

WORKPLACE SOLUTIONS

From the National Institute for Occupational Safety and Health

Medication-Assisted Treatment for Opioid Use Disorder

Summary

The opioid overdose epidemic continues to claim lives across the country with a record 47,600 overdose deaths in 2017. (This number represents 67.8% of the 70,237 overdose deaths from all drugs) [CDC 2018a]. More Americans now die every year from drug overdoses than in motor vehicle crashes [CDC 2016]. The crisis is taking an especially devastating toll on certain parts of the U.S. workforce. High rates of opioid overdose deaths have occurred in industries with high injury rates and physically demanding working conditions such as construction, mining, or fishing [Massachusetts Department of Public Health 2018; CDC 2018b]. Certain job factors such as high job demands, job insecurity, and lack of control over tasks have also been linked to opioid use [Kowalski-McGraw et al. 2017]. Medication-assisted treatment (MAT) (also known as medication-based treatment*) has been shown to be effective for many people with opioid use disorder [SAMHSA 2015b; National Academies of Sciences, Engineering, and Medicine 2019]. In addition to providing general information about MAT, this document provides information for employers wishing to assist or support workers with opioid use disorder.

Background

Challenges related to prescription drug misuse, illicit drug use, and addiction

affect individual workers, their families, and both large and small businesses. In a 2017 National Safety Council survey, 70% of employers reported suffering the negative effects of prescription drug misuse; noting positive drug tests, absenteeism, injuries, accidents, and overdoses [Hersman 2017]. In 2013, the total U.S. societal costs of prescription opioid use disorder (OUD) and overdoses were \$78 billion. Of that, about \$2.8 billion was for treatment [Florence et al. 2016].[†]

In 2016, individuals with insurance coverage received \$2.6 billion in services for treatment of opioid addiction and overdose, a dramatic increase from \$0.3 billion in 2004 (based on claims data from large employers). Of that \$2.6 billion, \$1.3 billion was for outpatient treatment, \$911 million was for inpatient care, and \$435 million was for prescription drugs [Cox et al. 2018].

Employers may save up to \$2,607 per worker annually (based on 2012–2014 data) by getting workers into treatment [NSC et al. 2016; NORC].

Despite these findings, 80% of individuals in need of treatment for a substance use disorder in 2016 did not receive treatment [CBHSQ 2017]. Making medication-assisted treatment (MAT) more readily available to people with OUD can help diminish the opioid crisis in the United States.

Treatment

What is medication-assisted treatment (MAT)?

MAT uses medications approved by the U.S. Food and Drug Administration (FDA) in combination with counseling and behavioral therapies to treat OUD involving misuse of either prescription

*Note that some experts recommend the term “medication-based treatment” or MBT instead of MAT. This change in nomenclature aligns with the premise that OUD is a chronic disorder for which medications are first-line treatments (often an integral part of a person’s long-term treatment plan) rather than complementary or temporary aids on the path to recovery [National Academies of Sciences, Engineering, and Medicine 2019].

[†]The White House Council of Economic Advisers [CEA 2017] estimated the economic cost of these deaths related to opioids “using conventional economic estimates for valuing life routinely used by U.S. Federal agencies.” The CEA report “also adjusts for underreporting of opioids in overdose deaths, includes heroin-related fatalities, and incorporates nonfatal costs of opioid misuse.” CEA estimates that in 2015, the economic cost of the opioid crisis was \$504.0 billion, or 2.8 percent of GDP that year.”



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or illicit opioids. The medications reduce the cravings for and the euphoria (extreme pleasure) experienced with opioids [SAMHSA 2015b]. Some medications may also reduce the risk of subsequent overdose. Three drugs are commonly used in MAT:

- **Methadone** is a *full opioid agonist*, which means that it works similarly to other opioids such as heroin, morphine, or fentanyl. Unlike other opioids, methadone acts much more slowly in the body. This slower action helps to reduce the euphoric highs and lows associated with other types of opioids while diminishing withdrawal symptoms. Methadone treatment is available only through a federally regulated opioid treatment program (OTP) and requires those in the program to report to the OTP daily or near daily to obtain the medication. Methadone itself can be addictive and misused, so it is important that it be used only as prescribed and under medical supervision.
- **Buprenorphine** is a *partial opioid agonist*, which means that it does not have the full effect of other semi-synthetic opioids in the same class, such as heroin or oxycodone. The drug is long-acting, works slowly, and, similar to methadone, helps prevent the intense cravings and withdrawal symptoms associated with opioid use. Buprenorphine is available by itself or in combination with naloxone, an *opioid antagonist* that reverses or prevents the effects of opioids. Adding naloxone discourages the misuse of buprenorphine. While naloxone has no effect when the combination (buprenorphine/naloxone) is used as directed by sublingual tablet or buccal film, the naloxone

does work to block the effect of buprenorphine when the combination is injected or used nasally. MAT using buprenorphine is available in healthcare settings outside of an OTP under certain circumstances. The Drug Addiction Treat Act of 2000 allows physicians who meet certain qualifications to obtain a waiver to treat OUD with buprenorphine in primary care settings. Such waivers may make this treatment more accessible to those seeking treatment. Like methadone, it is possible for buprenorphine to be misused when not taken as prescribed.

- **Naltrexone** is an *opioid antagonist* that blocks the euphoric and sedative effects of opioids such as heroin or morphine. It also reduces cravings for opioids [SAMHSA 2015b; NIH 2018a]. This medication may also be prescribed outside of an OTP.

Table 1 lists the formulations and possible side effects of each of these medications.

In addition to the side effects, serious drug interactions between MAT and other drugs (including alcohol) are also possible.

What are the typical steps in medication-assisted treatment (MAT)?

Treatment for OUD begins with stabilization and opioid withdrawal management followed by medication maintenance combined with counseling or behavioral therapy. Underlying health conditions that may be influencing opioid

Table 1. Formulations and side effects of medications used in medication-assisted treatment (MAT).

| Drug | Formulations [‡] | Potential adverse side effects |
|---|--|---|
| Methadone | Tablet (Dolophine) Oral concentrate (Methadose) | Respiratory depression, heart rhythm problems, low blood pressure, upset stomach, vomiting, constipation, dizziness, light-headedness, sedation, weakness |
| Buprenorphine (Subutex) | Patch (Butrans) Intradermal implant (Probuphine) Injection (Sublocade, Buprenex) Sublingual tablet | Constipation, nausea, vomiting, headache, drowsiness, sedation, insomnia, lack of energy, weakness |
| Buprenorphine/Naloxone (in combination) | Buccal film (Belbuca, Bunavail) Sublingual tablet (Subutex, Zubsolv) Sublingual film (Cassipa, Suboxone) | Constipation, nausea, vomiting, headache, insomnia, lack of energy |
| Naltrexone | Oral (Revia, Depade) Injectable suspension for extended release (Vivitrol) | Upset stomach, vomiting, diarrhea, stomach pain, headache, anxiety, dizziness, drowsiness, lack of energy, joint and muscle pain |

Sources: NIH 2018a; IBM Micromedex DRUGDEX 2018; ASAM 2015; Leshner 2019
[‡]Some formulations have generic versions available.



use should also be addressed. In later phases of treatment, healthcare providers work with patients to determine when the medication(s) can be tapered or stopped.

What is the typical length of treatment?

Length of treatment is highly variable with all three MAT drugs and spans from months to years. Long-term treatment is often needed to prevent relapses. A decision to taper off medication depends on factors such as compliance, tolerance, adverse effects, and a patient's progress toward abstinence from opioids. Tapering off often takes several months [ASAM 2015]. Removing someone from MAT abruptly or prematurely may increase the risk of relapse and subsequent overdose.

What is an opioid treatment program (OTP)?

OTPs are housed in facilities that provide substance abuse treatment including MAT for OUD. MAT patients treated in OTPs must receive counseling, which can include different forms of behavioral therapy. These facilities are accredited by the Substance Abuse and Mental Health Services Administration (SAMHSA), licensed to operate by the state where located, and registered with the U.S. Drug Enforcement



Administration (DEA) [SAMHSA 2015a]. Some MAT medications are only available through an OTP, while others can be obtained in other healthcare settings.

Can drugs used as part of medication-assisted treatment (MAT) cause side effects that impair work activities?

Research has shown that, when provided at the proper dose, medications used in MAT have no adverse effects on a person's intelligence, mental capability, physical functioning, or employability [SAMHSA 2015b]. However, side effects of the medication(s) may impair a person's ability to drive, operate heavy machinery, or perform other functions safely. Side effects will vary depending on the specific medication, dosage, and duration of treatment. Workers with safety-sensitive jobs may be subject to restrictions or limits on the jobs or duties they perform while using these medications. These restrictions may include operating motor vehicles, forklifts, cranes, and other types of heavy equipment, or making decisions that can affect the safety and health of others (such as dispatchers, operations managers, or other jobs requiring high levels of cognitive function or judgement). Case-by-case determinations by qualified occupational healthcare providers may be necessary based on the potential for impairment resulting from MAT. Reasonable accommodations by the employer should be considered when appropriate.

When starting MAT, the worker should avoid driving and hazardous work activities until dosages are stabilized, side effects are managed, and impairment risks related to the work to be performed are assessed. Side effects often diminish over time [ASAM 2015; IBM Micromedex DRUGDEX 2018].

Gaining Access to Medication-Assisted Treatment (MAT)

Does employer health insurance cover medication-assisted treatment (MAT)?

The Affordable Care Act requires most insurers to cover treatment for substance use disorder. In addition, the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008 requires health insurers and group health plans to provide benefits for behavioral health services at the same level as primary care. However, insurers may not cover all types of treatment for substance use disorder or may cover only certain treatments [SAMHSA 2017]. In addition, employers can often play an important role in influencing the level of healthcare and pharmacy benefits included in employer-sponsored plans for the treatment of substance use disorders.

How can workers find medication-assisted treatment (MAT) healthcare providers?

Workers should turn to their physician and healthcare insurance provider for assistance. Insurers can provide information about coverage and often have access to a network of preferred MAT providers. Some employers provide Employee Assistance Programs (EAP) offering counseling, support, and referrals. EAP and other member assistance programs (present in many labor organizations) give workers a safe, confidential space to talk about personal issues (including substance use disorder) and can provide referrals to local treatment facilities [ASSP 2018]. These types of programs can help foster a positive, supportive organizational culture that reduces the fear of serious repercussions when workers seek care.

Many states offer treatment programs for those without insurance coverage. Once a provider is identified, the worker should contact the provider for an appointment. Some programs are also able to offer walk-in services. In times of crisis, many people access services through hospital emergency rooms.

Other resources and information about locating addiction treatment centers can be found at <https://findtreatment.samhsa.gov/> or by calling the National Helpline at 1-800-662-4357.

Regulations, Rights, and Worker Protections

Are opioid treatment programs (OTP) regulated?

OTPs are required by law to be accredited to help monitor the quality of care provided and the appropriate dispensing of opioid treatment drugs [SAMHSA 2015a; The Joint Commission 2018]. For further information about these federal regulations, please refer to The Substance Abuse and Mental Health Services Administration's (SAMHSA) Federal Guidelines for Opioid Treatment Programs.

What rights and protections are available to workers who have opioid use disorder (OUD)?

Employers should protect the privacy and confidentiality of all workers' health-related information.

For employers subject to the Americans with Disability Act (ADA), federal law safeguards people against job discrimination if they are undergoing MAT. Both the ADA and the Rehabilitation Act of 1973 forbid most employers

from firing, refusing to hire, or discriminating (in the terms and conditions of employment) against any qualified job applicant or worker on the basis of a disability [Legal Action Center 2009]. In addition, the ADA, the Rehabilitation Act, and the Family Medical Leave Act (FMLA) give workers the right to take medical leave, which can include alcohol or drug treatment.

These federal laws cover employers in different ways. The ADA applies to all state and local government agencies and to private employers with fifteen or more workers. The Rehabilitation Act applies to federal agencies and to state and local government agencies and private employers that receive federal grants, contracts, or other federal aid. When federal law covers employers, they are prohibited from denying a job to, or firing, a worker based on a worker's participation in MAT. They also must offer reasonable accommodation as needed to allow those with a disability to perform their job duties, unless the accommodation would cause undue hardship to the employer [American Addiction Centers 2018].

In addition to giving workers with OUD the right to take leave to focus on treatment, the FMLA also offers employers resources for managing that leave, and places other obligations and restrictions on the rights of workers.

More information from SAMHSA can be found here: Know Your Rights: Rights for Individual Medication-Assisted Treatment.

How Employers Can Help

Employers can take the following steps to contribute to prevention and treatment of OUD [NIOSH 2018; CDC 2017; Massachusetts Department of Public Health 2018; National Safety Council 2018; Kowalski-McGraw et al. 2017]:

- Ensure that work is safe and working conditions do not lead to worker injury or illness, or contribute to painful chronic conditions.



- Identify clinics that provide evidence-based treatment for injured workers, including the adherence to opioid prescribing guidelines.
- Provide adequate leave and other benefits after workplace injury including flexibility in scheduling and receiving medical care, support during recovery, and return to work.
- Take steps to manage workplace stressors and job insecurity to the extent possible.
- Take steps to decrease the stigma associated with substance misuse through awareness building and supervisor training.
- Educate workers about how drugs impair work activities, including driving, and encourage them to notify their employers if they are taking medications that may affect their ability to work safely so that a safe solution can be determined.
- Develop and communicate clear drug-related workplace policies that include an offer of assistance to workers with OUD.
- Offer comprehensive treatment options to workers with OUD, including healthcare coverage that provides MAT.
- Work with health plan providers and pharmacy benefit managers to attend to inclusion of such coverage in employer health plans.

Employers should also consider the following steps when arranging services for their workers, or when working with others to select an MAT program or provider:

- Ensure that the MAT program is licensed or certified by your state.
- Verify that the MAT program offers FDA-approved medications to treat OUD.
- Check if the provider can offer or refer for psychological, social, and family support in the treatment program.
- Look for independent evidence that the program offers effective and proven treatment whenever possible [SAMHSA 2019].

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For More Information

More information about opioids in the workplace can be found at <https://www.cdc.gov/niosh/topics/opioids/default.html>

Additional Resources

Certification of Opioid Treatment Programs

<https://www.govinfo.gov/app/details/CFR-2007-title42-vol1/CFR-2007-title42-vol1-part8>

http://dptbeta.samhsa.gov/pdf/FederalGuidelines2015_508.pdf

The Federal Guidelines for Opioid Treatment Programs – 2015

<https://store.samhsa.gov/system/files/pep15-fedguideotp.pdf>

Medication-Assisted Treatment

<https://www.samhsa.gov/medication-assisted-treatment/treatment#medications-used-in-mat>

<https://www.samhsa.gov/medication-assisted-treatment/treatment/naltrexone>

<https://www.samhsa.gov/medication-assisted-treatment/opioid-treatment-programs>

Treatment and Costs

<https://www.samhsa.gov/medication-assisted-treatment/treatment/insurance-payments>

<https://www.rehabcenter.net/insurance-cover-methadone-clinics/>

<https://www.opioidtreatment.net/insurance-coverage/methadone-clinics/>

<https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost>

Using Naloxone to Reverse Opioid Overdose in the Workplace

<https://www.cdc.gov/niosh/docs/2019-101/default.html>

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