

Opioid Use Disorder: Not Just For Addiction Medicine Specialists

LAUREN WHITESIDE MD MS

ASSOCIATE PROFESSOR

UNIVERSITY OF WASHINGTON DEPARTMENT OF EMERGENCY MEDICINE

MEDICAL DIRECTOR, WA TELEBUPE HOTLINE



UW Medicine

Disclosures (professional)

NIDA

Washinton DOH

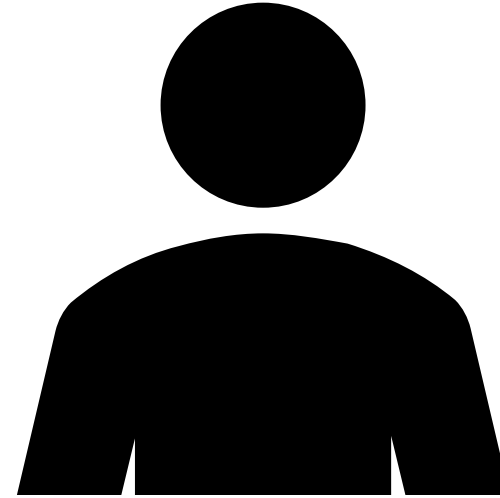
Seattle King County Public Health

Disclosures (personal)

LOCAL NEWS

Spokane mother turns grief into action after son's fentanyl overdose

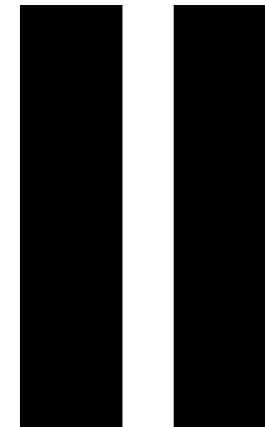
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NEWS > LOCAL GOVERNMENT

Spokane County breaks ground on new treatment facility considered 'beacon of hope' in combating addiction, mental health crises

April 2, 2026 | Updated Thu., April 2, 2026 at 9:52 p.m.



NEWS > CRIME/PUBLIC SAFETY

Fatal overdoses in Spokane County remain high after years of increasing deaths

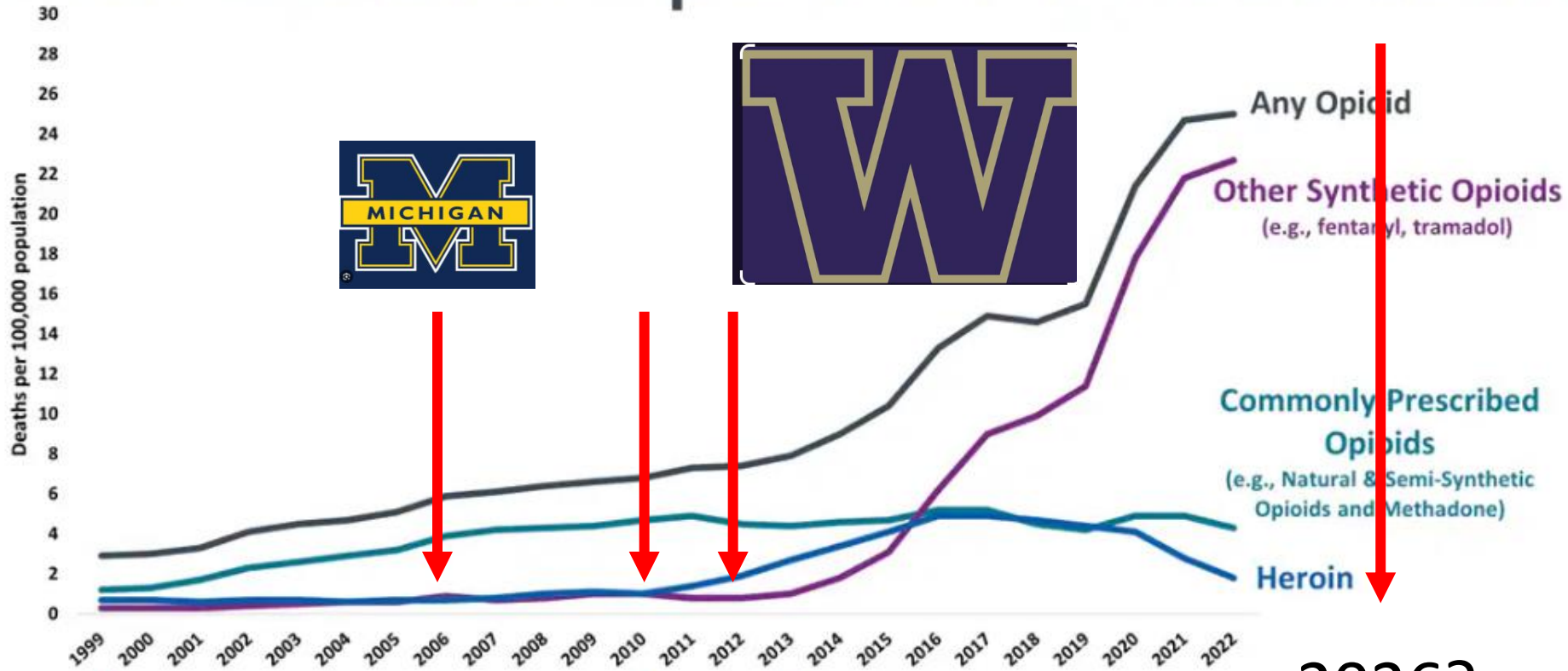
Thu., Feb. 26, 2026

Objectives and Road Map

- Epidemiology and 'how did we get here'
- Definitions and Diagnosis
- Treatment for OUD
- Evidence
- Questions



Three Waves of Opioid Overdose Deaths



Wave 1: Rise in Prescription Opioid Overdose Deaths Started in the 1990s

Wave 2: Rise in Heroin Overdose Deaths Started in 2010

Wave 3: Rise in Synthetic Opioid Overdose Deaths Started in 2013

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/>.



2026?



83%

Drug overdose deaths
from an opioid, 2024

94%

Opioid overdose deaths
involving fentanyl, 2024

4%

Decrease in opioid
overdose ED visits, 2025



Death Rate Over Time

Drug Type

- ☒ Fentanyl deaths
- ☒ Opioid deaths

The rate of fatal drug overdoses are increasing, and most overdose deaths involve opioids. In 2024, the rate of fatal drug or opioid overdoses in Spokane County was higher than that in Washington State.

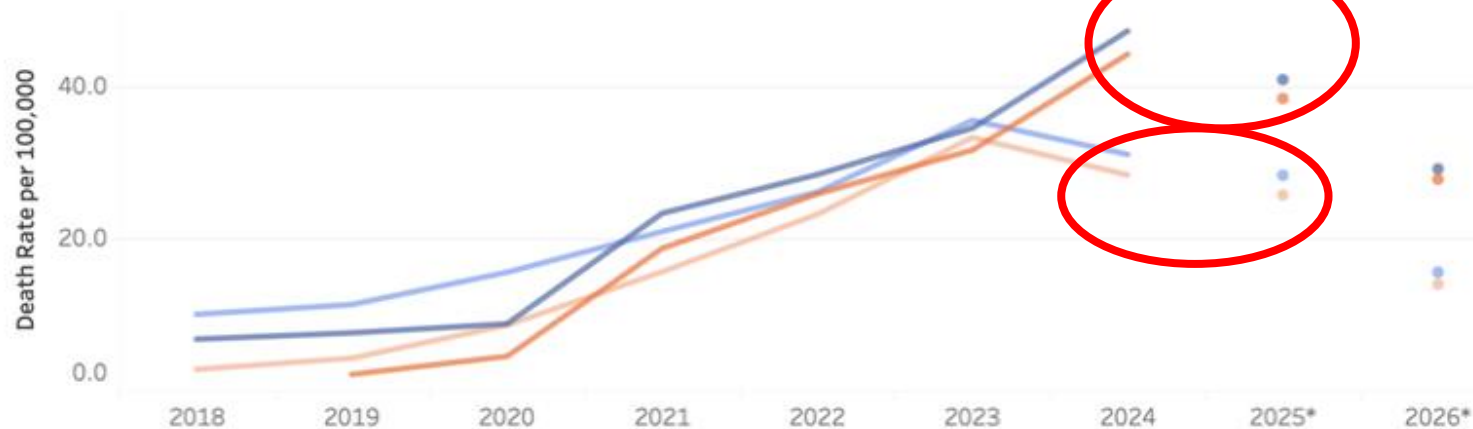
Geography

- ☒ Spokane County
- ☒ Washington State

Legend

- Fentanyl, Spokane
- Fentanyl, WA
- Opioid, Spokane
- Opioid, WA

Fentanyl deaths, Opioid deaths, Spokane County & Washington State



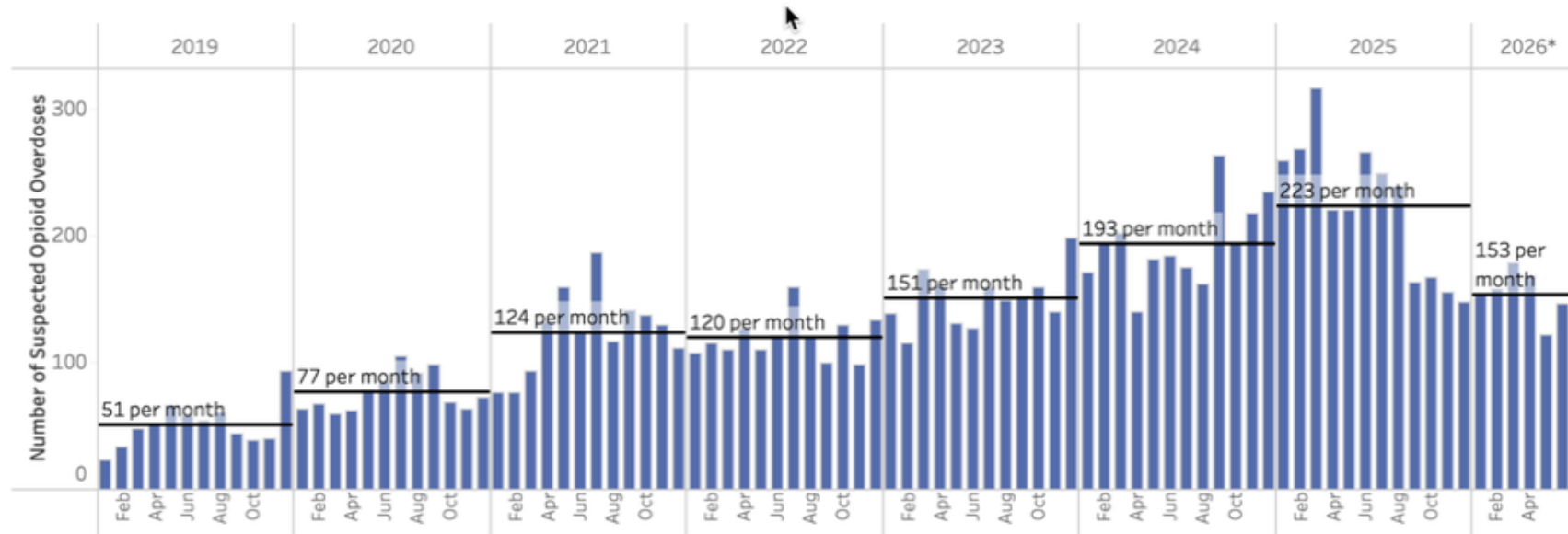
*The 2025 and 2026 data are preliminary and are expected to change.

Number of deaths less than 10 were suppressed. With 2026 population estimates not yet available, 2025 population is used for rate calculations. The 2026 population is adjusted based on available days as of the updated date.

Source: Death Certificate Data (As of 8/24/2026)

<https://countyhealthinsights.org/county/spokane/dashboard/opioid-dashboard/>

Suspected opioid overdose



Source: Washington Emergency Medical Services Information System (WEMSIS) (As of 8/14/2026)

Note: The 2026 data are incomplete (pulled through June) and should be interpreted with caution. The April 2024 EMS Opioid Overdose report data are incomplete due to the system transitions.

223

Avg number of suspected
opioid overdoses per month
in 2025

26%

Suspected opioid overdoses
with layperson naloxone
provided prior to EMS arrival

49%

Suspected opioid overdoses
with improved naloxone
response

Take-Home Point #1



The number of opioid-involved deaths has increased substantially since 1999. Overdose is a leading cause of mortality in people < 45 years of age



Three distinct waves of opioid overdose deaths over the last 25 years, each driven by a different opioid



Increasing overdose prevention and response support, capacity and education can help save lives



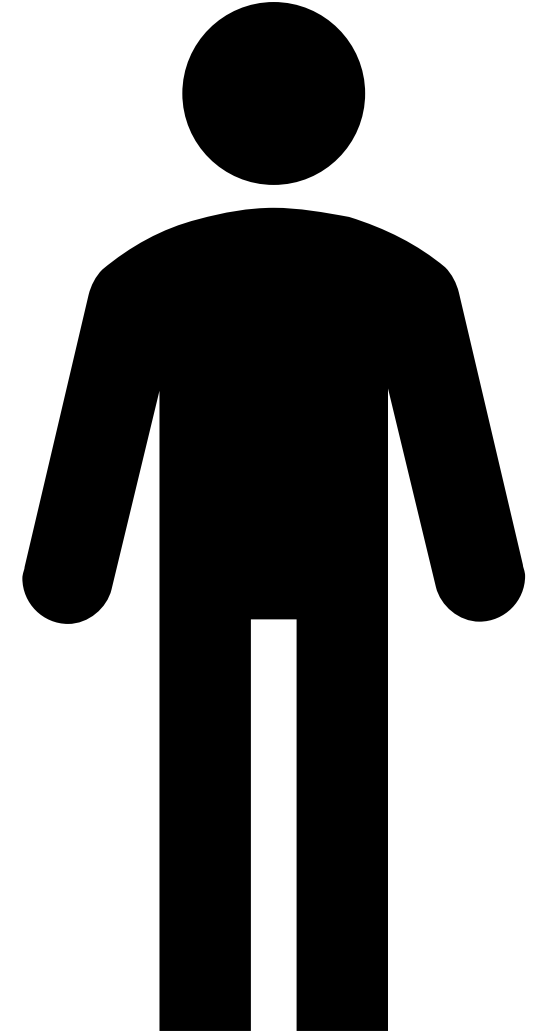
Spokane County Opioid Dashboard

Definitions and Diagnosis



Addiction is a treatable chronic disease involving complex brain circuits, genetics, the environment and an individual's life experience (ASAM).

Opioid Use Disorder is a problematic pattern of opioid use that leads to clinically significant impairment or stress (ASAM).



Summarized DSM-5 Diagnostic Categories and Criteria for Opioid Use Disorder

Category	Criteria
Impaired Control	• Opioids used in larger amounts, or for longer than intended • Unsuccessful efforts or desire to cut back • Excessive amount of time spent obtaining, using or recovering from use • Craving to use opioids
Social Impairment	• Failure to fulfill major role obligations at work/school/home as a result of recurrent use • Persistent or recurrent social or interpersonal problems that are exacerbated by opioids • Reduced or given up important activities because of opioid use
Risky Use	• Opioid use in physically hazardous situations • Continued opioid use despite knowledge of persistent physical or psychological problem that is likely caused by opioid use
Pharmacological Properties	• Tolerance as demonstrated by increased amounts needed to achieve desired effect • Withdrawal

Severity	
Mild Opioid Use Disorder	2-3 symptoms
Moderate Opioid Use Disorder	4-5 symptoms
Severe Opioid Use Disorder	6+ symptoms

Tell me about your opioid use? When did you start, what have you used lately and what prompted you to seek care today?

Impaired control

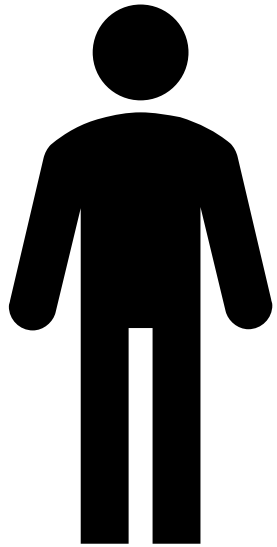
- All day is spent obtaining, using and recovering from effects
- 'I use all day every day'
- I wake up thinking about how I'm going to get more

Social Impairment

- 'My family doesn't talk to me'
- 'I lost my kids'
- 'I can't work like this or I don't work when I'm using'
- 'I just got out of jail'
- Isolation

Risky Use

- Overdose
- Using Alone
- Buying from someone you don't know
- Trading sex for drugs



Tell me about your opioid use? When did you start, what have you used lately and what prompted you to seek care today?

Using opioids for five years
Escalating dose to get same effect
'Tired of it controlling my life'
Unable to work because I'm constantly using
Usually uses alone
Impeding relationships
Jail in the past year

Diagnosis?

Last fentanyl use was 10 hours ago and now:
Restlessness and anxiety
Body aches
Nausea and vomiting
Fatigue
Yawning, watery eyes

Take-Home Point #2

Be curious and ask and most patients will fill in the gaps

Medications for OUD

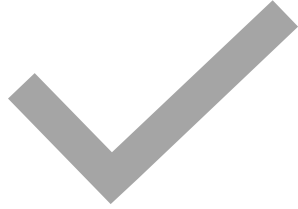




Pharmacology

AHEAD

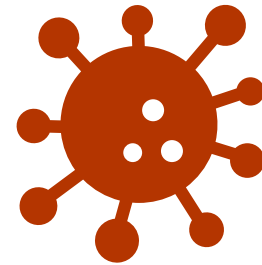
Pharmacologic principles of opioids



Receptor binding activity



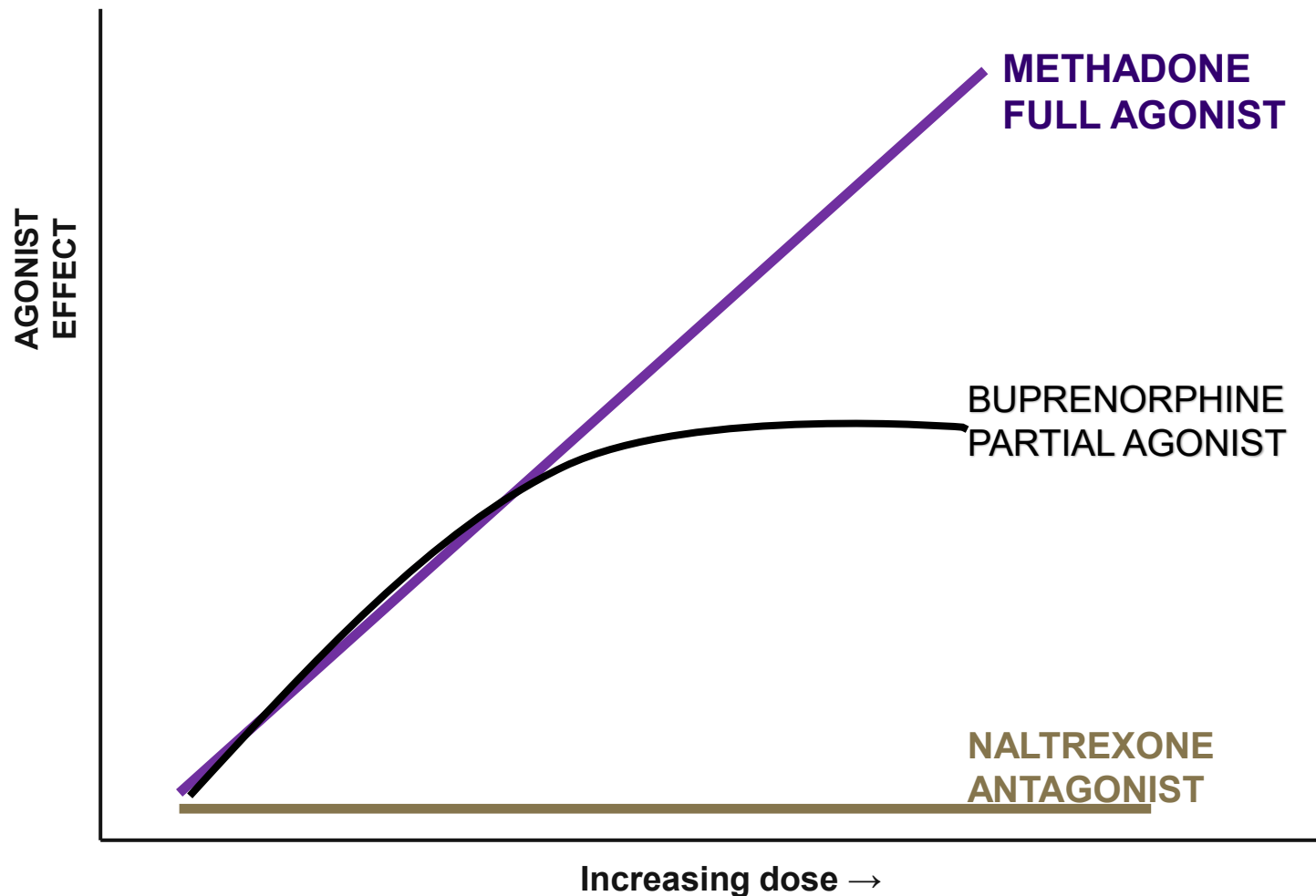
Receptor binding affinity



Lipophilic?

THREE WAYS TO ACT AT THE μ -OPIOID RECEPTOR

Dose–effect curves explain the pharmacologic differences



WHY IT MATTERS



METHADONE
FULL activation
No ceiling



BUPRENORPHINE
PARTIAL activation
Ceiling effect

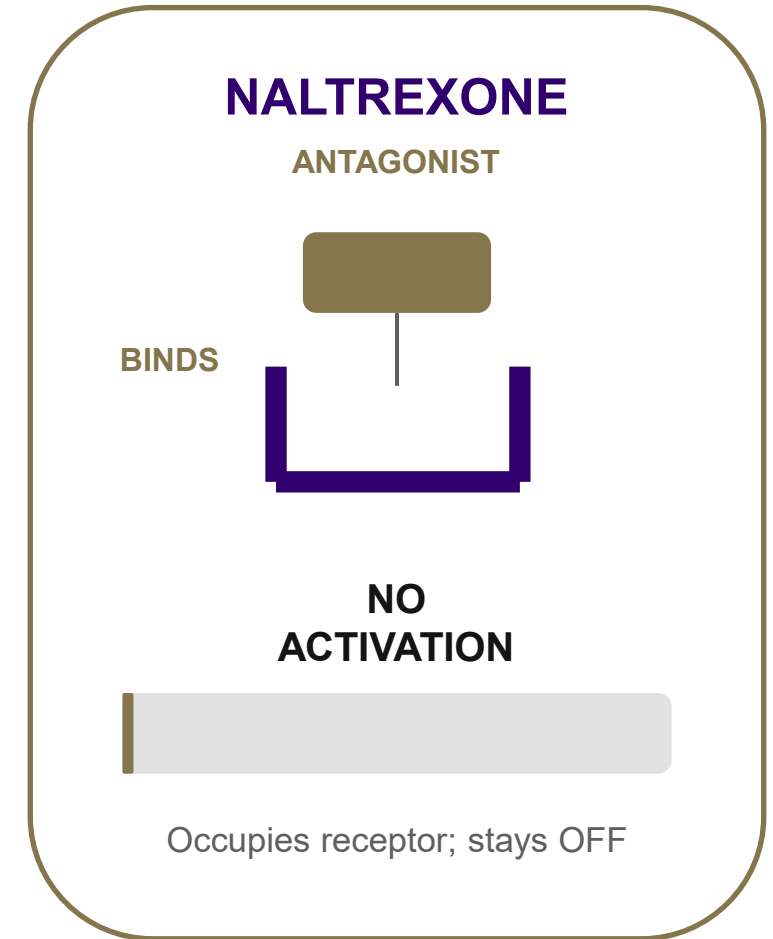
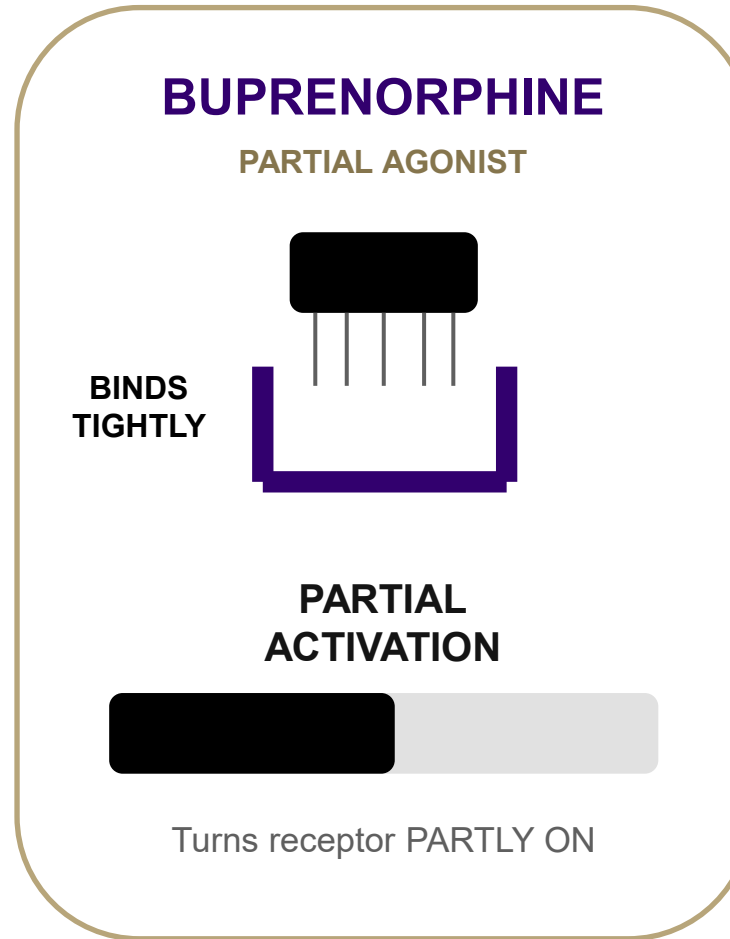
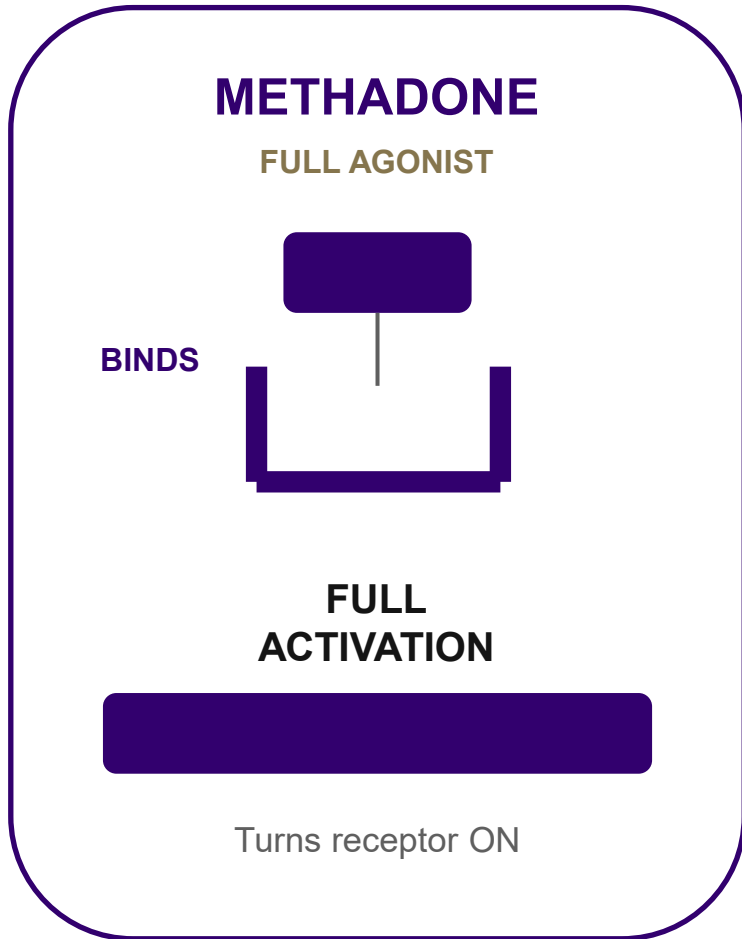


NALTREXONE
NO activation
Blocks agonists

Same receptor. Different intrinsic activity.

AFFINITY ≠ INTRINSIC ACTIVITY

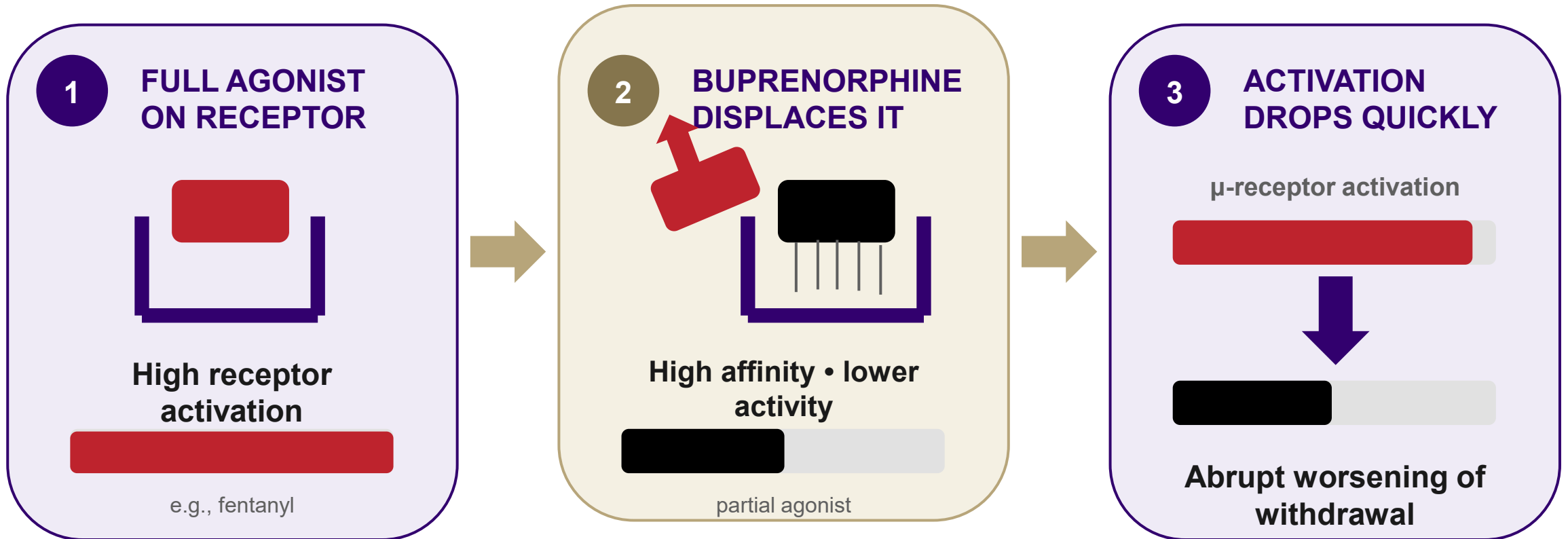
Binding tells you who occupies the receptor. Intrinsic activity tells you what happens next.



Buprenorphine: high affinity + partial activation = blockade with a ceiling.

WHY CAN BUPRENORPHINE PRECIPITATE WITHDRAWAL?

High affinity + partial agonism can abruptly reduce μ -receptor activation



PRECIPITATED WITHDRAWAL = abrupt worsening of withdrawal shortly after buprenorphine

HIGH AFFINITY + LOWER INTRINSIC ACTIVITY → ↓ RECEPTOR ACTIVATION → WITHDRAWAL

For standard induction, wait for clear objective withdrawal before the first dose.

Table 1. Medications for Opioid Use Disorder Treatment Considerations

Characteristics	Buprenorphine	Methadone	Naltrexone
Mechanism	Partial agonist	Full agonist	Antagonist
Treats withdrawal	Yes	Yes	No
Risk of precipitated withdrawal	Yes	No	Yes
Effectiveness	RR of all-cause mortality is reduced by ≈60% (RR, 0.34; 95% CI, 0.26-0.45), ¹⁶ reduced unregulated opioid use, ¹⁷ reduces HIV and HCV transmission ¹⁸	RR of all-cause mortality is reduced by ≈50% (RR, 0.47; 95% CI, 0.41-0.54), ¹⁶ reduces unregulated use, ¹⁷ reduces HIV and HCV transmission ¹⁸	Oral is no more effective than placebo ¹⁹ Compared with sublingual buprenorphine, patients are less likely to initiate as an injectable (72% vs 94%) and more likely to return to use (65% vs 57%) at 24 wk Once initiated, injectable has similar unregulated opioid use reduction as sublingual buprenorphine ²⁰
Retention in care at 12 mo	43% (95% CI, 39%-47%) at 12 mo ¹⁷	47% (95% CI, 38%-56%) at 12 mo ¹⁷	Uncertain and inconclusive ^{21,22}
Formulations	Sublingual film or tablet Weekly or monthly subcutaneous injectable	Oral liquid or tablet	Monthly intramuscular injectable
Prescribing	Office, hospital, or telehealth	Licensed opioid treatment program, hospital Exemption allows for prescribing and dispensing in setting of withdrawal by office and ED clinicians for up to 3 d ²³	Office, hospital, or telehealth
Dispensing	Sublingual: pharmacy dispensed Injectable: specialty pharmacy to office dispensed	Licensed opioid treatment program	Oral: pharmacy dispensed Injectable: specialty or retail pharmacy to office dispensed
Administration	Sublingual taken at home 1-3 times/d Long-acting injectable: office administered	Licensed opioid treatment program	Oral: take at home once daily Long-acting injectable: office administered
Monitoring	Weekly visits until stable, then reduce frequency as needed down to ≈every 3-6 mo	Daily visits at opioid treatment program, may receive take-home doses up to 28 days per clinic protocol If initiated outside of program,	Weekly visits until stable, then reduce frequency as needed down to ≈every 3-6 mo

Only 1 in 4 adults who need opioid use disorder (OUD) treatment receive medications for OUD*

OUD medications[†] prevent overdoses and save lives



Providers should offer effective treatment, including OUD medications



Pharmacists and payors can support making these medications available without delays



*National Survey on Drug Use and Health, 2022

[†]FDA-approved medications for OUD are buprenorphine, methadone, and naltrexone

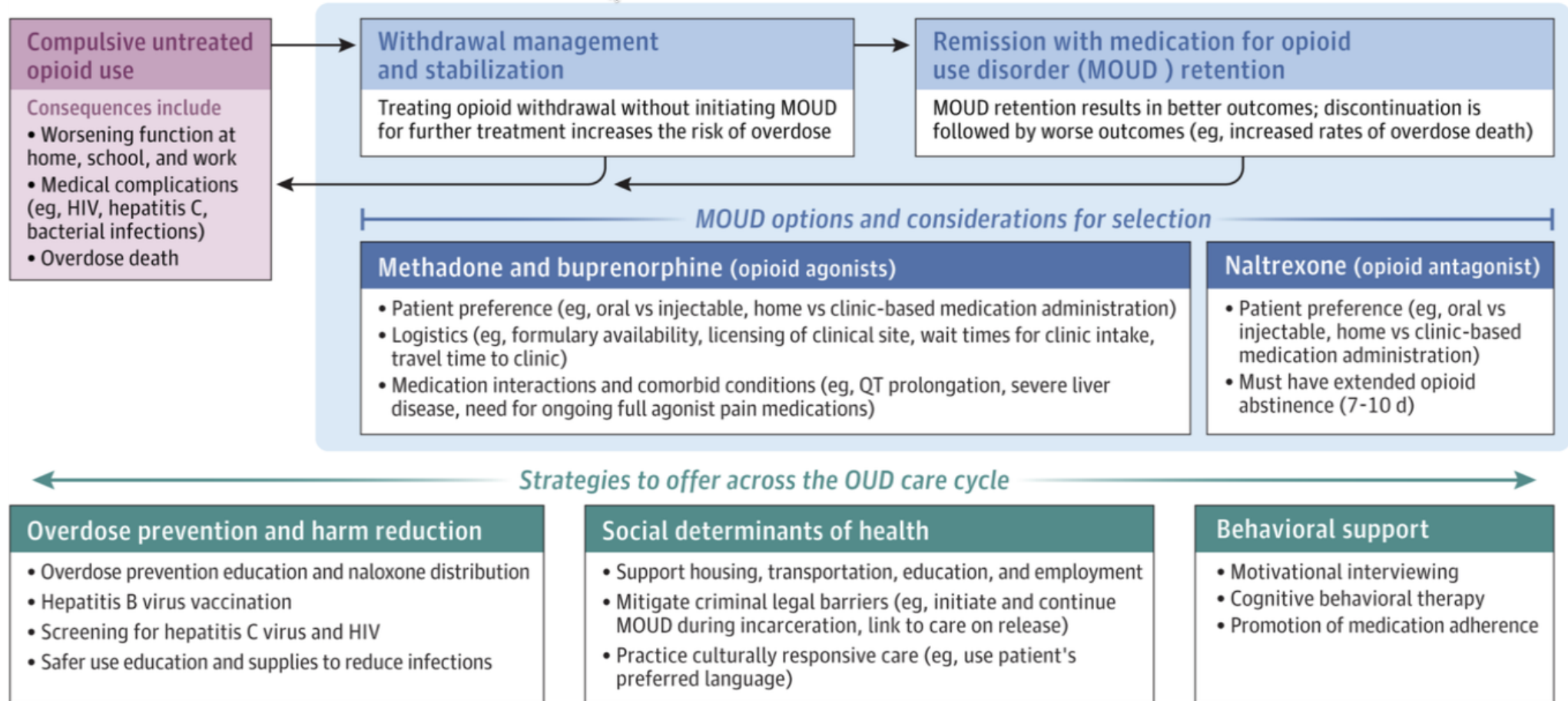
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JUNE 27, 2024

MMWR

Comprehensive opioid use disorder (OUD) is a continuous care cycle with the following considerations

- People with OUD commonly cycle from use to remission
- Providing overdose prevention education, harm reduction supplies, addressing social determinants of health, and providing behavioral support improves outcomes across the cycle



Evidence





Published:
February 6, 2014

Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence

- Objective: Determine the effects of buprenorphine maintenance against placebo or methadone maintenance in:
 - Management of opioid dependence including retention in treatment
 - Days of illicit opioid use
- **No difference** between buprenorphine and methadone in treatment retention or suppression of illicit drugs when comparing:
 - Medium dose buprenorphine (7-15 mg) to medium dose methadone (40-85 mg)
 - High dose buprenorphine (16 mg or higher) to high dose methadone (85 mg or higher)

Methadone And Buprenorphine Are Associated With Reduced Mortality After Nonfatal Opioid Overdose

RETROSPECTIVE COHORT, MASSACHUSETTS PUBLIC HEALTH DATASET, 2012-2014

Larochelle et al. *Annals of Internal Medicine*. 2018.

What about other types of treatment?



Original Investigation | Substance Use and Addiction

Comparative Effectiveness of Different Treatment Pathways for Opioid Use Disorder

Sarah E. Wakeman, MD; Marc R. Larochelle, MD, MPH; Omid Ameli, MD, MPH; Christine E. Chaisson, MPH; Jeffrey Thomas McPheeters, BA; William H. Crown, PhD; Francisca Azocar, PhD; Darshak M. Sanghavi, MD

Objective: Examine associations between OUD treatment pathways and **overdose** (and opioid-related acute care)

Sample: 40,885 US adults with recent OUD diagnosis

Outcome: In 3-month follow-up period: 1.7% had an overdose

- Compared to those patients receiving no treatment:

Buprenorphine or Methadone:
Less likely to experience overdose

Outpatient Counseling:
No difference in Overdose

Intensive Behavioral Health:
No difference in Overdose

Inpatient detox or Residential:
No difference in Overdose

Naltrexone:
No difference in Overdose

Buprenorphine Treatment Is Associated With a Substantially Lower Risk of Death in People With Opioid Use Disorder (OUD)

Meta-analysis of 126,595 people with OUD



126,595
people with OUD
included



Santo T Jr, Clark B, Hickman M, et al. Association of opioid agonist treatment with all-cause mortality and specific causes of death among people with opioid dependence: a systematic review and meta-analysis. *JAMA Psychiatry*. 2021;78(9):979-993.
doi: 10.1001/jamapsychiatry.2021.0976

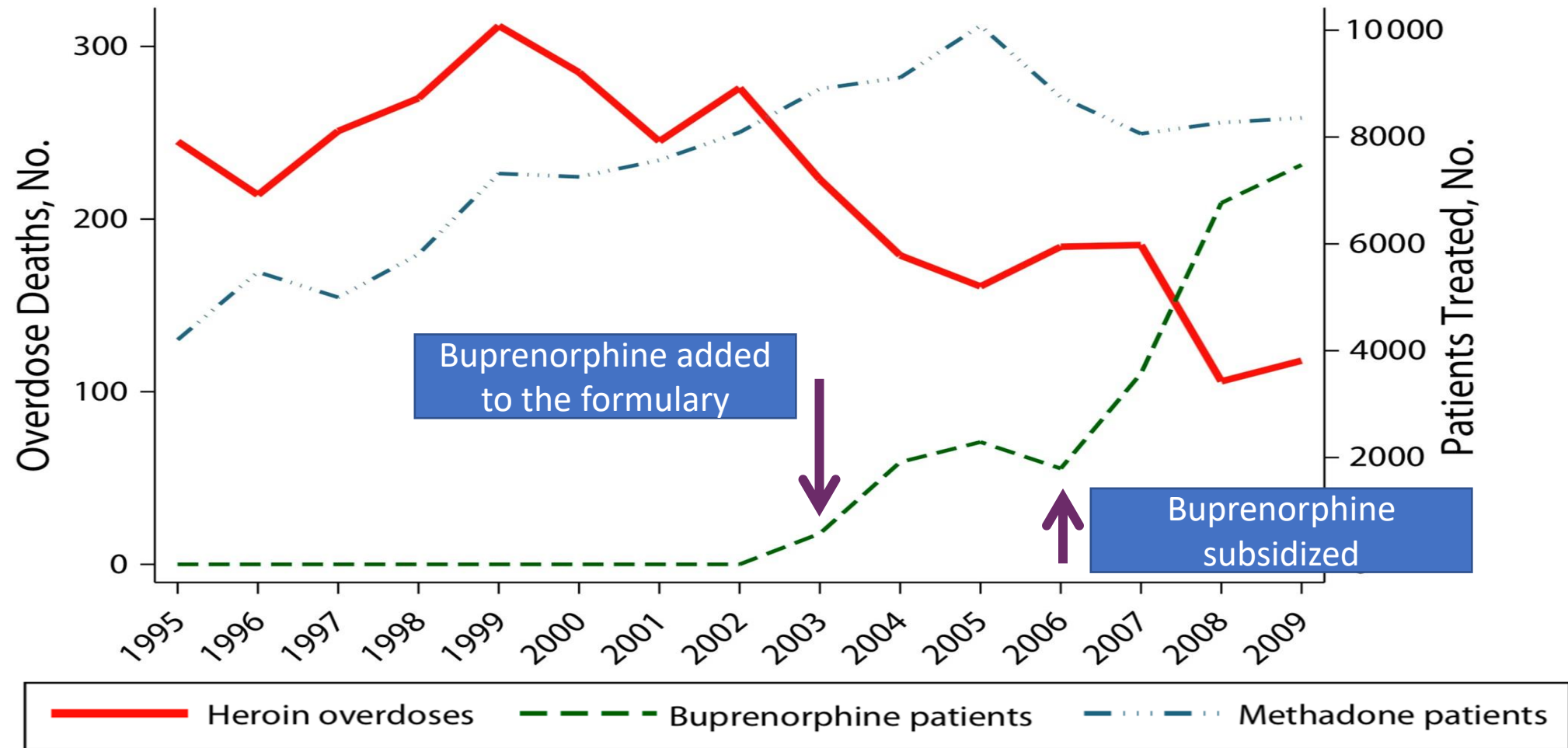
**Buprenorphine
saves lives.**

Baltimore, Maryland 1990's



- Largest increase in heroin overdose deaths in the 1990's in the US
- Significant efforts to expand treatment with methadone
- Buprenorphine added to Medicaid formulary in 2003 and subsidized in 2006
- **Association between access to medications and heroin death?**

Heroin Overdose Deaths and Opioid Agonist Treatment: Baltimore, MD, 1995-2009



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Providers should offer effective treatment, including OUD medications



Pharmacists and payors can support making these medications available without delays



*National Survey on Drug Use and Health, 2021

[†]FDA-approved medications for OUD are buprenorphine, methadone, and naltrexone

bit.ly/mm7325a1

JUNE 27, 2024

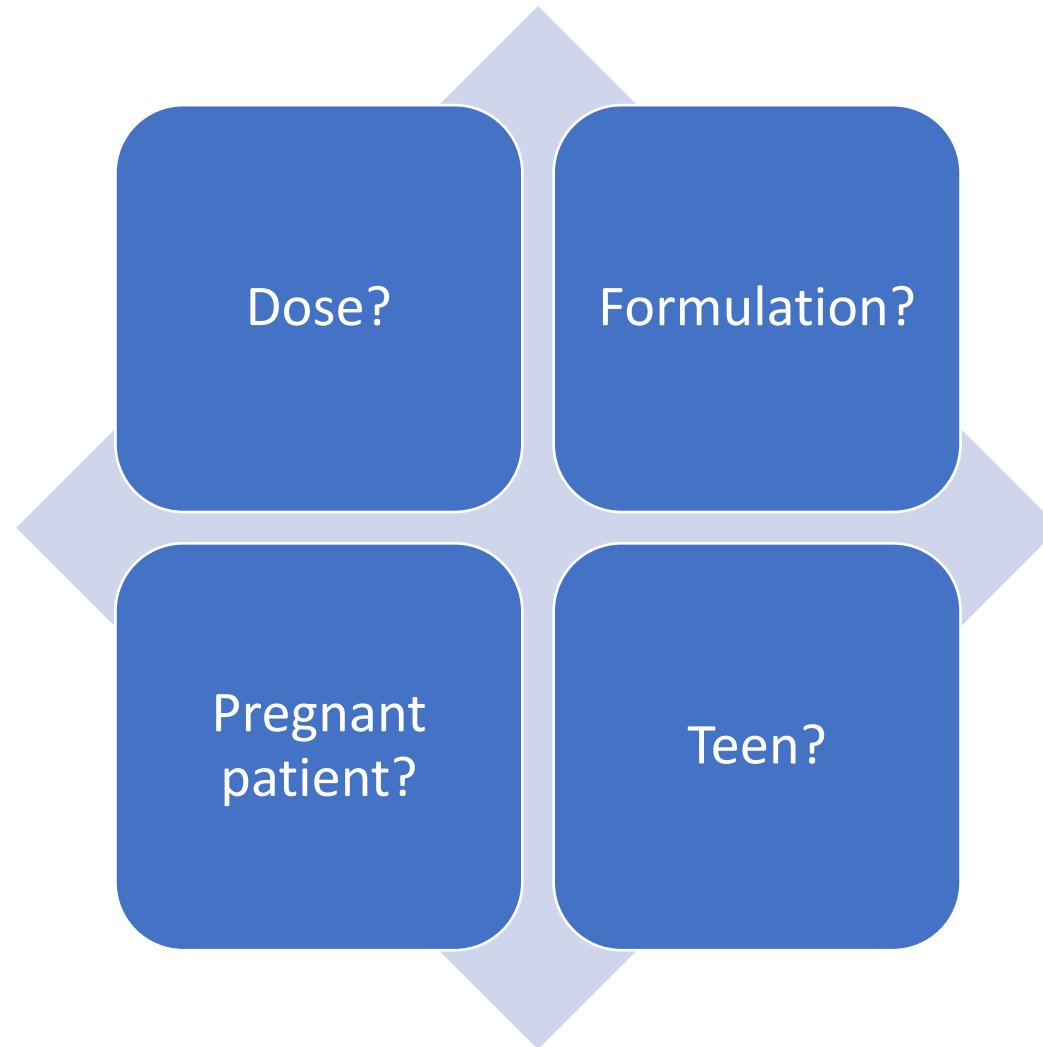
MMWR

Take Home Point #3

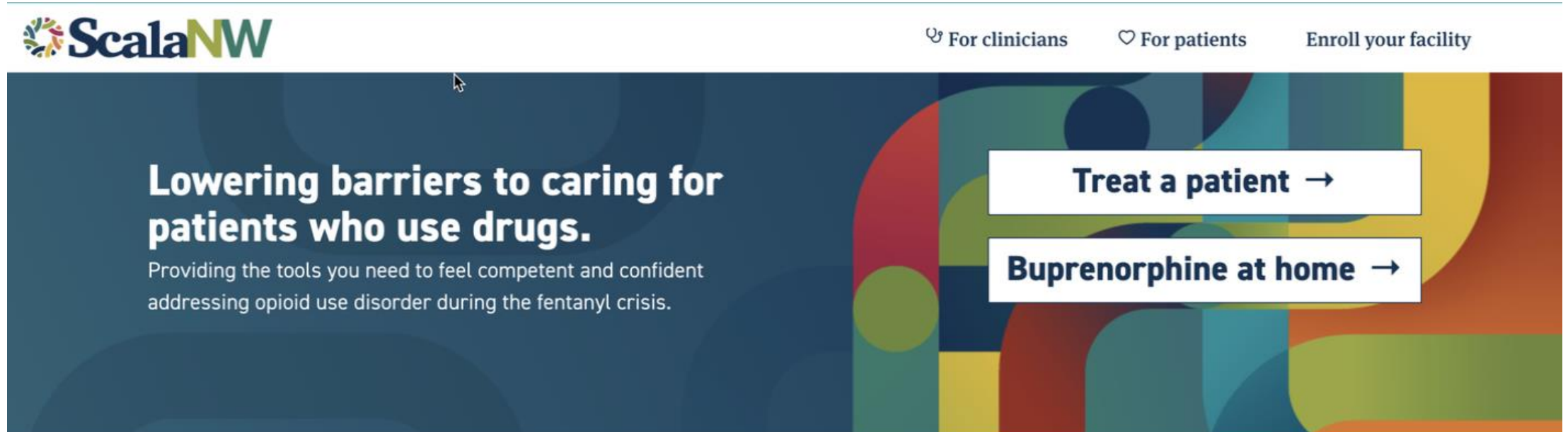
Medications for
OUD Are Effective

Getting
medications to
people with OUD is
hard

How do I start buprenorphine?



Scalanw.org



[Scala NW](https://scalaww.org)

Starting buprenorphine at home

Day 1

Wait until you are in moderate withdrawal, typically 12-24 hours after last opioid use.

Take other prescribed medications to treat symptoms.

Moderate withdrawal

Means 3+ of the following:

Restlessness	Body aches
Yawning	Shaking/twitching
Runny nose	Sweats
Big pupils	Chills
Watery eyes	Goosebumps
No appetite	Nausea or vomiting
Stomach cramps	Diarrhea

Take 2 tablets or films under your tongue



16 mg

WAIT 30-60 MINUTES

Take 1-2 additional tablets or films if needed



8 mg 8 mg

Do not take more than 4 tablets or films (32 mg) the first day.

Day 2 and beyond

Take 1 tablet or film (8 mg) in the morning, afternoon, and evening.

Take this dose daily until your follow-up appointment. If the medication makes you feel too sleepy, you can take it twice per day (morning and evening) instead.



AM
Morning



8 mg



PM
Afternoon



8 mg



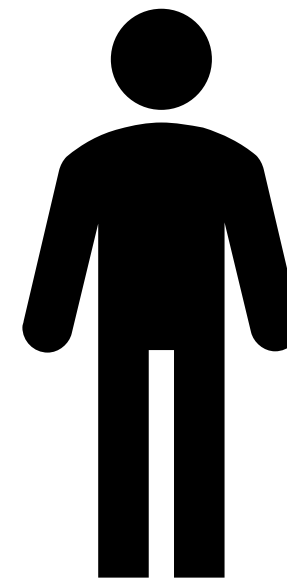
NIGHT



8 mg

How to take the buprenorphine films or tablets:

1. Put the buprenorphine under your tongue.
2. Don't swallow it—the medication won't work!
3. Keep the medication there until it's fully dissolved.



Stigma is the enemy of public health

Jennifer S. Potter PhD

Access to Treatment is important:
You are EXPERTS at access to treatment

Eliminating stigma and providing compassionate care is CRUCIAL

The ***Healthcare System*** can be:

- Cold
- Judgmental
- 'That's not my problem'
- Go see someone else

The ***Healthcare System*** can be:

- Lights always on
- Open
- 'Tell me about your opioid use'
- 'We can help'

Take Home Synopsis

Overdose is
common

- You can help!

Be curious

- Ask about drugs and let the patient do the rest

Medications
for OUD are
effective

- You can prescribe!

Stigma is the
enemy of
public health

- Your words and actions matter!

Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial



Lancet 2018; 391: 309–18

Published Online

November 14, 2017

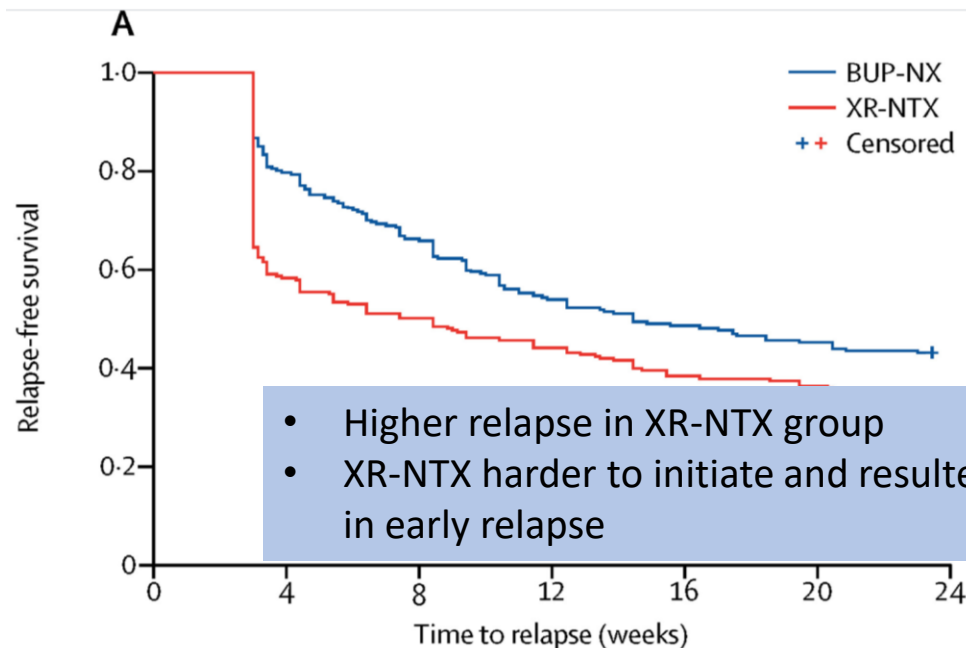
[http://dx.doi.org/10.1016/](http://dx.doi.org/10.1016/S0140-6736(17)32812-X)

S0140-6736(17)32812-X

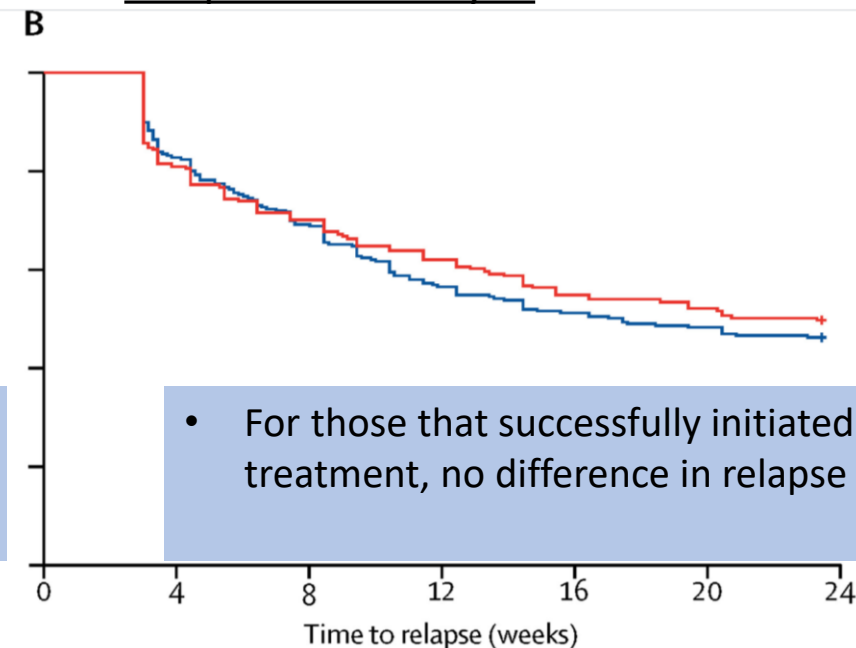
Sample: 540 participants with OUD at inpatient detoxification units planning to continue outpatient treatment

Main Outcome: Time to relapse event

Intention to Treat Analysis



Per-protocol Analysis





Thank You!

LAURENKW@UW.EDU