

# Emergency Department Management of Opioid Use Disorder/SUD



**SCHOOL OF MEDICINE**  
INDIANA UNIVERSITY



*Michael A Mitcheff, DO MBA CHCQM  
Corporate Medical Director  
Wexford health sources  
Beacon Addiction Medicine Consulting*

# Brief Biography

- Former Chief Medical Officer –Indiana Department of Correction
- Former Medical Director Emergency Services Holy Cross and Ancilla Healthcare
- Current Corporate Medical Director Wexford health sources
- Current Corporate Medical Director Beacon Addiction Medicine Consulting
- Board Certified Addiction Medicine

Critical  
Access  
Points  
of entry

---

Jails/Prisons

---

*Emergency  
Departments*

**"Do the best you can until you know better. Then  
when you know better, do better."**

**~ Maya Angelou**

## Learning Objectives

- ✓ Define opioid use disorder (OUD) as a medical and public health emergency
- ✓ Explain that medications are the most effective treatment for opioid use disorder
- ✓ Recall the pharmacology of buprenorphine, methadone, & naltrexone
- ✓ Apply the principles of precipitated withdrawal
- ✓ Demonstrate how to diagnose someone with OUD
- ✓ Summarize how to start someone on buprenorphine in the emergency department

# Learning objectives

---

Emphasize the importance of having resources available for referral from the ED

Briefly discuss other substance use disorders and critical access decisions

Review myths surrounding substance use disorder

# Common Substance Abuse MYTHS

- **Myth #1: Drug addiction is a choice.** Drug use can be a choice, and prolonged use changes your body and brain chemistry. When that happens, the user no longer appears to have a choice—this is when use and misuse become addiction. ***The mid-brain sees the drug as life sustaining and essential as it sees oxygen, food, shelter etc., “holds the cortex hostage!”***
- **Myth #2: If you have a stable job and family life, you’re not addicted.** You may still have a job or career, a loving spouse and kids, and still have a drug or alcohol problem. Just ask any physician in recovery—many of them practiced for years without anyone recognizing their drug addiction. Holding down a job doesn’t mean you’re not addicted—it could mean that you have a tolerant spouse or boss, or you are in a career that puts up with excessive drug or alcohol use. ***Like any chronic illness, there are different severity levels***
- **Myth #3: Addicts are bad people.** Addicts aren’t “bad” people trying to get “good,” they’re sick people trying to get well. They don’t belong to a particular race or exist only in certain parts of the country. They are lawyers, farmers, soldiers, mothers and grandfathers who struggle with drug dependence on a daily basis. They are proof that addiction doesn’t discriminate—but, thankfully, neither does recovery ***Once the disorder develops, control is lost and people often exhibit survival actions sometimes completely out of character for them.***
- **Myth #4: More than anything else, drug addiction is a character flaw: SUD** is a brain disease. Every type of drug of abuse has its own individual mechanism for changing how the brain functions. But regardless of which drug a person is addicted to the effects are similar: they range from changes in the molecules and cells that make up the brain, to mood changes, to changes in memory processes and in such motor skills as walking and talking. ***The drug becomes the single most powerful motivator in a drug abuser’s existence.*** This comes about because drug use has changed the individual’s brain and its functioning in critical ways.
- **Myth #5: Detox is all you need. You aren’t addicted after you finish detox. They can just knock you out so you can detox while you sleep.** Detox is difficult and it’s just the beginning. Detox is the first step towards recovery, but addiction is a chronic illness—like diabetes, asthma or hypertension, it needs to be managed throughout the lifespan. There is no “cure.” ***DETOX (medically supervised withdrawal) ALONE DOES NOT WORK***
- **Myth #6: You need to be religious in order to get sober. Recovery** doesn’t require you to believe in God or subscribe to any organized religion Treatment that meets the client’s needs is most effective. ***A higher power can be anything including the 12- step group***
- **Myth #7: You need to hit “rock bottom.”** There is no such thing a universal “rock bottom.” Each person has different limits. This is a dangerous idea that keeps people using or avoiding help because “I haven’t hit rock bottom” or allows family members to wait to intervene till someone “hits rock bottom.” Help can be obtained at any time and early intervention is best. ***You can get off the elevator on any floor!***

## Terminology

**Traditionally “Medication Assisted Treatment”  
(MAT)**

**Medications for Opioid Use Disorder (MOUD)**

**Opioid Agonist Therapy (OAT)**

**Medication for Addiction Treatment (MAT)**

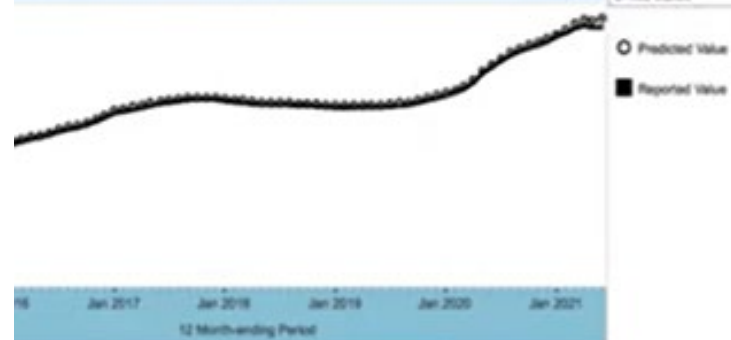


able for analysis on: 1/2/2022

12 Month-ending Provisional Counts of Drug Overdose Deaths: United States

Select Jurisdiction

United States



In Predicted 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: June 2020 to June 2021



Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods



For 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Reported provisional counts may not include all deaths that occurred during a given time period. Therefore

Based on data available for analysis on: 1/2/2022

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths

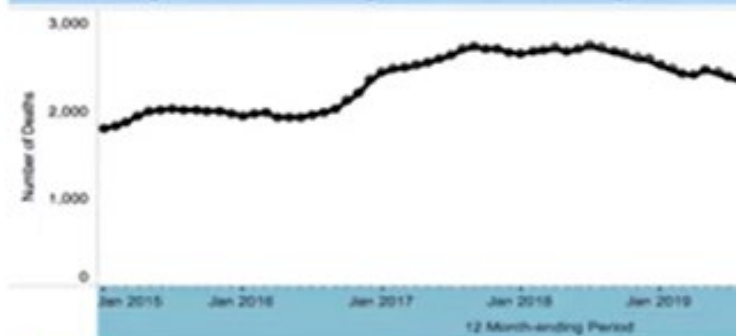


Figure 1b. Percent Change in Predicted 12 Month-ending Count of Drug Overdose Deaths: June 2020 to June 2021



Legend for Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods



NOTES: Reported provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Reported provisional counts may not include all deaths that occurred during a given time period. Therefore

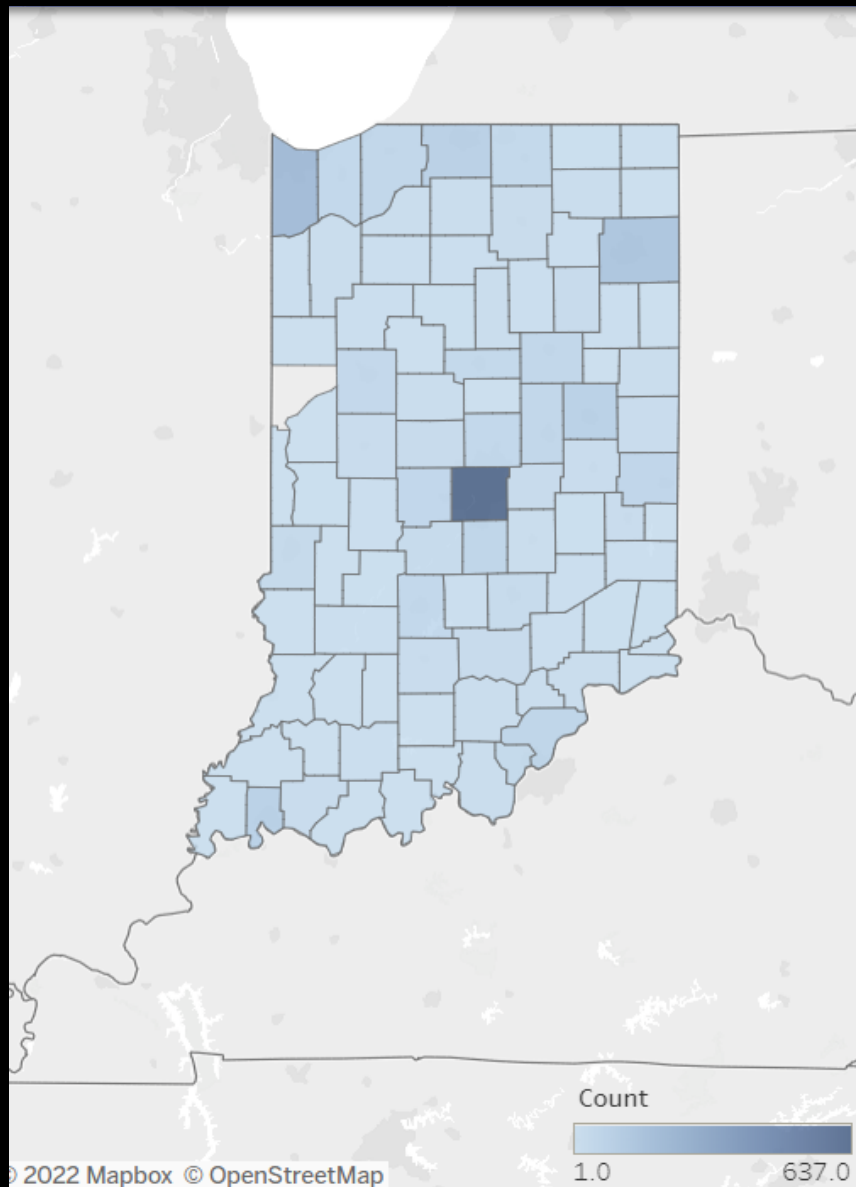
Emergency Medicine Management of Opioid

12 month-  
ending  
provisional  
number of  
drug  
overdose  
deaths

20% increase

# Indiana Statistics on OD deaths

- INDIANAPOLIS (WISH) — Indiana drug overdose deaths rose by a third in 2020, according to provisional data released by the U.S. Center for Disease Control and Prevention's National Center for Health Statistics.
- Figures show Indiana's overdose deaths rose from 1,704 in 2019 to 2,268 in 2020. The CDC notes that Indiana's figures are underreported due to incomplete data.
- Indiana's percentage change from 2019 to 2020 was an increase of 33.1%, compared to the national change of 29.4%



2,554

Deaths due to Any Drug in 2021

Age-Adjusted Rate

NA

Deaths due to Any Drug per 100,000 population in 2021

County Name

Deaths

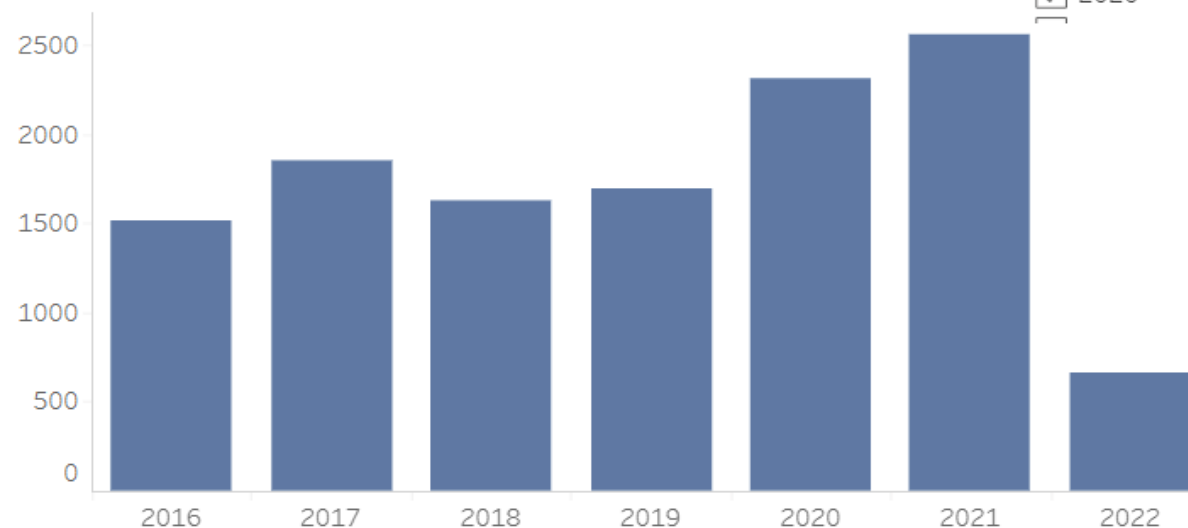
Percent Change from Previous Year

Adams	3	^ Incalculable
Allen	138	x Incalculable
Bartholomew	27	x Incalculable
Benton	2	x Incalculable
Blackford	4	x Incalculable
Boone	23	x Incalculable
Brown	9	x Incalculable
Carroll	4	x Incalculable
Cass	5	x Incalculable

### Trending Counts by Selected Time Interval

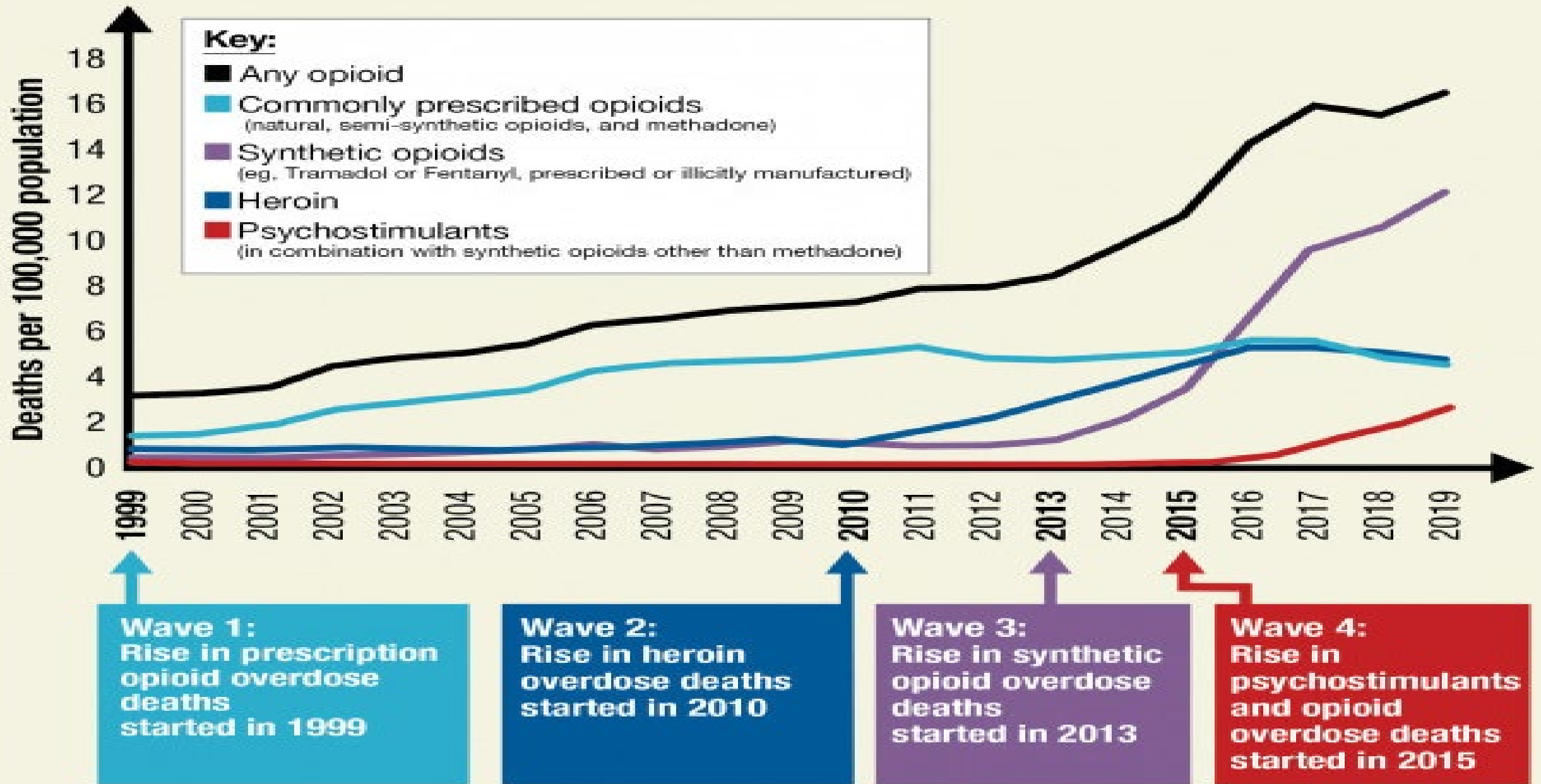
Toggle between year, quarter, and month on the right to view trend data by year, month, or quarter. Select one or more years on the right for inclusion in trend data.

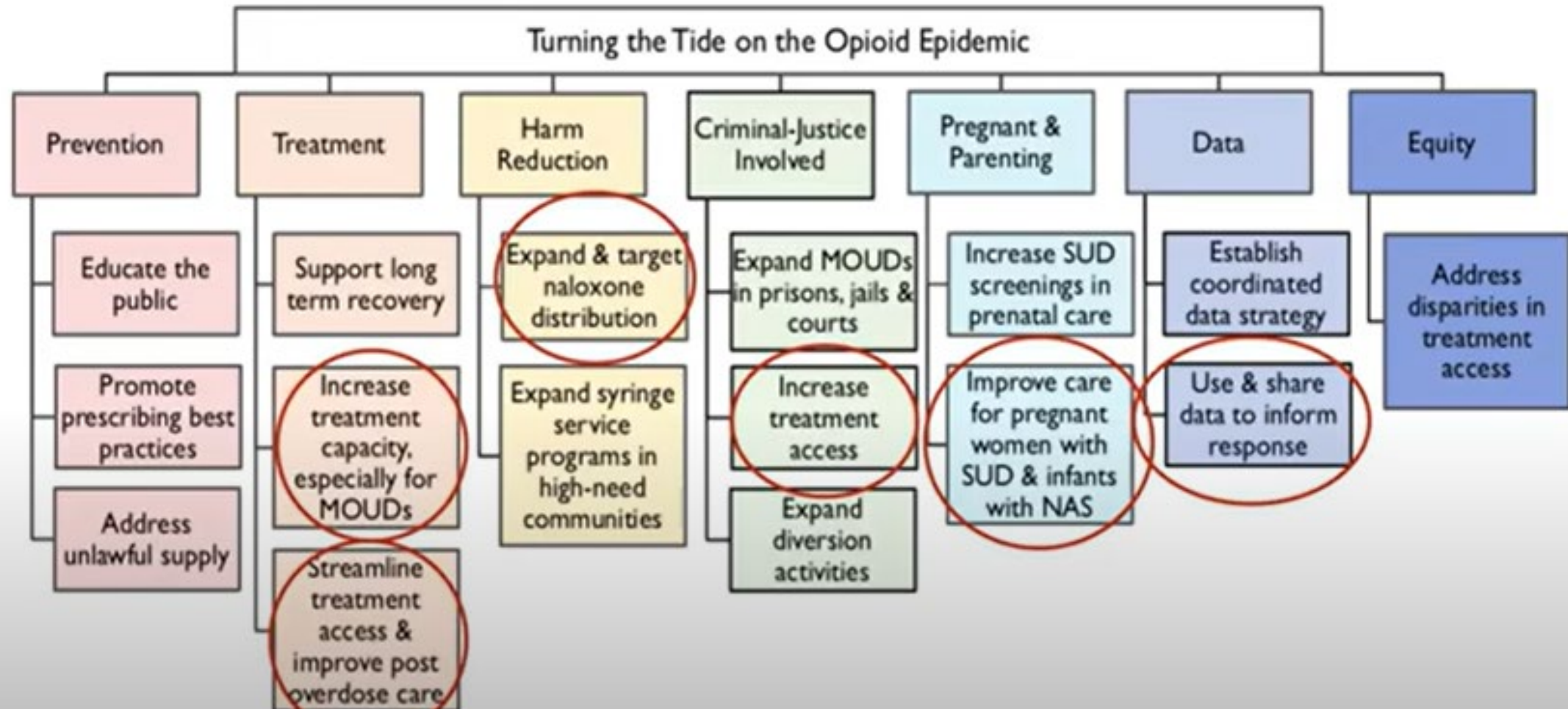
- ☒ Year  
☐ Quarter  
☐ Month
- ☒ 2016  
☒ 2017  
☒ 2018  
☒ 2019  
☒ 2020



**FIGURE 1**

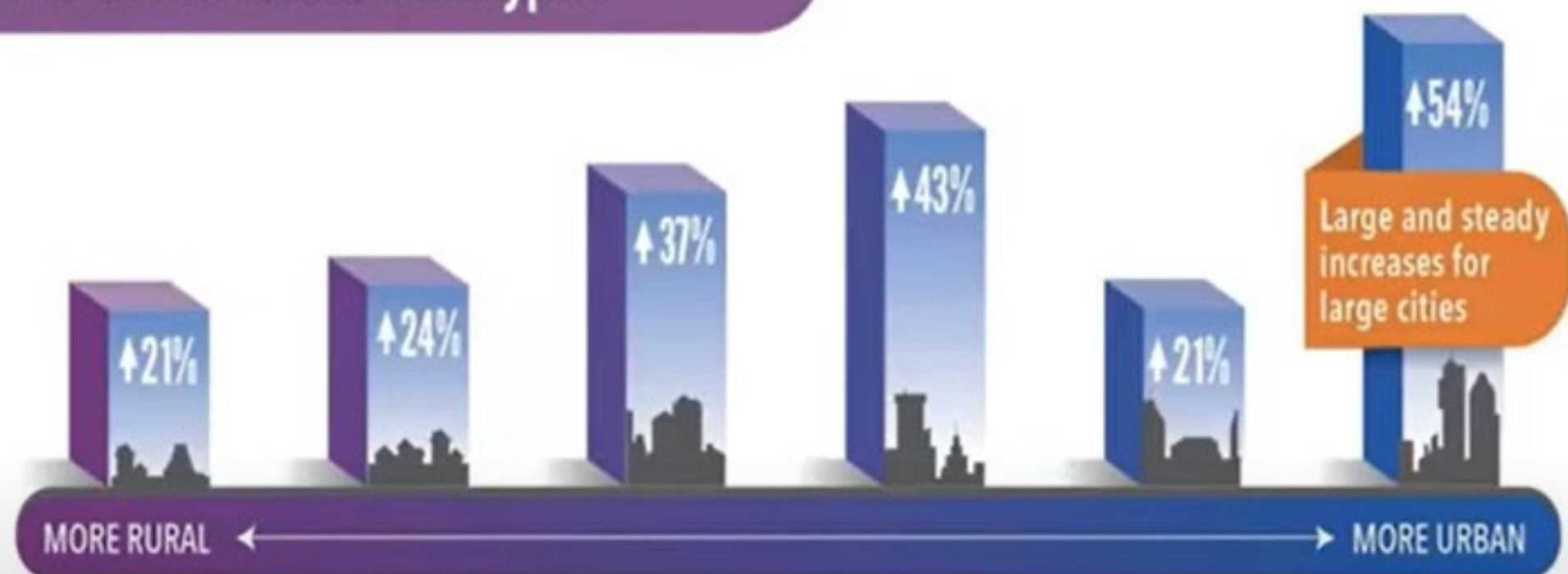
# Timeline of Opioid-related Overdose Deaths





Emergency Department Influence

Opioid overdoses continued to increase  
in cities and towns of all types.\*

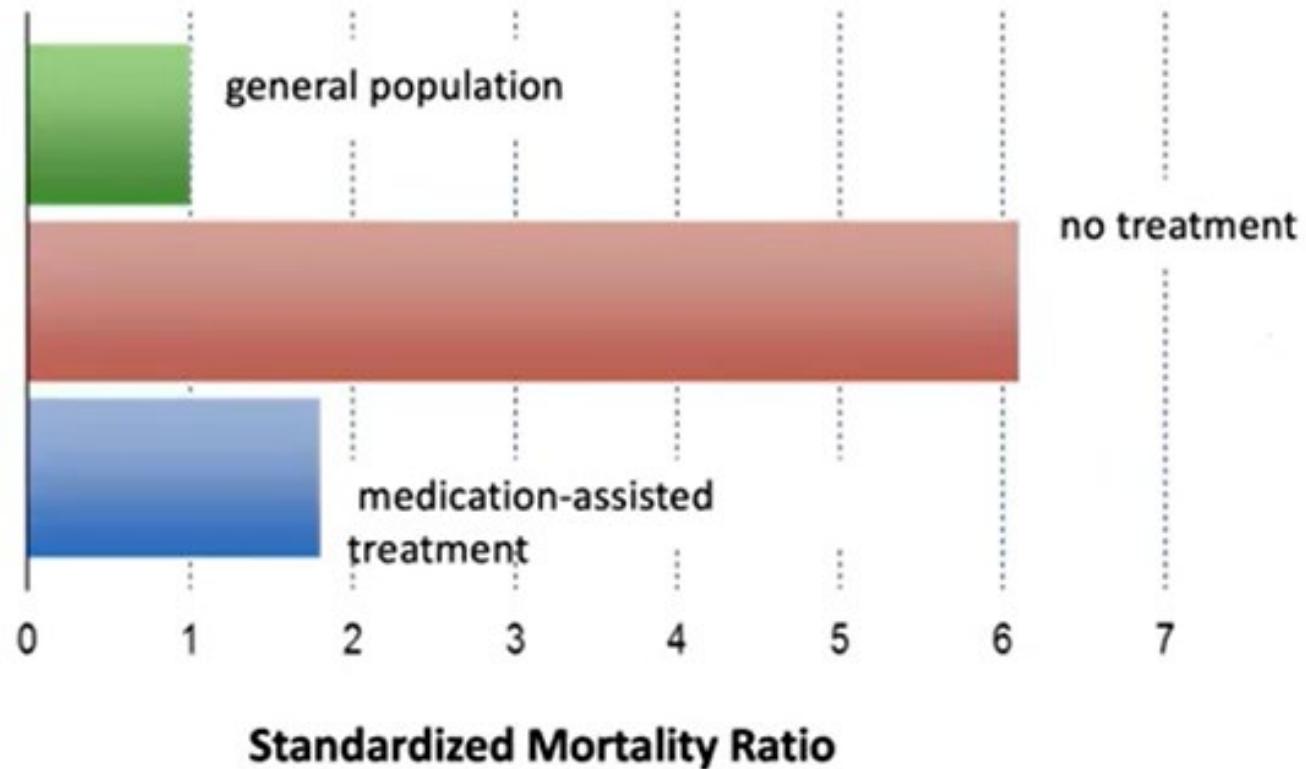


SOURCE: CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) Program, 16 states reporting percent changes from July 2016 through September 2017.



## Benefits of Medications for OUD: Decreased Mortality

Death Rates:



# Changes to the X-waiver

---

As of April 2021, educational requirement for an X-waiver not longer required.

---

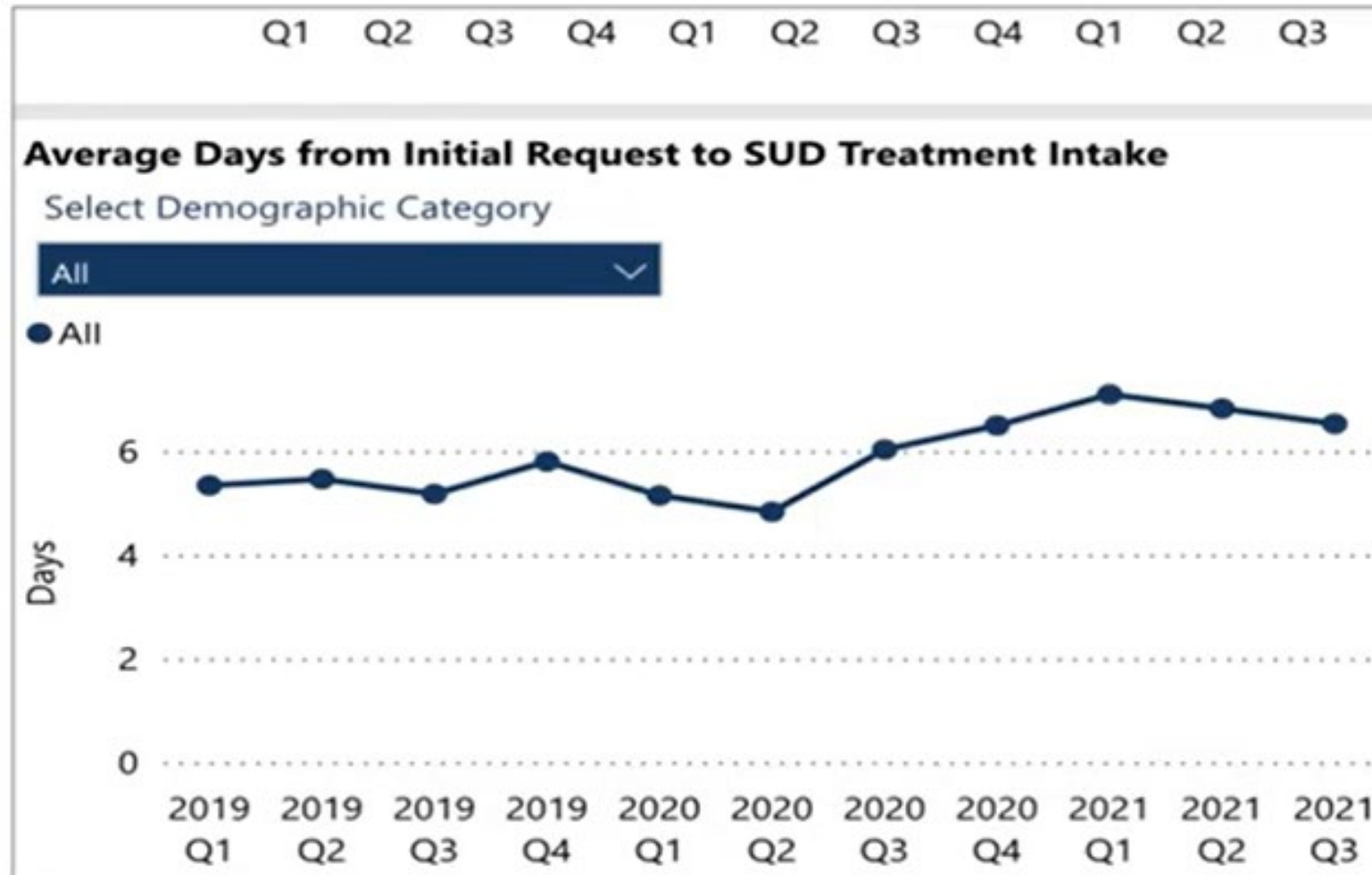
No longer required to offer counseling or ancillary services (although best results are with medications and therapy)

---

Everyone must submit an application to SAMHSA website designated as “notice of intent”  
Takes 5 minutes!



# Long Waits for Treatment



Supply & Demand  
Why the ED?



**28%**

**of adult ED patients  
screen positive for SUD**

**In 2019, only 18% of those with OUD were receiving  
MOUD**

## One-Year Mortality of Patients After Emergency Department Treatment for Nonfatal Opioid Overdose

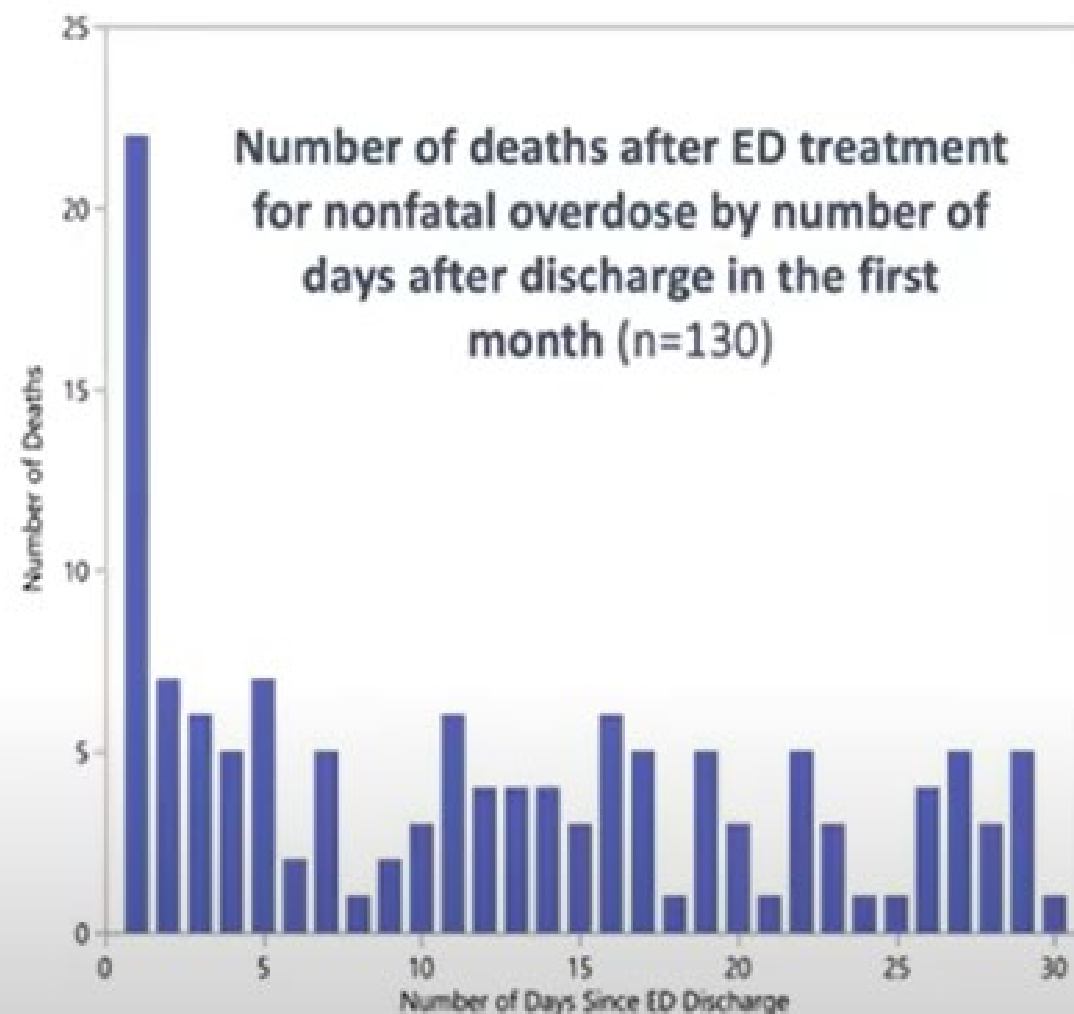
Scott G. Weiner MD, MPH<sup>1</sup>, Olesya Baker PhD<sup>2</sup>, Dana Berman MPH<sup>3</sup>, Jeremiah D. Schuur MD, FRACP

Nonfatal overdose has a 1-year mortality 5-10%

16.6% of patients obtained follow-up treatment after a nonfatal opioid overdose.

Those who didn't get treatment:

- Older
- Female
- Black
- Hispanic



Reference: Weiner, Scott, et al.. *One-Year Mortality of Patients After Emergency Department Treatment for Nonfatal Opioid Overdose*. *Annals of Emergency Medicine*. April 2, 2019.

Follow up rate  
in treatment in  
one month  
with and  
without  
buprenorphine

Research

**JAMA** The Journal of the  
American Medical Association

## Emergency Department-Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence A Randomized Clinical Trial

Gail D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD;  
Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

78% vs 37%

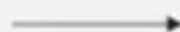


**Street Access to  
Drugs**

**Medical Access to  
Buprenorphine**



Effectiveness of  
buprenorphine



NNT with anti-hypertensives to  
prevent heart attack, stroke and  
death:

- 1 in 125
- 1 in 67
- 1 in 100

NNT with 16mg of buprenorphine  
daily to retain in treatment is 2

NNT for death is 40

## The French Field Experience with Buprenorphine

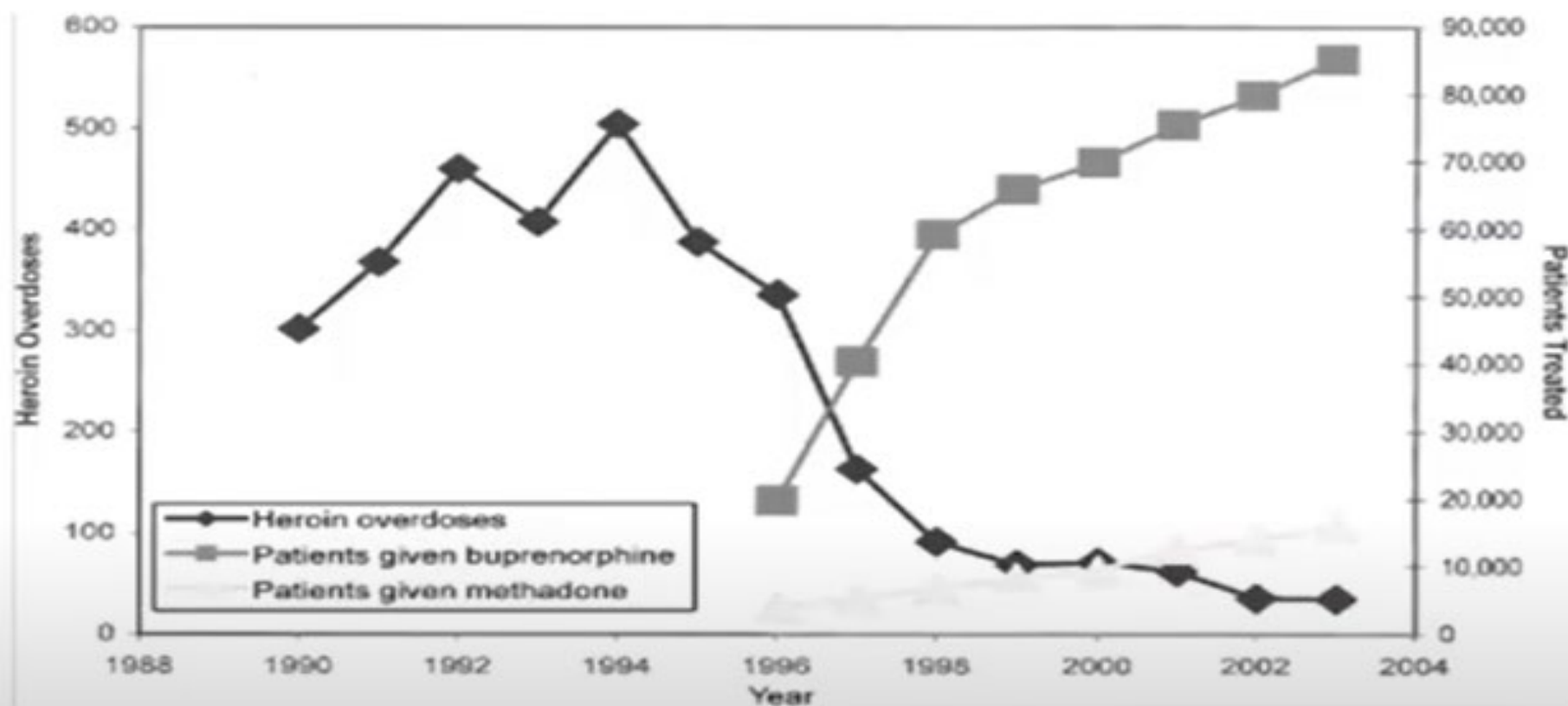


Figure 2. From: Carrieri, Maria Patrizia, et al. "Buprenorphine use: the international experience." *Clinical Infectious Diseases* 43.Supplement 4 (2006): S197-S215.



# Medications for Opioid Use Disorder (MOUD)

Arian

## Methadone

Full mu opioid receptor  
agonist



Oral (often solution)

## Buprenorphine $\pm$ Naloxone

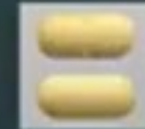
Partial mu opioid receptor  
agonist



Sublingual (tab, film),  
IV, IM, subcutaneous  
injection, transdermal  
patch

## Naltrexone

Mu opioid receptor  
antagonist (blocker)



Intramuscular injection  
(extended release) or Oral



# Major Features of Buprenorphine



Treats withdrawal, craving, & overdose

Safe & effective for treating OUD

## Partial agonist:

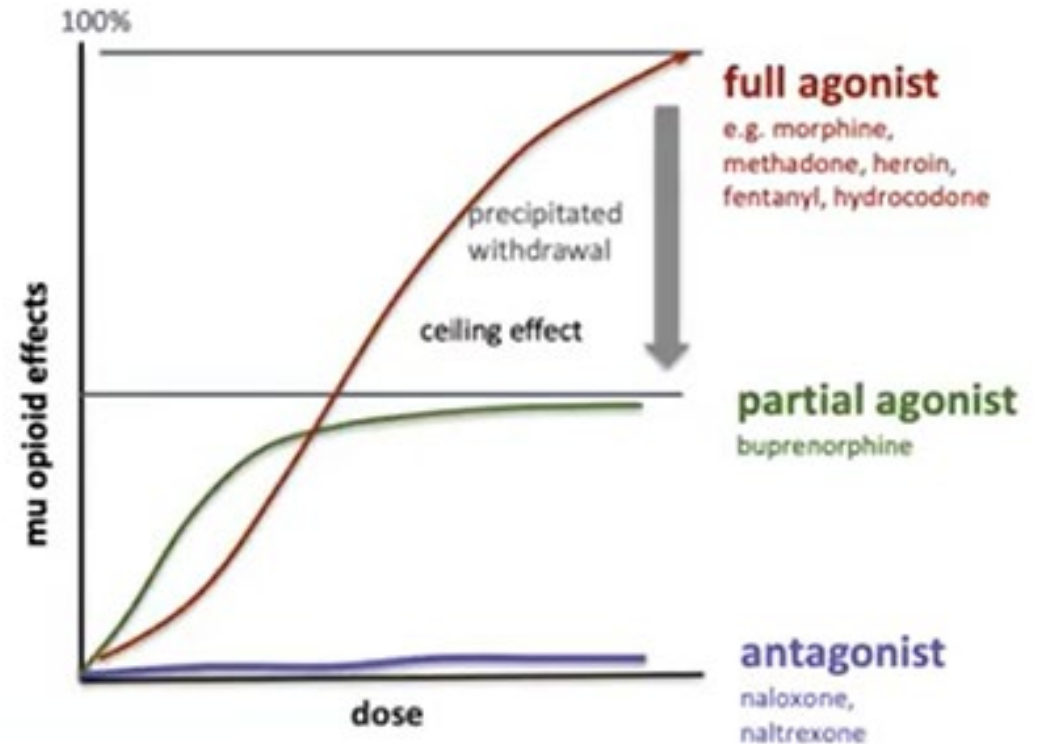
- Ceiling effect:
  - respiratory depression
  - sedation
- No ceiling effect:
  - analgesia

## High affinity:

- Blocks other opioids
- Displaces other opioids
- Can precipitate withdrawal

Long acting: Half-life ~ 24-36 Hours

Any clinician can order bup to be *administered* in the ED,  
DEA X-waiver required to *prescribe*



## Case #1: *Sophia, 28 year old female*

Arianna Campbell

### Situation

Sophia presents to the ED with severe abdominal pain, diaphoresis and tachycardia. What if she did not disclose she is withdrawing?

### Background

She is trying to quit using Oxy pills that she thinks could be fentanyl but is experiencing severe withdrawal symptoms. She has tried to quit before but could not make it past day 3.

### Assessment

Irritable, diaphoretic, restless, yawning, rhinorrhea, gooseflesh, nausea, diarrhea, abdominal pain, tachycardia at 108. She is vomiting.

### Treatment

What would you do?  
IV, saline boluses, labs, urine drug screen?

## Case #1: *Sophia, 28 year old female*

### Course

Initially full work-up with labs, IV, CT ordered since she is experiencing abdominal pain and did not initially disclose her opioid use.

She sees a sign on the wall indicating there is treatment for opioid use disorder.

She discloses her opioid use disorder to the RN after multiple IV attempts.

Buprenorphine 8mg is given sublingually.

She is checked and significantly improved after 45 minutes.

### Plan/Disposition

A second buprenorphine 8mg dose is given.

She is discharged home with hand naloxone and a prescription for buprenorphine.

She leaves the emergency department feeling normal and hugs the nurse.

### Outcome

She follows up in clinic and is continued on buprenorphine. She remains in treatment at 7 and 30 days.

MEDICATIONS are  
the MOST  
EFFECTIVE  
Treatment for  
OUD




**29%** of outpatient  
programs offer  
MOUD with  
maintenance

**31%** offered MOUD  
for short term detox

**39%** did not offer  
MOUD or were  
unclear

**21%** discouraged  
callers from using  
MOUD

## Benefits of MAT



**Decrease use of  
illicit opioids**

**Decrease overdose**

**Decrease in infectious  
disease transmission**

**Decrease all-cause  
mortality**



Emergency  
Department  
Relevance



**24/7 access to  
care-  
“availablists”**

**Short-term post  
overdose mortality**

**Frequent site of care  
for folks with OUD**

**Familiar with medical  
and psychiatric  
complications**

A hallway with three doors: orange, green, and blue. The doors are set into a light gray wall. In the foreground, there is a large, white, cloud-like shape that partially obscures the bottom of the doors. The floor is a dark wood pattern.

## **Buprenorphine in the ED**

EDs are an important entry point for MOUD

[West J Emerg Med](#). 2020 Mar; 21(2): 261–271.

PMCID: PMC7081867

Published online 2020 Feb 21. doi: [10.5811/westjem.2019.11.44382](https://doi.org/10.5811/westjem.2019.11.44382)

PMID: [32191184](https://pubmed.ncbi.nlm.nih.gov/32191184/)

# Emergency Department Clinicians' Attitudes Toward Opioid Use Disorder and Emergency Department-initiated Buprenorphine Treatment: A Mixed-Methods Study

[Dana D. Im](#), MD, MPP,<sup>✉\*</sup> [Anita Chary](#), MD, PhD,<sup>\*†</sup> [Anna L. Condella](#), MD,<sup>\*†</sup> [Human Vongsachang](#), MD, MPH,<sup>‡</sup>  
[Lucas C. Carlson](#), MD, MPH,<sup>\*†</sup> [Lara Vogel](#), MD, MBA,<sup>\*†</sup> [Alister Martin](#), MD, MPP,<sup>\*†</sup> [Nathan Kunzler](#), MD,<sup>\*†</sup>  
[Scott G. Weiner](#), MD, MPH,<sup>†</sup> and [Margaret Samuels-Kalow](#), MD, MSHP<sup>\*</sup>



# Addiction Science and Clinical Practice

- Although opportunities exist to identify and refine effective ED care of patients with SUDs, the importance that the ED can have in improving outcomes for patients with SUDs is clear.
- Ample opportunities exist for emergency providers to improve care by screening, initiating treatment, either psychosocial or pharmacotherapies, and directly linking patients to ongoing treatment.
- Barriers to effective ED management of SUDs include competing priorities, **inadequate training in addiction medicine, stigma some of which can be overcome by increasing the quantity and quality of addiction medicine training in the medical, nursing and allied health sciences training and post-graduate education, and by prioritization of enhanced care of the ED patient with SUDs through national and local reimbursement and quality mechanisms**

ACEP position

ED physicians should be treating OUD

Now a national guideline so the tables are turning


## ED Specific Concerns: Systems-Level

Prescribing buprenorphine in the ED without the ability to ensure outpatient follow-up: **YOU GOT THIS**

Possible financial barriers for patients to continue on buprenorphine after ED-induction. **(ALWAYS CHEAPER THAN HEROIN)**

Anticipated increase in ED volume related to patients requesting OUD treatment.

## Key Takeaways



1. **Patient-centered rapid access to addiction treatment is an essential component of quality care.**
2. **Increasing numbers of patients are started on buprenorphine in the ED and referred to ongoing treatment in the community**
3. **There are key, simple steps to providing quality, patient-centered care that reflect the shift in treatment access from the ED**

## Buprenorphine in the ED

75% of patients initiated in ED and given RX still on buprenorphine at 30 & 60 days

30% follow up in one week

78% were engaged in addiction care at 30 days

Reduction of illicit drug use from 5.4 days per week to 2.3 days<sup>3</sup>

## STEP 1

*Buprenorphine in  
the ED* →

- ✓ **Diagnose Opioid Use Disorder**
- ✓ **Screening**
- ✓ **PDMP**



# DSM 5 diagnosis

## Making the Diagnosis

### Loss of control

- more than intended
  - amount used
  - time spent
- unable to cut down
- giving up activities
- craving

### Physiology

- tolerance
- withdrawal

### Consequences

- unfulfilled obligations
  - work
  - school
  - home
- interpersonal problems
- dangerous situations
- medical problems

*formerly "dependence"*

*formerly "abuse"*

- A **substance use disorder** is defined by having 2 or more • in the past year resulting in distress or impairment.
- **Tolerance** and **withdrawal** alone don't necessarily imply a disorder.
- Severity is rated by the number of symptoms present:

2-3 = mild  
4-5 = moderate  
6+ = severe

## STEP 2

*Buprenorphine in  
the ED* →

**Calculate their Clinical Opioid Withdrawal Scale (COWS)**

- ✓ **≥8 mild-moderate withdrawal, typically ok for induction**
- ✓ **≥12 moderate suggested by some pathways**



### STEP 3

*Buprenorphine in  
the ED* →

- ✓ **Choose your induction site**
- ✓ **ED vs Home**

Home Starts



- ✓ **Primary method for office-based providers**
- ✓ **ED providers are increasingly doing this**

## Case #2: *Olivia, 35 year old female*


- 35 yo F presents by EMS after being found down
- Given 2mg narcan with immediate resolution of bradypnea and somnolence
- Initially agitated and diaphoretic, nauseated with vomiting, but now improved
- Asking to leave

What do you want to offer before she leaves?

## Case #2: *Olivia, 35 year old female*

- ✓ IN Narcan
- ✓ Referral to syringe exchange
- ✓ HIV/Hepatitis/syphilis/pregnancy testing
- ✓ Buprenorphine RX with Home Start Guide

# Addiction is Fatal

The New York Times

PLAY THE CROSSWORD

## ***Overdose Deaths Reached Record High as the Pandemic Spread***

More than 100,000 Americans died from drug overdoses in the yearlong period ending in April, government researchers said.

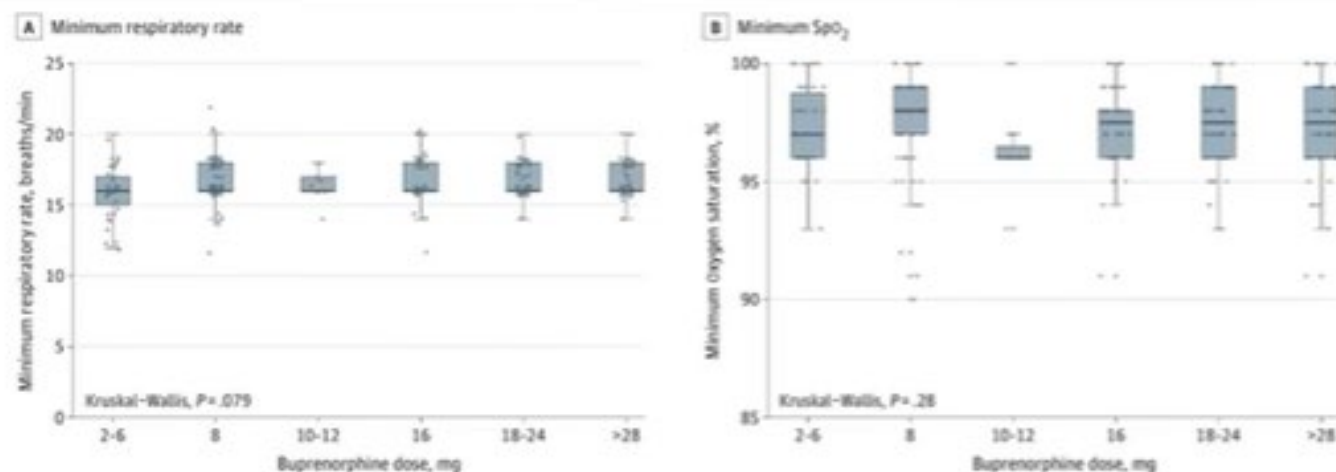
*“.. more than the toll of car accidents and guns combined. Overdose deaths have more than doubled since 2015..”*

Original Investigation | Substance Use and Addiction

## High-Dose Buprenorphine Induction in the Emergency Department for Treatment of Opioid Use Disorder

Andrew A. Herring, MD; Aidan A. Vosooghi, MS; Joshua Luftig, PA; Erik S. Anderson, MD; Xiwen Zhao, MS; James Dziura, PhD; Kathryn F. Hawk, MD, MHS; Ryan P. McCormack, MD, MS; Andrew Saxon, MD; Gail D'Onofrio, MD, MS

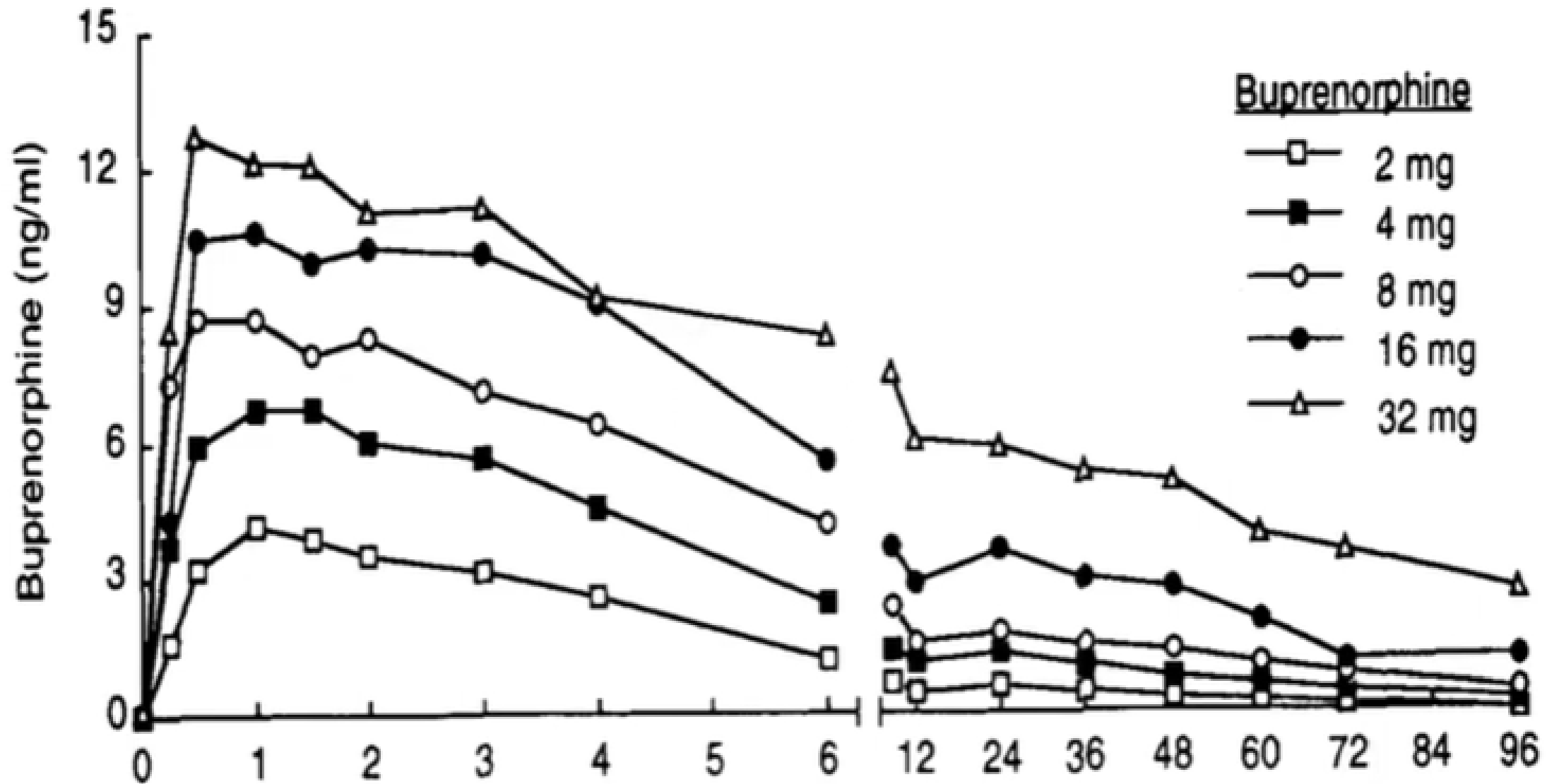
Figure 2. Minimum Respiratory Rate and Oxygen Saturation (SpO<sub>2</sub>) Following Initial Dose by Buprenorphine Dose



### Dose categories Mg (N)

2-6 (55)  
8 (136)  
10-12 (22)  
16 (106)  
20-24 (122)  
≥ 28 (138)





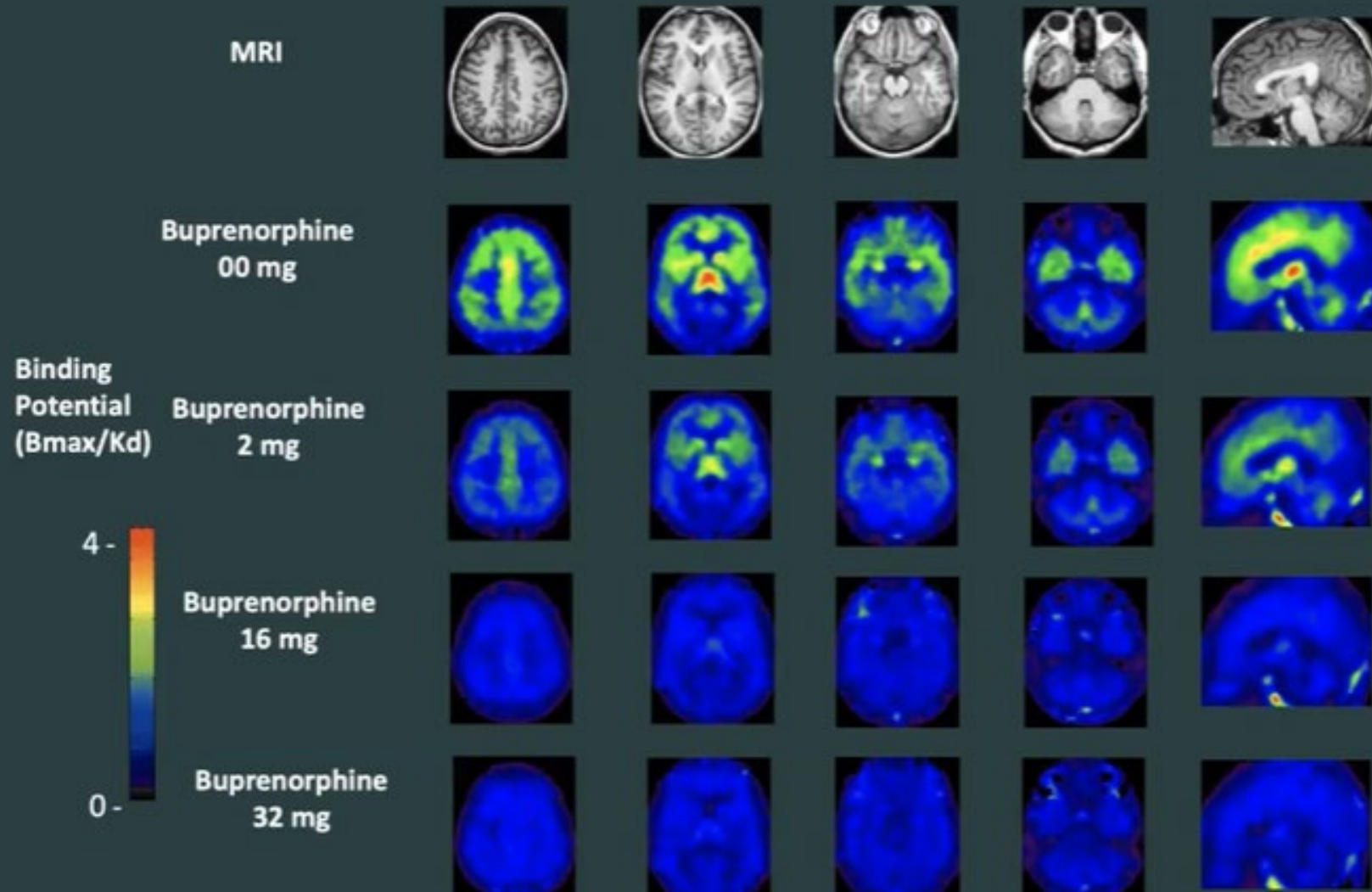
## Buprenorphine Dosing in the ED



- ✓ **2, 4 or 8mg are all acceptable initial doses of buprenorphine**  
*Ask your patients what they've done before*
- ✓ **Low initial daily dose is a prime reason for discontinuation of therapy**
- ✓ **Higher initial doses of buprenorphine paradoxically may cause fewer incidences of precipitated withdrawal**



## Effects of Buprenorphine Dose on $\mu$ -Opioid Receptor Availability in a Representative Subject



## STEP 4

*Buprenorphine i* →  
*n the ED*

- ✓ **Reassess in 20-40 minutes**
- ✓ **If improving, provide second BUP dose for total of 16mg**

## STEP 4b

*Buprenorphine in  
the ED* →

**If patient gets worse...may have  
precipitated withdrawal**

- ✓ **GIVE MORE BUP**
- ✓ **Benzos**
- ✓ **Usual adjuncts**

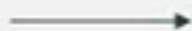
## STEP 5

*Buprenorphine i* →  
*n the ED*

### Discharge preparation

- ✓ Place consult to recovery coach/social work
- ✓ Provide take-home naloxone kit
- ✓ Provide specific follow up instructions (TIME AND PLACE)
- ✓ Prescribe 8-2mg buprenorphine-naloxone every 12 hours for as long as needed to get into local clinic

Buprenorphine  
in the ED



**Naloxone precipitated withdrawal (NPW)**

**AVOID THIS:**

- 0.1 mg naloxone **WHILE** BVM (NP airway and elevated head of bed)
- Goal RR 10-12

**TREAT WITH BUP**

- 16mg
- Add 8mg every 15min to effect
- **AVOID IN PATIENTS ON METHADONE**



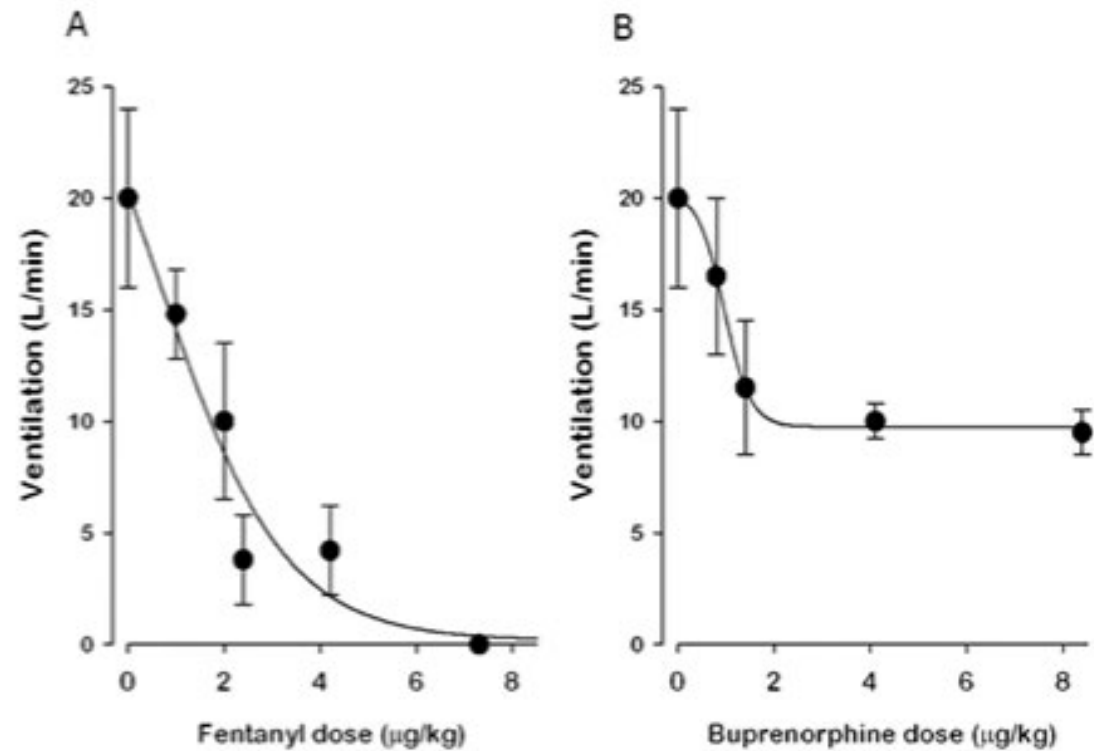
# Ceiling On Respiratory Depression

*British Journal of Anaesthesia* 96 (5): 627-32 (2006)  
doi:10.1093/bja/ael051 Advance Access publication March 17, 2006

BJA

## Buprenorphine induces ceiling in respiratory depression but not in analgesia

A. Dahan<sup>1,2</sup>, A. Yassen<sup>2</sup>, R. Romberg<sup>1</sup>, E. Sartori<sup>1</sup>, L. Teppema<sup>1</sup>,  
E. Olofson<sup>1</sup> and M. Danhof<sup>2</sup>

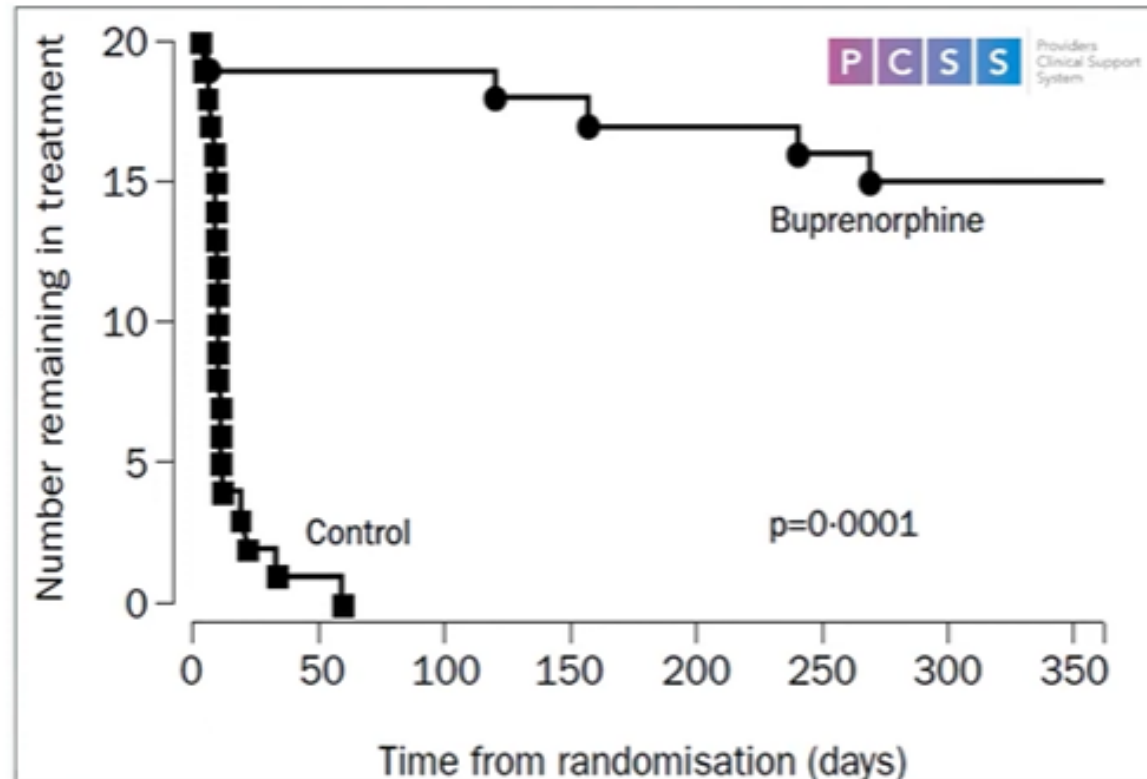


## Treatment Course

Discontinuation of MOUD is associated with relapse, overdose and mortality

Remind Patients this is a Chronic Disease

## Taper vs. Ongoing Treatment



Deaths: Taper – 4/20

Buprenorphine – 0/20



Bup Diversion



**23% of patients shared their prescriptions**

- Allergy (25%)
- Analgesia (22%)
- Antibiotics (21%)

## Bup Diversion

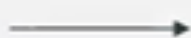
2% of IV opioid users  
report buprenorphine use  
"to get high"

72-80% report use of  
"diverted" BUP for  
symptom management

- Would prefer rx by a licensed provider
- May be public health signal that treatment needs not being met
- Need for improved access/expansion of treatment

Replacing One  
Drug For  
Another?

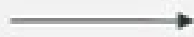
Buprenorphine  
Abuse?



- Brain chemistry and structure of OUD is changed
- Those changes require a medication to stabilize the disease
- Diabetes - insulin is a stabilizing medication
- Dosage of meds used does not get them high
- Restores balance in the brain's circuits
- Misuse among opioid-dependent people is low
- "Street use" of bup is usually self-treatment for OUD without access to MOUD

**Know and remove  
barriers to treatment.**

## DEA Regulations



**If patient is admitted for a medical or surgical reason other than opioid dependency:**

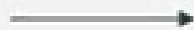
→ Methadone and buprenorphine can be administered to maintain or detoxify, including new starts

**If the patient presents to ED or urgent care in withdrawal:**

→ Legal to administer 72 hours of methadone or buprenorphine to treat withdrawal

**On discharge, regular rules apply**

## MAT Billing Code – G2213



### **G2213 – new billing code for initiation of medication for the treatment of opioid use disorder in the ED:**

- Medicare will pay ~ \$65.95, which is between ED E/M code levels 2 and 3 valued at 1.89 total RVUs and 1.30 work RVUs

### **Procedure note must include:**

- Assessment
- Referral to ongoing care/follow-up after treatment info and
- Arrangement for access to support for patients with OUD disorder who are initiated on MAT (BUP)

**All people deserve rapid access to  
addiction treatment.**



What should I do  
first? →

- ✓ **Identify a clinical champion**
- ✓ **Buprenorphine on formulary and in ED Pyxis**
- ✓ **Share treatment protocols**
- ✓ **Remove unnecessary diagnostic testing that delay start of treatment**
- ✓ **Get your team X-waivers - it is easy!!**
- ✓ **Identify an outpatient referral mechanism and develop a simple pathway**
- ✓ **Measure success, communicate wins to your crew**
- ✓ **Find resources - grants, navigators, etc.**

## Case #3: *Nelson, 61 year old man*

### Situation

Nelson is agitated and pacing around the emergency department, diaphoretic and occasionally alternately lying on the stretcher and the floor

### Background

Nelson presented for an asthma exacerbation last night and the overnight team ordered BUP prior to leaving for the day for mild withdrawal symptoms.

### Assessment

Irritable, diaphoretic, roaming around, screaming, yawning, rhinorrhea, tachypneic, tachycardia at 138

### Treatment

What happened?

What is the treatment?

## Case #3: *Nelson, 61-year-old man*

### Course

Precipitated withdrawal diagnosed

Provider took a deep breath and did not overreact

16 mg SL bup and 2 mg lorazepam po administered.  
20 mg IM ketamine administered 20 minutes later

### Plan/Disposition

Nelson left the ED 2 hours later feeling much better.

### Outcome

He followed up in clinic and is continued on buprenorphine but ultimately switched over to a methadone clinic 4 weeks later

## Review

ODD is a highly morbid chronic medical condition

ODD is treatable with highly effective medications

Survival neurocircuitry has been hijacked (would you lie, cheat, and steal to stay alive?)

The ED is one of several very important entry points for those with ODD to receive MOUD

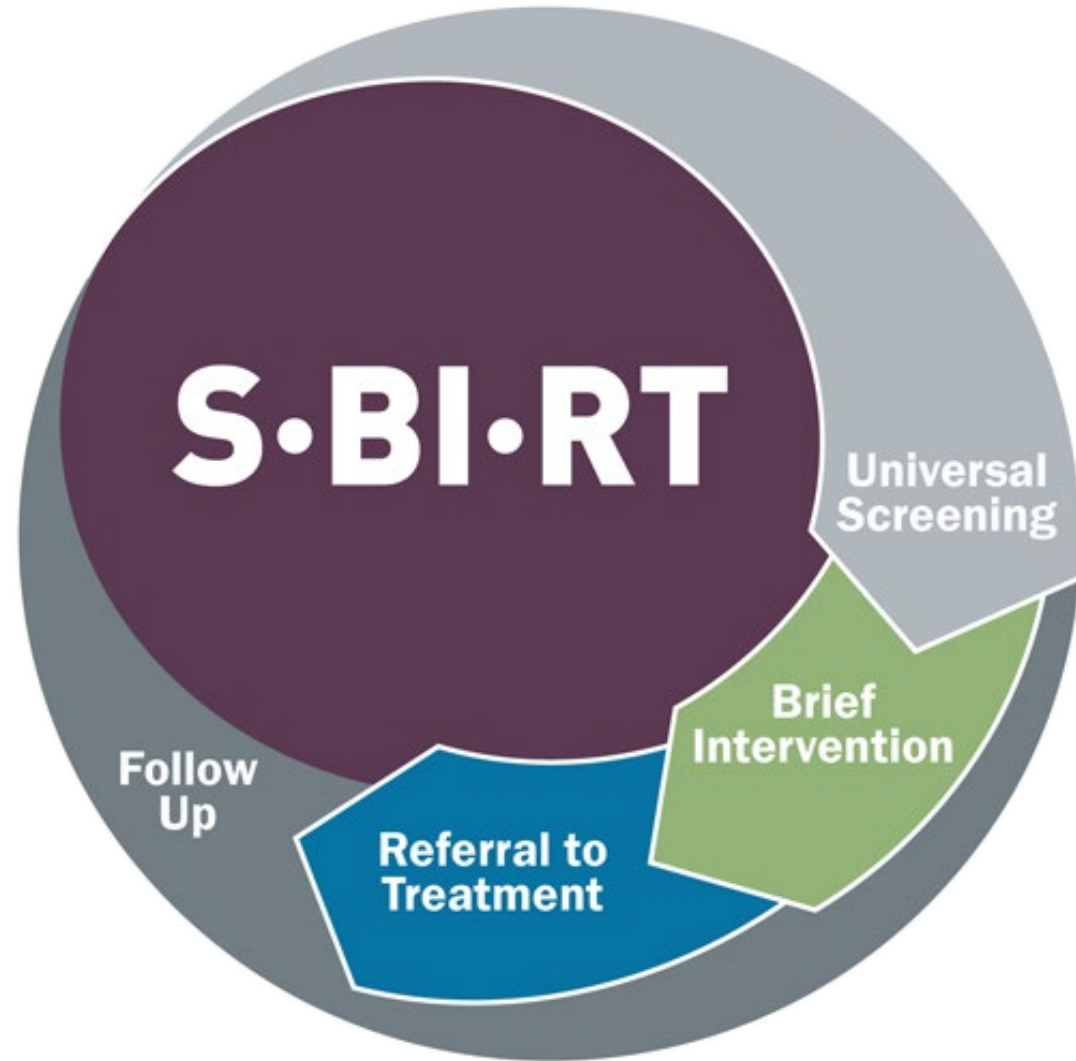
Reimbursement now tied with effective interventions

# Crystal methamphetamine in the ER

- Methamphetamine is a common, illegal, drug sold on the streets. It may be called meth, crystal meth, crank, speed, glass, tweak, chalk, Tina, or ice. Can present with MI, CVA, cardiac arrhythmia etc.,
- Majority of opioid related overdoses now combined with a stimulant
- Very reinforcing
- High risk suicide upon cessation
- Give naloxone to take home
- Connect ASAP with treatment provider for contingency management/matrix model



# Alcohol use disorder in the ER



# Alcohol use disorder in the ED

Discuss

consequences of use and relationship to ER visit

Assess

patient commitment to change

Discuss

potential severity of withdrawal and potential need for inpatient care

Discuss

MAT such as naltrexone (Sinclair method?), acamprosate and Antabuse (it is often very reassuring to patients to know there is help)

Have

If low risk withdrawal, have a referral source and set up an appt ASAP.



# Tobacco use disorder in the ED

#1 cause of preventable mortality in the country

Discuss clinical consequences. (may have presented with an MI, CVA, signs of vascular disease etc.,)

Discuss treatment options including NRT, Chantix and Bupropion.

Refer to Hot Line or other resource.



*That's all Folks!*