

BUPRENORPHINE

for Opioid Use Disorder

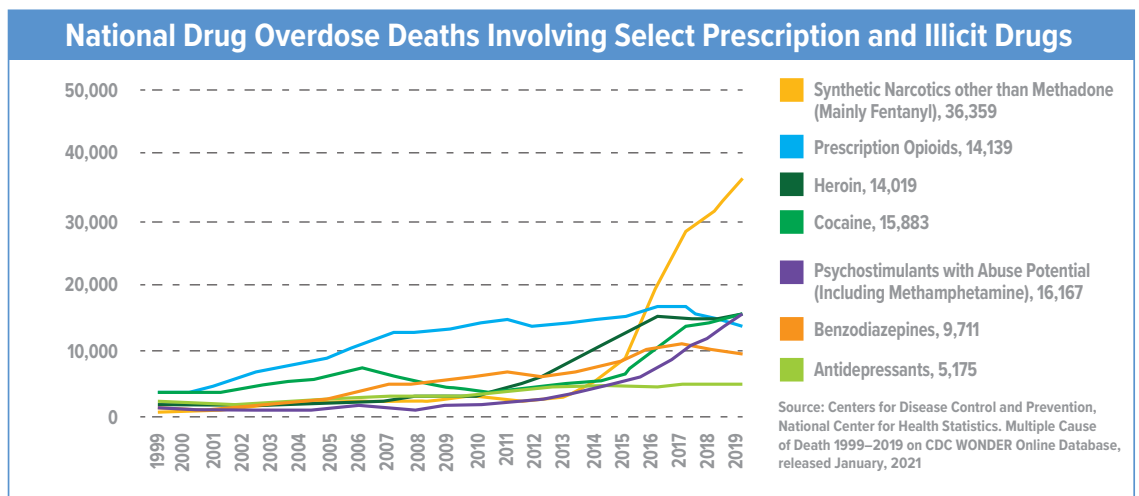
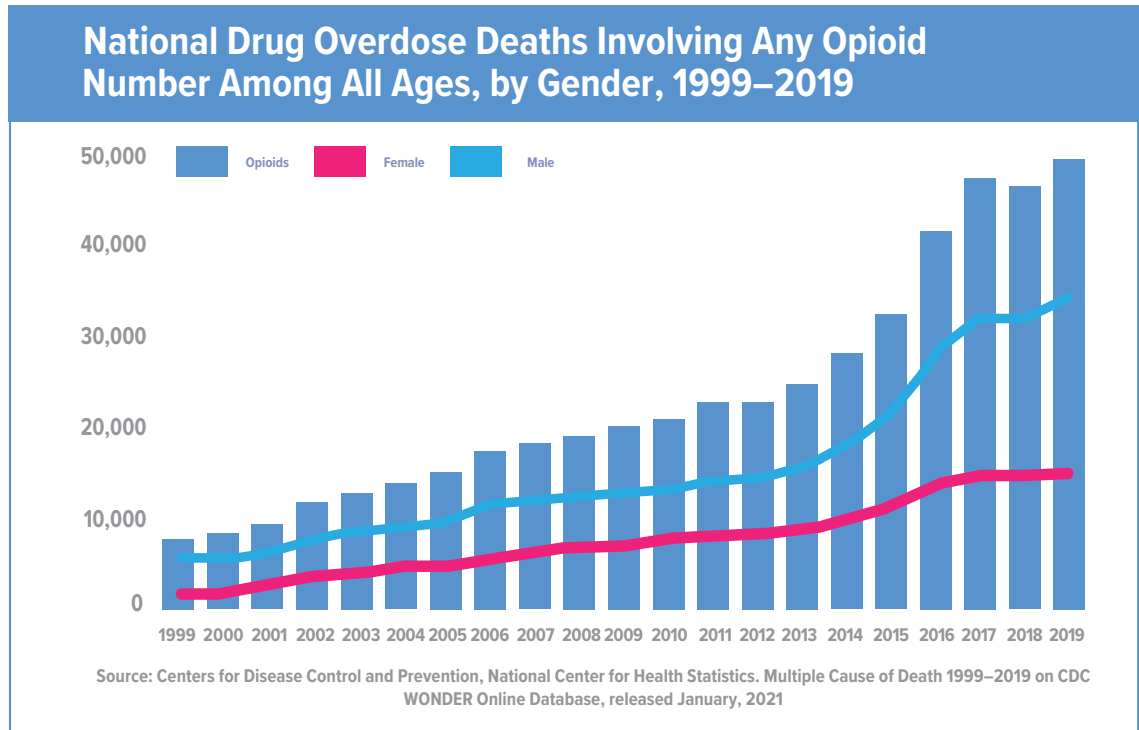


Introduction

The United States is in the midst of an epidemic of opioid overdose and overdose deaths, driven by misuse of opioids.^{1,2}

National Overdose Deaths

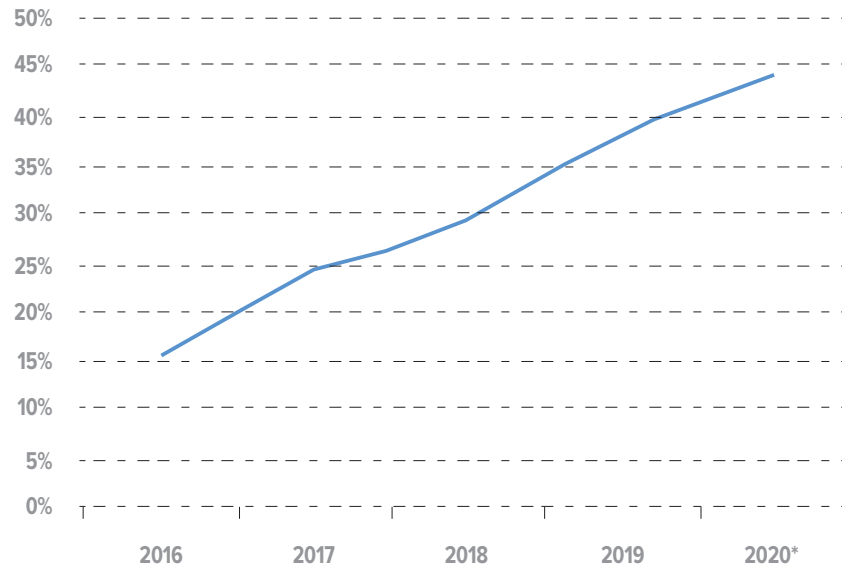
National prescription opioid and heroin/non-methadone synthetics overdose deaths: 2002-2019.¹



The opioid overdose death epidemic is accelerating, fueled primarily by overdose deaths from illicit opioids. Provisional CDC data indicate that the number of deaths from heroin and other opioids exceeded 49,860 in 2019.^{2,3}

Fentanyl

2016 — 2020* Percent of Erie County Opioid Related Deaths Associated with Fentanyl¹ and Cocaine



Source: Erie County Medical Examiners Office
*Closed Cases Reported Thru 7/23/2020

¹Includes all Fentanyl related deaths.

- The synthetic opioid fentanyl has been implicated in this accelerating wave of opioid overdose deaths. Fentanyl (50-100 times more potent than morphine) is commonly found as an adulterant in the “heroin” sold on the street. Fentanyl derivatives, such as carfentanil, (50-100 times more potent than morphine) have been found episodically in the illicit drug supply as well. **The unpredictability of the concentration of these potent synthetic opioids makes the epidemic increasingly deadly, and the need for effective treatment more urgent.**
- These opioid overdose deaths are preventable.
- Opioid Use Disorder (OUD) is a treatable condition.⁶
- Effective treatment is available.^{9,6}
- Opioid Agonist Treatment (OAT) is not “substituting one addiction with another”.⁷

Opioid Use Disorder (OUD) Treatment

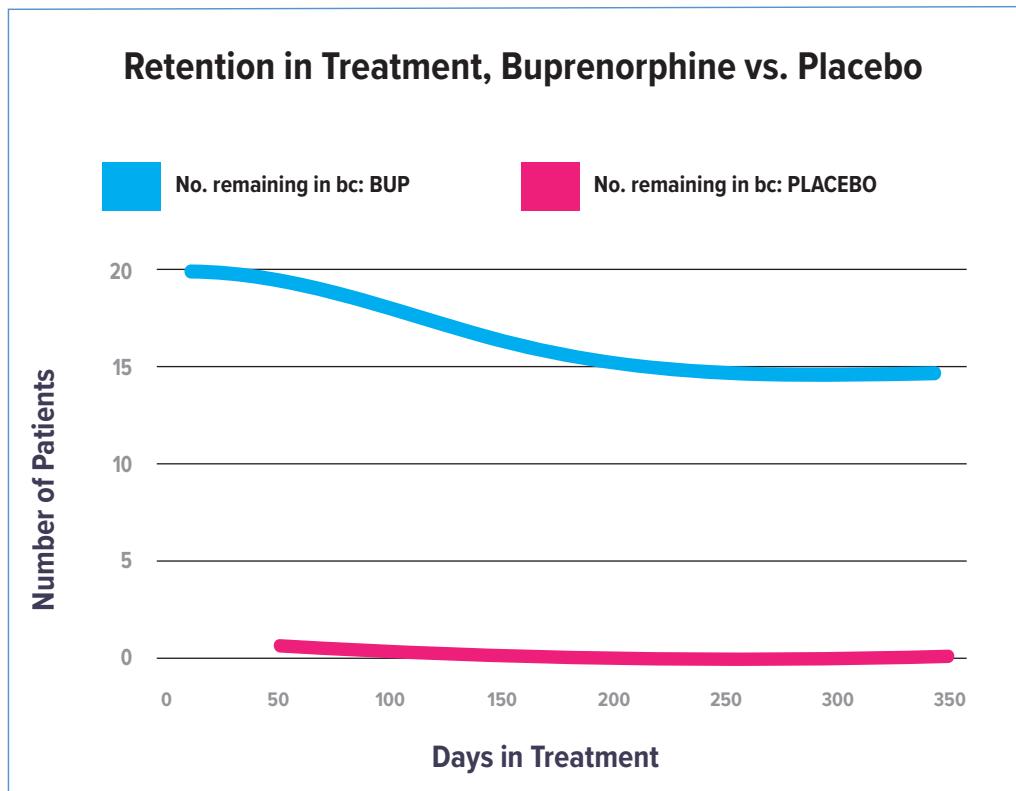
- Effective treatment is available to help control OUD and help prevent overdose and death.
- There are three Food and Drug Administration (FDA) - approved medications for use in treatment of OUD. Multiple products are available - see separate handout for the details.
 - Buprenorphine (with and without naloxone)
 - Methadone
 - Naltrexone
- **The choice of medication should be based on effectiveness, safety, patient preference, clinical parameters, affordability, and treatment goals.**
- When considering medication options for treatment of OUD, clinicians should be aware that, at present, the weight of evidence and clinical experience is considerably greater for the efficacy of the agonist medications buprenorphine and methadone, compared to that of naltrexone.¹⁴

Opioid Agonist Treatment (OAT)

OAT refers to treatment with buprenorphine (with or without naloxone) or methadone.

- OAT works by stopping withdrawal symptoms, decreasing craving, and by blocking the use of other opioids.⁶
- OAT does not “substitute one addiction for another.”⁷
- OAT promotes a return to normal biologic, psychologic, and social function.⁶
- OAT decreases crime, improves employment, decreases disease transmission, increases access to health care and housing, decreases overdoses, and saves lives.^{15,16}

Buprenorphine is also under the categories of Medication for Addiction Treatment (MAT) and Medication for Opioid Use Disorder (MOUD)



Retention in treatment is better in the buprenorphine group: risk ratio 58.7 (95% CI 7.4-467.4); $P=0.0001$

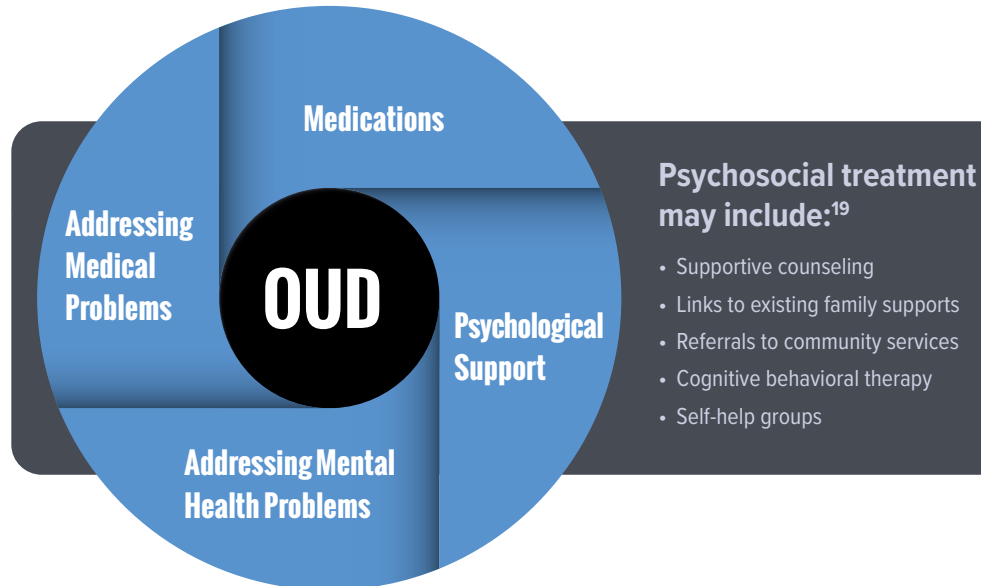
Four patients in the placebo group died during the treatment period; there were no deaths in the buprenorphine group ($p=0.015$).

Agonist treatment with buprenorphine can be extremely effective in promoting abstinence from illicit opioids and retention in treatment.

Introduction

Potential components of OUD treatment:¹⁸

Psychosocial support can improve quality of life and outcomes from Substance Use Disorder (SUD) treatment, but is not an absolute requirements for patients on Medication for OUD, (MOUD). Providing referral options based on the needs of the patient is sufficient and should be documented.¹⁹



Risk of misuse is lower with buprenorphine than with full opioid agonists.

- The partial agonist effect of buprenorphine reduces euphoria and decreases the potential for misuse.⁶
- The buprenorphine-naloxone co-formulations are designed to deter injection and inhalation. When taken as directed (sublingually), there is minimal absorption of the naloxone component. If injected, the naloxone (a pure opioid antagonist) will attenuate the potential euphoric effect. Naloxone, as well as buprenorphine, could precipitate withdrawal in individuals who are physically dependent on opioids.^{6,20}
- **When buprenorphine is diverted for illicit use, it is usually for the purpose of trying to self-medicate and manage withdrawal symptoms, often in areas where there is limited access to OAT.²¹**
- When considering medication options for treatment of OUD, clinicians should be aware that, at present, the weight of evidence and clinical experience is considerably greater for the efficacy of the agonist medications buprenorphine and methadone, compared to that of naltrexone.¹⁴

Introduction

Taking a Patient-Centered and Public Health Oriented Approach

- People with SUD are often stigmatized, which creates obstacles to effective treatment. Understanding the underlying problem as a health issue rather than a moral failing can reduce stigma and improve access to care.⁸
- Primary care providers are in a unique position to identify substance use problems at an earlier stage in their patients when treatment may be more effective, and in an environment where an individual is unlikely to be identified as having a substance use disorder.^{9,10}

Stop the Stigma

- Respectful language can help create an effective, therapeutic environment.
- Non-judgmental terminology and person-first, supportive language are recommended.¹¹⁻¹³

SAY:

Substance Use Disorder (SUD)

Person with SUD/People Who Use Drugs

Positive or Negative Toxicology

RATHER THAN:

Addicted

Drug Addict

“Clean” or

“Dirty” Toxicology

Introduction

Medications for Treatment of OUD^{20,22-24}

MEDICATION	SCHEDULE	FORMULATIONS	PHARMACOLOGY	TREATMENT SETTINGS
BUPRENORPHINE	C-III	SL tablet, extended-release SC injection, implant	Partial mu-opioid agonist	Clinician's office, OTP, or other health care setting
BUPRENORPHINE/ NALOXONE	C-III	SL tablet, SL film, buccal film	Partial mu-opioid agonist + full mu-opioid antagonist	Clinician's office, OTP, or other health care setting
METHADONE	C-II	Oral solution liquid concentrate, tablet/diskette, powder	Full mu-opioid agonist	OTP
NALTREXONE	N/A	Tablet, extended-release IM injection	Full mu-opioid antagonist	Clinician's office, OTP, or other health care setting

All above medications are FDA-approved for OUD treatment. SL=sublingual, SC=subcutaneous, IM=intramuscular, N/A=not applicable, OTP=opioid treatment program. Table adapted from SAMHSA TIP 63.⁶

Key Points

Buprenorphine/Buprenorphine-Naloxone^{20,23}

- Effective in controlling OUD, decreasing use of illicit opioids, and decreasing overdose deaths.
- Formulation with naloxone may minimize diversion potential. Partial agonist “ceiling effect” reduces potential for respiratory depression and overdose.
- DEA waiver training required.
- May be useful for treatment of concurrent chronic pain and OUD.
- The patient must discontinue other opioid agonists long enough to experience mild-moderate withdrawal symptoms before initiation of buprenorphine therapy.
- May be used in office-based treatment of OUD.

Introduction

Key Points (continued)

Methadone²²

- Concomitant use of alcohol or other sedative-hypnotics (especially benzodiazepines) may lead to respiratory depression, overdose, and death.
- Use caution in patients receiving benzodiazepines or other CNS depressants and warn patients against concomitant self-administration/misuse.
- Effective in controlling OUD, decreasing use of illicit opioids, and decreasing overdose deaths.
- Absence of antagonist effect can facilitate transition from illicit opioids.
- May be helpful in patients with more severe OUD or where buprenorphine has not been effective.¹⁶
- Potential for QT interval prolongation at higher doses.
- Interactions with other medications that induce or inhibit CYP enzymes.
- Not for office-based treatment of OUD. Dispensed in federally-approved Opioid Treatment Programs (OTPs).

Naltrexone²⁶

- Contraindicated with concurrent use of opioid analgesics, including methadone or buprenorphine.
- Will precipitate acute opioid withdrawal if administered to a person dependent on opioids.
- Blocks reinforcing effects of opioids.
- No tolerance or withdrawal symptoms upon discontinuation.
- May be useful in stable patients with strong motivation and established recovery programs, or in patients who are required to discontinue OAT.
- Has been found to be useful in treatment of alcohol use disorder.²⁷
- Need to stop all opioids for at least 7-10 days before starting treatment, to avoid precipitated withdrawal.
- Increased potential for overdose after discontinuation.^{28,29}

Adverse Effects^{20,22,23,25}

Buprenorphine

- Adverse effects are similar to those of other opioids: constipation, nausea, vomiting, headache, anxiety and sleep disturbances.

Methadone

- Adverse effects are similar to those of other opioids: constipation, nausea, vomiting, headache, anxiety and sleep disturbances.

Naltrexone

- Adverse effects may include: insomnia, lack of energy/sedation, anxiety, nausea, vomiting, abdominal pain/cramps, headache, cold symptoms, and joint and muscle pain.
- Injection site reactions may be reported for injectable naltrexone.

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