website provides information on types of EAPs, costs and benefits of EAPs, questions to ask when selecting an EAP, and questions to ask on assessing costs and services.

[Workplace Guidelines to Prevent Opioid and Substance Abuse for the Construction Trades](#), Healthier Workforce Center of the Midwest

Refer to page 33 of the resource guidelines for a list of questions to ask when evaluating current or prospective EAPs.

[FindTreatment.gov](#), SAMHSA

This website provides treatment resources for OUD and mental health. It also includes a national helpline that provides 24/7 free and confidential information on mental health and substance use treatment referral options.

[Suicide Prevention Resource for Action](#), CDC

This document provides approaches to decrease the risk of suicides.

[SAFEProject Support and Treatment Locator](#), SAFEProject

Search confidentially from a comprehensive list of substance use treatment/prevention support and treatment resources.

[Substance Use: Prevention, Screening Tools and Workplace Policies](#), National Safety Council

Peer Programs



What are Peer Support Programs?

Peer support programs provide non-clinical services to help individuals struggling with SUDs.¹⁰⁰ The programs provide strategic support, provided by trained peer workers, to help those in need access treatment and maintain recovery afterwards.

In the workplace, these programs are typically administered through employee or member assistance programs (EAP, MAP). Historically, they have had a strong affiliation with labor.¹⁰¹

Importance of Workplace Peer Support Programs

Peer support providers most often have lived experiences, either their own or that of family members. They also have a keen understanding of the job and its demands and challenges.¹⁰² Peers usually serve as unpaid volunteers and participate in formal training, typically lasting 3–5 days, which includes certification.

The unique relationship between a peer and person in recovery is based on hope, trust, and empathy.¹⁰² Peers can identify people who are struggling, help them access services, and assist them throughout the recovery process by focusing on the three R's: recognize, react, and recommend.¹⁰² Because they are peer-workers first, they can help other workers identify aspects of work that may increase risks associated with recurrence of SUDs and may share their own recovery experiences. Those in recovery can be inspired when they see their fellow workers who are overcoming similar struggles.

This trusting, insightful relationship can make peer programs effective in supporting prevention, treatment, and recovery. Because recurrence of use is often a part of recovery, peers provide ongoing support to help workers extend gains made in treatment into the daily environment.¹⁰³ In community-based settings, research has demonstrated increased treatment retention, reduced recurrence rates, reduced substance use, and improved relationships with providers.¹⁰³ Moreover, “having peers help colleagues in distress is an effective way of both counteracting stigma and increasing help-seeking.”¹⁰⁴

Improving Peer Support in the Workplace

Peer support models have been understudied in workplace settings, with programs more established and researched in community-based or behavioral health settings.¹⁰⁵ While peer support for workers with SUDs has been integrated into Member Assistance Programs since the 1990s,¹⁰⁶ there is a shortage of peer training and certification programs available for non-union employers. Employers can consider enhanced EAP models to provide the structure and resources to support peer programs. Employers can also use digital behavioral health tools to address workers' needs.¹⁰⁷

Another approach of increasing peer support is to offer “first aid” type training for employees. These courses can facilitate awareness, understanding, conversation, and getting help for those in crisis. Because of the considerable overlap of SUDs, mental health disorders, and suicidality,⁴⁰ providing multiple training

options for workers may be helpful. Training may also help to reduce stigma surrounding mental health and substance use concerns. Examples of these training programs include:

- [Mental Health First Aid](#) is a one-day course developed to allow the public to identify, understand, and respond to mental health conditions and substance use disorders. It is similar to basic life support classes that teach cardiopulmonary resuscitation (CPR) skills for the general public to learn lifesaving treatments for people in cardiac arrest.
- [Question, Persuade, and Refer](#) (QPR) is a one-hour course that aims to prevent suicide and dispel harmful myths about individuals struggling with suicidal thoughts.

These courses can be implemented with or without an established peer support program. Some employers may decide to start with the awareness building courses and expand peer programming over time.

How to Get Started to Include Peer Support for OUD Prevention

Using the Workplace Health and Well-Being Model (Figure 7) to guide planning and implementation of peer-based services, the following illustrate steps employers can take during each of the model's four phases.

1 ASSESSMENT

Assess organizational and community resources to determine the feasibility of peer support

Consider the following assessment activities:

- Document the advantages and limitations of each strategy for the workplace.
- Inventory available community resources (e.g., community health/mental health center) with which the EAP or HR department can partner for training and/or peer support services.
- Explore virtual peer support and digital behavioral and health tools.

To learn more about implementing a support program with certified peer workers, reach out to the local union or contact the EAP program. Alternatively, contact local community health or mental health centers.

Assess leadership and supervisor buy-in for peer support initiatives

Visible, vocal leadership support is critical to success. It is critical to develop middle management and supervisor support prior to beginning a peer program.

Assess whether stigma may be a barrier to establishing a peer support program

Consider conducting organizational surveys to capture employee attitudes about mental health, workplace stress, and perceptions of stigma.

2 PLANNING

Develop a peer support improvement plan

Based upon results from the needs assessment phase, develop an initial strategy for peer support. Consider partnering with external providers in the community. Be clear about the goals and objectives. For

example, if starting with brief trainings (e.g., Mental Health First Aid, QPR), primary objectives may be to build greater mental health awareness across the workforce, increase dialogue about mental health, and reduce stigma.

Engage workers to identify potential peers

Approach the idea of a peer program and the opportunity for volunteer peers through open forums, newsletters, and informal conversations with workers. Share a point-of-contact for questions and to discuss training options.

Build capacity by developing a referral network

One of the primary goals of peer programs is to increase access to treatment and supportive resources for workers who are struggling. Work with the EAP and HR department to identify resources and referral mechanisms. This can be an iterative process to enhance the available resources over time. Start with local resources (i.e., community mental health center, behavioral health counselors, support groups) and then add virtual substance use resources (see SAMHSA resources).

3 IMPLEMENTATION

Conduct outreach on an ongoing basis to facilitate awareness, participation, and buy-in

Share information with workers on a regular basis through newsletters, posters, flyers, events, pre-shift meetings, and annual health meetings. This ensures that workers know who to reach out to for help. Workers who have been trained can share their experiences and encourage others to engage in awareness trainings. Plan outreach events to coincide with national awareness events such as [Mental Health Awareness Month](#), [Suicide Prevention Month](#), [Recovery Month](#), and [Overdose Awareness Week](#).

Encourage ongoing communication and feedback

Make sure to communicate with workers, supervisors, and leadership throughout the process. Request feedback from peers on what is working and what isn't working and for suggestions for improvement (e.g., additional training or referral options).

4 EVALUATION

Evaluate program outcomes to inform improvement

Identify measures of success during planning (e.g., numbers of peers trained and referrals made). Use ongoing employee surveys to track changes in workers' attitudes, perceived stigma, and health-related behaviors over time.

Resources for Peer Support

Peer Support Training and Education

[Member Assistance Program](#), International Union of Operating Engineers

This website provides education, stories, and supportive resources.

[Start Your Recovery](#), Labor Assistance Professionals

This website provides education, stories, and supportive resources.

Informal Training on Identifying and Responding to Mental Health or Substance Abuse

[Find a Course or Instructor](#), Mental Health First Aid

Information on local or virtual courses to train workers on how to identify and respond to people struggling with substance use or mental health disorders.

[Suicide Prevention in the Workplace: Open Letter to Employers](#), QPR Institute

This page provides background information, a self-suit tool for employers, and a link to find an instructor. This course focuses on identifying and helping someone who may be suicidal. While the course is not focused specifically on harmful substance use, such substances can contribute to suicide. The QPR Institute provides in-person and online training. Employers may consider training and certifying a manager to teach the course within the organization.

National Helpline

[SAMHSA's National Helpline](#), SAMHSA

A national helpline that is 24/7 and provides treatment referrals for individuals and family members facing substance use disorders or mental health problems. The helpline provides referrals to local treatment facilities, support groups, and community-based organizations.

EMERGING PREVENTION STRATEGIES FOR OUD AND SUD PREVENTION

In addition to the eight workplace strategies previously reviewed, two additional strategies are relatively recent efforts to prevent nonfatal and fatal opioid overdoses in workplaces. Recovery-Ready Workplace efforts offer a holistic approach that utilizes multiple strategies to prevent harmful substance use, provides access to treatment, and includes practices that support recovery. In addition, efforts to provide access to naloxone in workplaces greatly accelerated after the Food and Drug Administration made naloxone available for use without a prescription in 2023. Both efforts are outlined in the following sections.

Recovery-Ready Workplace Programs



Recovery-Ready Workplace Programs have rapidly emerged as a holistic, comprehensive workplace approach to support prevention, treatment, and recovery for workers with SUDs. Recovery-Ready Workplaces are workplaces that adopt policies and practices that are holistically supportive of workers with SUDs. The primary objectives are to reduce risks that can cause or prolong an SUD and reduce barriers to seeking care and maintaining recovery. Another goal is to foster positive workplace culture to eliminate stigma. Recovery-Ready Workplace Programs are also known as [Workplace Supported Recovery](#) and Recovery-Friendly Workplace Programs.

Efforts to support Recovery-Ready Workplace Programs by federal,¹⁰⁸ state, and local governments are growing rapidly. As of 2024, more than thirty states have Recovery-Ready Workplace initiatives. One of the earliest, [New Hampshire](#), launched its statewide effort in 2018. Some states have passed legislation that includes tax credits, grants, and other incentives for employers that become certified recovery-ready workplaces. A new National Recovery Friendly Workplace Institute will support state and local efforts and provide training.

The U.S. Department of Labor (DOL) recently launched the [Recovery-Ready Workplace Resource Hub](#) to support state and employer implementation efforts. The resources available on the Hub include guidance, tools, and a new toolkit, [Recovery-Ready Workplace Toolkit: Guidance and Resources for Private and Public Sector Employers](#). According to the DOL, Recovery-Ready Workplace policies and practices support:¹⁰⁹

- Employment opportunities for people in or seeking recovery.
- Help-seeking among workers with SUDs.
- Access to treatment, recovery support, and other beneficial services.
- Use of policies and practices (e.g., reasonable accommodations) to enable retention of workers in treatment.
- Prevention strategies to reduce worker risk of SUDs (e.g., injury prevention, education).
- Open discussion, education, and other strategies to reduce stigma.

These characteristics include many of the practices suggested in the discussion of components of a comprehensive prevention program. For example, policies and practices are integrated, comprehensive,

and engage workers. A key feature of Recovery-Ready Workplaces is that they demonstrate a shift away from zero tolerance towards more supportive policies (e.g., second chance, return-to-work, job accommodations). That shift helps to create a more trusting and caring health culture.

Maintaining work is an important contributor to worker recovery. Workers in recovery also strengthen the labor force. There are an estimated 50 million workers in the U.S. in recovery.¹¹⁰

Workers in recovery miss fewer workdays and have less job turnover than workers without SUDs.⁴⁷ Additionally, workplaces that support workers in recovery can benefit from increased productivity, decreased healthcare costs, and decreased incidents related to substance use.⁴⁹ NORC researchers estimated that construction and extraction employers save an estimated \$8,934 over a 12-month time period in turnover, absenteeism, and health care costs for each employee in recovery.³⁸

Resources for Recovery-Ready Workplace Programs

[Recovery Ready Workplace Resource Hub](#), U.S. Department of Labor

The Hub is an online resource hosted by the U.S. Department of Labor in collaboration with other agencies. The RRW Resource Hub provides guidance, tools, best practices, and other resources to help public and private employers. The resources include a new toolkit, [Recovery-Ready Workplace Toolkit: Guidance and Resources for Private and Public Sector Employers](#).

[The Recovery Friendly Workplace Initiative](#), New Hampshire

The website provides information about the state's initiative as well as training and other resources.

[Workplace Supported Recovery Programs](#), NIOSH

The website provides an overview of Workplace Supported Recovery Programs and links to resources.

[Initiatives to Prevent Opioid Misuse and Promote Recovery Friendly Workplace Programs](#), NIEHS

This report highlights examples of initiatives developed by employers, unions, community-based organizations, and government agencies for the prevention of prescription opioid misuse and illegal opioid use and promotion of recovery friendly workplace programs.

Integrating Naloxone into the Critical Response Plan



Naloxone is a lifesaving drug that reverses opioid overdoses. It can help restore breathing and reverse the unconsciousness that occurs in overdoses. Emergency and non-emergency responders alike use the medication to save the lives of people who have overdosed on opioids. First approved by the Food and Drug Administration (FDA) in 1971, naloxone nasal spray is now available for use without a prescription.¹¹¹ Administration of naloxone is straightforward, and training is readily accessible online.

Anyone who uses opioids is at risk for overdose, regardless of the setting. In 2022, there were 525 overdose deaths in the workplace, representing almost 10% of all occupational injury deaths.²¹ Mine workers may be at higher risk for opioid overdose than workers in most other industries. Workers' compensation research has shown that mine workers were prescribed opioids more often for pain, at higher doses, and for longer periods than most workers in other industries.³⁰ In fact, mine workers have been reported to have among the highest rates of prescription opioid use compared with other industries.³

Implementing a Workplace Naloxone Program

Increasingly, employers are implementing naloxone programs to save lives in the event of an overdose at work or a job site. These programs can be integrated into an employer's critical incident response plan.

To support implementation of a naloxone plan, it is important for employers to develop a naloxone policy, provide employee training, develop plans for procuring and storing naloxone, and establish a records management plan. It is also important to define roles and responsibilities for management and employees who witness or assist in responding to a potential overdose. Legal counsel may be engaged to ensure the program is consistent with the state's naloxone and Good Samaritan rules. Refer to NIOSH's factsheet, [Using Naloxone to Reverse Opioid Overdoses in the Workplace: Information for Employers and Workers](#), for more information on assessing the feasibility, planning, and implementation of a program.

Another important source for naloxone resources is the [Alliance for Naloxone Safety in the Workplace](#). Formed in 2022, the Alliance includes business, labor, trade, and non-profit organizations who advocate for workplace naloxone programs and provide free resources including [policy templates](#) and naloxone training.¹¹² The resources include these sources and others to support planning for a naloxone program.

Resources for Naloxone Programs

Developing a Naloxone Program

[Using Naloxone to Reverse Opioid Overdose Factsheet](#), NIOSH

This guide outlines considerations to determine whether a naloxone program is feasible and details the steps required to establish a program including risk assessment, records management, training, purchasing and storage, PPE, and follow-up care.

Policy Development

[Workplace Policy: Free, Accessible, and Actionable Naloxone Policy](#), Alliance for Naloxone Safety in the Workplace

Provides a complimentary policy template that will help an employer prevent opioid-involved deaths on company premises. Available as an editable Word Document or fillable PDF.

State-by-State Rules

[State Naloxone Access Rules and Resources](#), SAFEProject

This page provides state-by-state naloxone access rules and resources.

[Good Samaritan Laws: State-By-State Analysis](#), SAFEProject

This page provides state-by-state rules, regulations, and resources regarding Good Samaritan Laws.

Training and Education

[Naloxone Training](#), The Alliance for Naloxone Safety in the Workplace

This video provides an overview of signs of opioid overdose and how to use naloxone nasal spray. This [poster](#) advertises the course and provide a QR code to access the free course. These [Naloxone FAQs](#) may be useful.

[Respond Ready Workplace](#), National Safety Council

This site offers training and support resources, including links to assist with bulk purchasing of naloxone and free, online naloxone training.

[Naloxone DrugFacts](#), National Institute on Drug Abuse

This website provides information about naloxone and its administration, precautions, and access.

LEGAL CONSIDERATIONS

Finally, it is important that new or revised prevention strategies (i.e., policies, practices, and programs) comply with local, state, federal, union, and industry laws, agreements, and regulations. Thus, employers may consult with legal counsel and emphasize worker confidentiality and privacy.

Although not an exhaustive list, the following federal regulations relate to employer policies and programs for workers with substance use and mental health disorders.

Americans with Disabilities Act (ADA)

- ADA applies to employers with at least 15 employees.
- ADA does not name covered disabilities, but SUDs are usually considered to be disabilities under ADA.
- Employers cannot discriminate against workers based on healthcare status or treatment.
- Employers cannot inquire about disabilities or medical issues unless they are job-related.
- Employers cannot discriminate against workers who are in recovery or who use medications to treat OUD.
- Employees do not have the right to use medications (prescription or non-prescription) during their work shift that can be a safety risk.
- Illegal opioid use is not protected.

Health Insurance, Portability and Accountability Act (HIPAA)

- Limits how covered entities disclose and use medical information.
- Drug testing results should be considered confidential medication information.
- Ensures confidentiality of sensitive information (e.g., communications regarding medical issues or substance use).

Mental Health Parity and Addiction Equity Act (MHPAEA)

- Does not require that a health plan cover mental health diagnoses, but those plans that do cover mental health services are to provide them in an equitable manner.
- Equitable benefits apply to aspects like co-pays, out-of-network coverage, limitations on services, and determinations of medical necessity.

Family and Medical Leave Act (FMLA)

- Provides up to 12 weeks of unpaid leave for eligible workers or their family members for serious medical conditions.
- Substance use treatment may qualify under FMLA as a serious medical condition.
- Applies to employers with at least 50 employees.

Legal Resources

[10 Steps to Avoid Legal Problems](#), SAMHSA

This site provides best practices that are helpful for all organizations that strive for a drug-free workplace.

[Employment Laws: Medical and Disability-Related Leave](#), Department of Labor

[The Family and Medical Leave Act, Fact Sheet #28](#), Department of Labor

[The Mental Health Parity and Addiction Equity Act \(MHPAEA\)](#), Centers for Medicare and Medicaid Services

[The ADA: Your Responsibilities as an Employer](#), Equal Employment Opportunity Commission

KEY TAKEAWAYS AND FUTURE WORK

There is a growing cultural shift in U.S. workplaces recognizing the importance of worker health and well-being, especially given the troubling numbers of workers experiencing substance and mental health disorders, overdose, and suicide. Because the workplace directly influences the health, safety, and well-being of workers, it is an ideal setting to promote worker health and prevent injury and illness.⁵⁹

The mining industry has experienced greater burden of prescription opioid use, illegal opioid use, and fatal opioid overdoses compared to most other industries.^{3,4} Employers in the mining industry can play a crucial role in improving the health and well-being of mine workers. An important first step is to identify and understand factors that can contribute to workers' increased risk of harmful opioid use. Further, implementing evidence-based strategies to reduce worker OUD and facilitate workers' access to prevention, treatment, and recovery supports is a critical next step. The key for employers is to tailor evidence-based prevention strategies to workplace priorities, understanding that addressing any complex problem takes time and persistence.

Employers can implement effective strategies to prevent worker harmful opioid use and OUD while also promoting worker mental health and well-being. Some of these strategies are more common workplace strategies (e.g., health benefits, EAPs, injury prevention). Other strategies have emerged more recently, including incorporating naloxone into critical incident response plans and implementing Recovery-Ready Workplace Programs. While peer programs have a longer history, their use has been quite limited outside of labor MAPs. Peer support programs have roots in community behavioral health and offer a relatively new and promising strategy for workplace settings. If peer support programs are not feasible through existing EAPs/MAPs, employers may explore partnering with local behavioral health clinics to increase employers' access to technical assistance and workers' access to treatment and recovery supports.

The use of promising practices may increase the effectiveness of prevention strategies implemented in the workplace. These include coordination across functional units, meaningful worker engagement, and ongoing assessment to support data-driven decision-making and evaluation. Additionally, policies and practices designed to promote a culture of health are associated with improved worker safety and health.⁵⁶ Finally, the Total Worker Health® approach can help employers prioritize and integrate a range of workplace strategies to build more holistic, tailored organizational efforts to promote worker health and well-being.

In its first iteration, this guide is designed to provide resources for occupational health and safety and other employer-based managers to plan and implement OUD prevention strategies. Collecting feedback from employers will facilitate improvements to the guide. It is also important to include evaluation of workplace OUD prevention efforts to identify and share lessons learned and promising practices that are associated with reduced upstream health risks and improved downstream worker health outcomes.

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