



# Opioids, Overdose and the Impact of the Coronavirus Pandemic

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# Disclosures

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- Pyramid Healthcare, Inc.
  - Regional Medical Director
- Uzima Consulting Group, LLC
  - Principal
- American Society of Addiction Medicine (ASAM)
  - Board Member

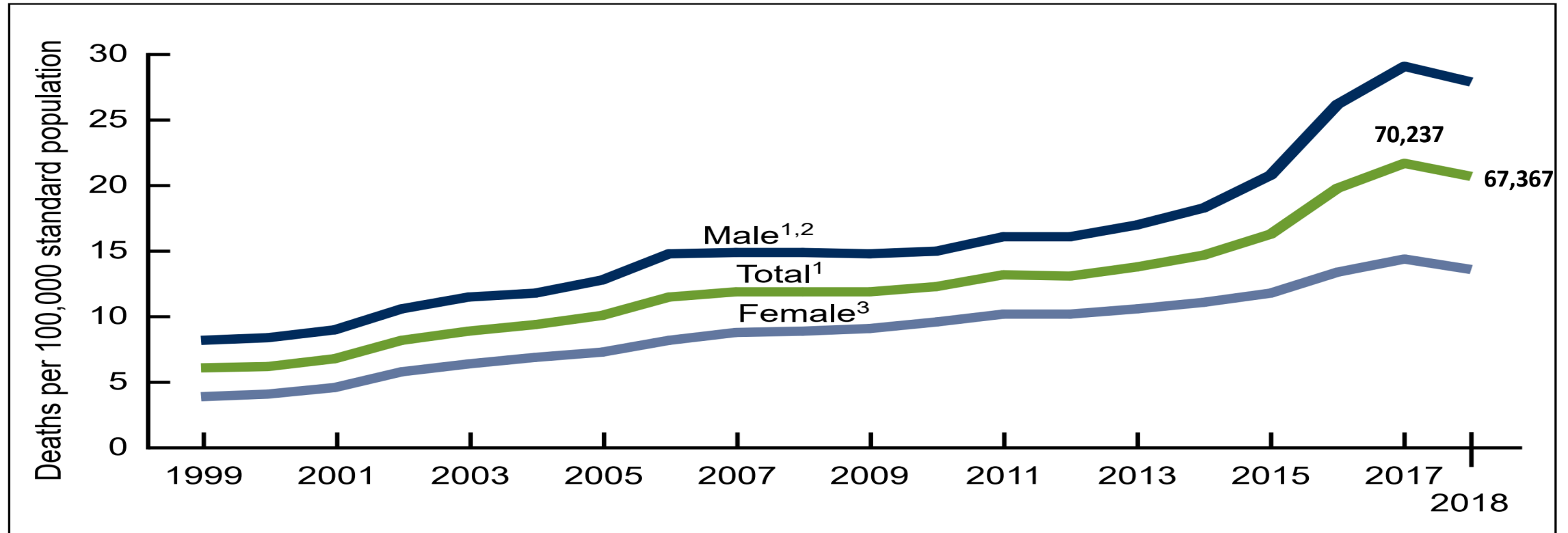
# Learning Objectives

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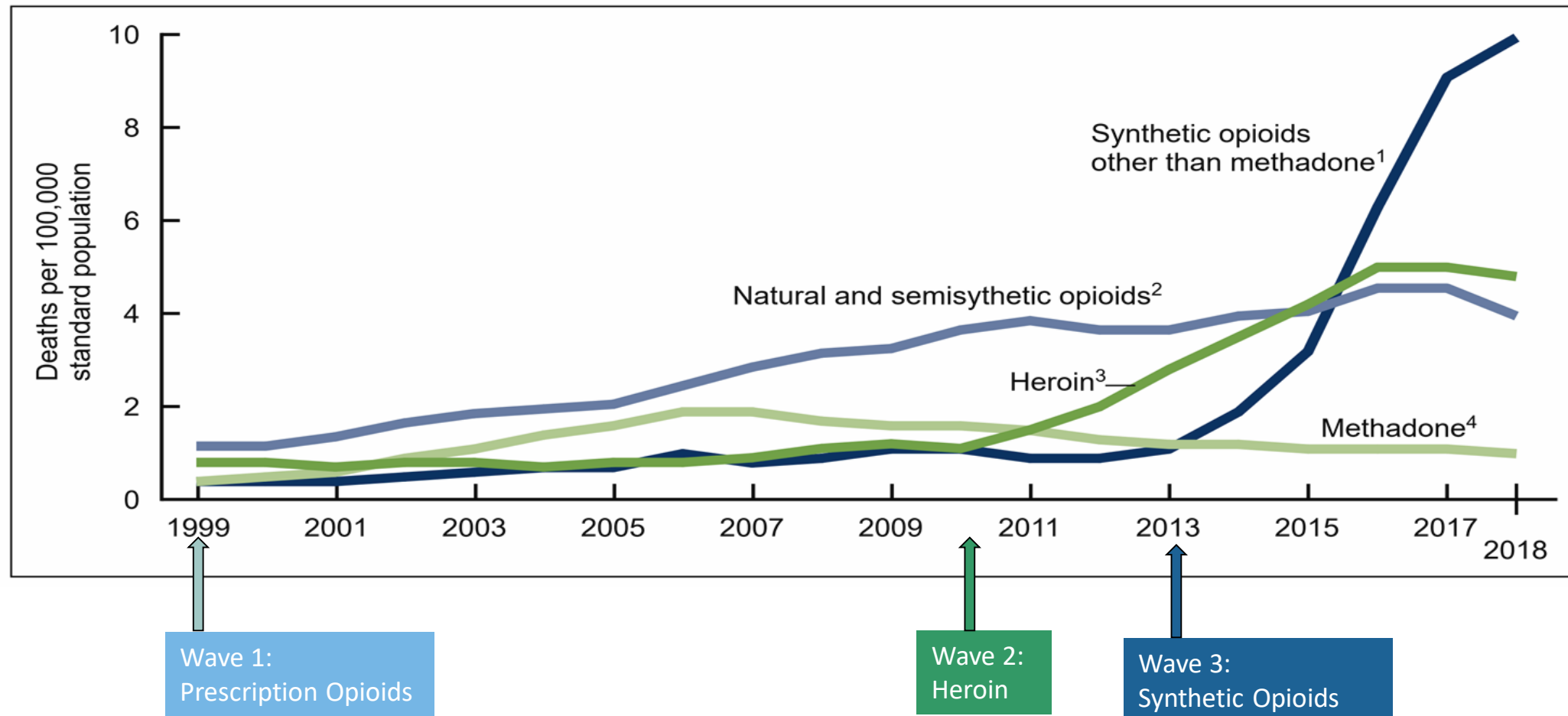
- Describe the epidemiology of the current opioid overdose crisis
- Discuss the potential impacts of the Covid-19 pandemic on the overdose crisis
- Understand how providers can respond to opioid use disorder and overdose

# Overdose Death Rate 1999 - 2018

Figure 1. Age-adjusted drug overdose death rates, by sex: United States, 1999–2018



# Overdose Deaths Involving Opioids, 1999 - 2018



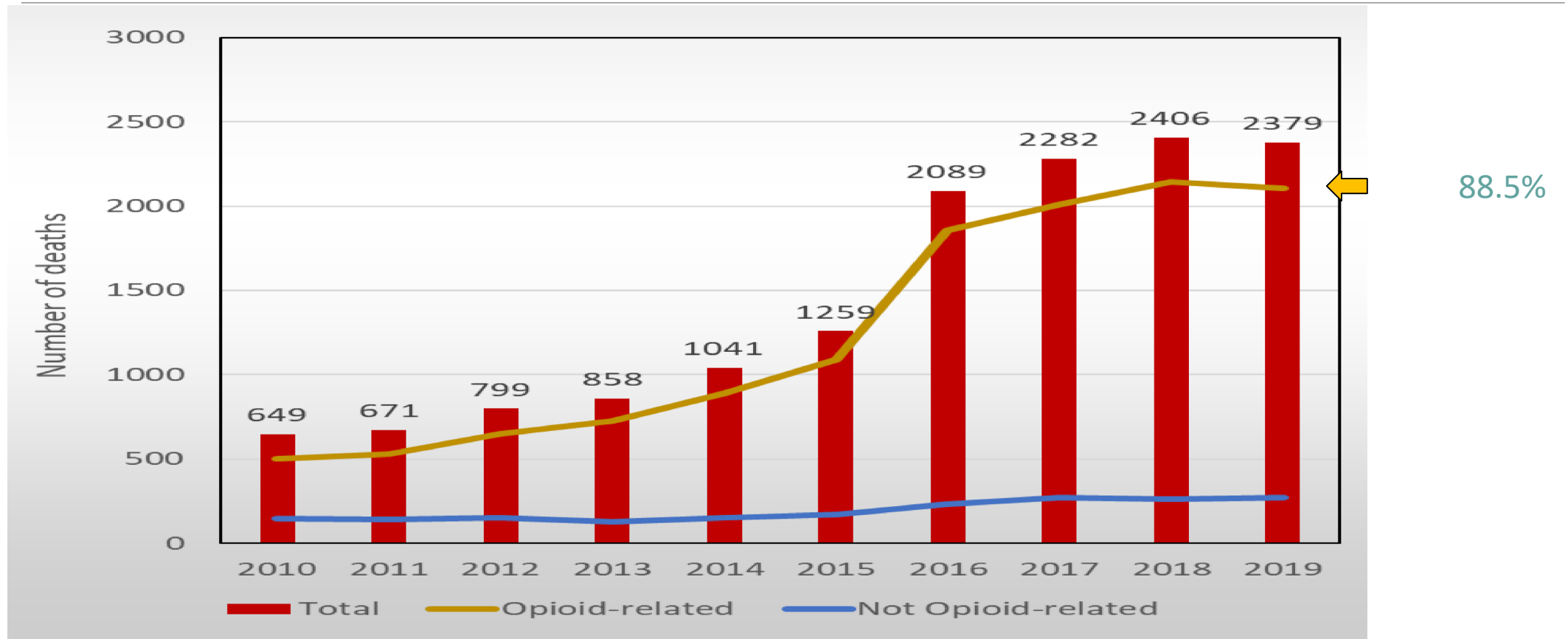
# Opioid Use and Hospitalization

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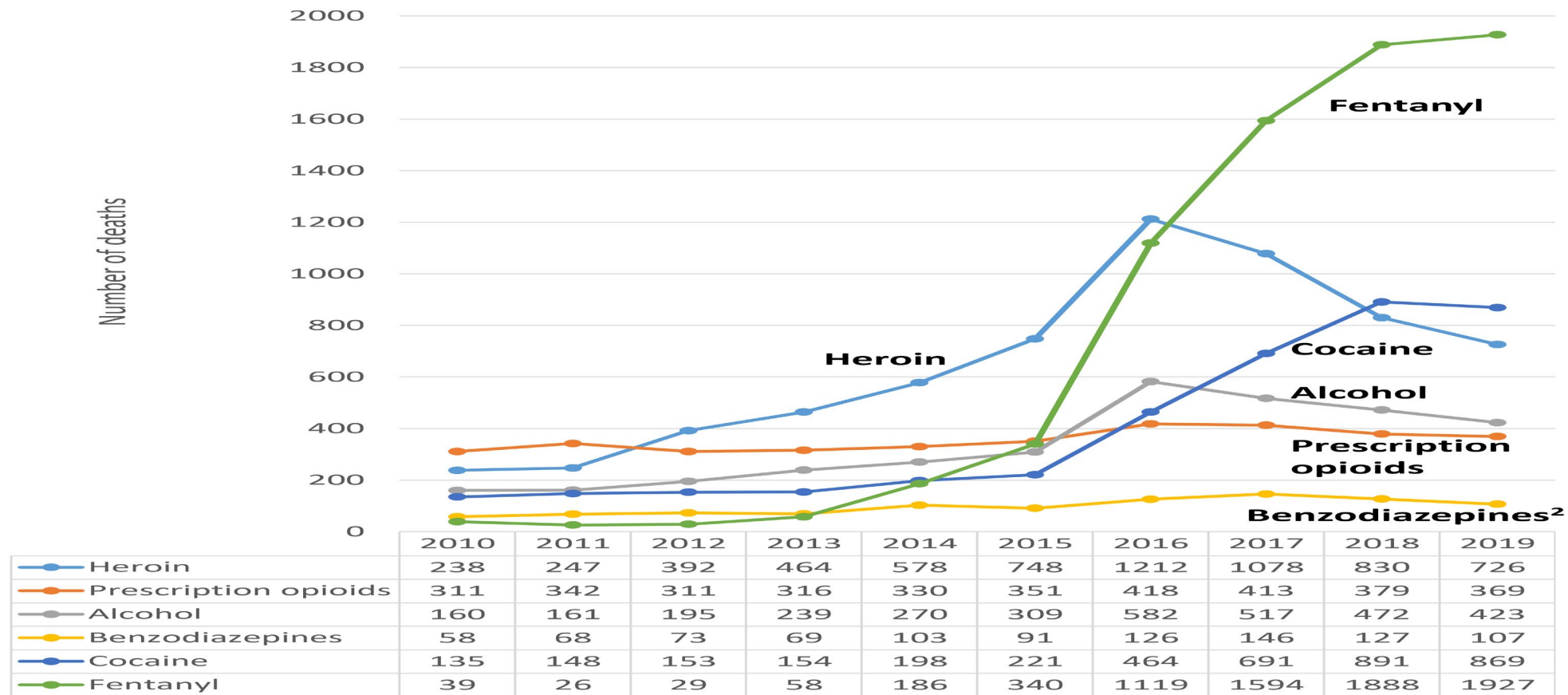
- 1999 – 2006: 65% ↑ in hospitalizations for poisoning by prescription opioids, sedatives, and tranquilizers
- 2002 – 2012: 1.9 fold ↑ in hospitalizations for opioid use disorder (OUD)
- 2-fold increase in OUD-associated skin and soft-tissue infections
- 5-fold increase in neonatal abstinence syndrome (NAS)/neonatal opioid withdrawal syndrome (NOWS) between 2004 -2014
- >60% with fatal overdose had  $\geq 1$  hospitalization or ED visit, for any reason, in the 1 year prior
- Hospitalization may be “teachable moment”

Winkelman, et. al., 2018  
Ronan and Herzig, 2016  
Gserjing, et. al., 2016  
Cohen, et. al., 2010  
Seal, et. al., 2001

# Maryland Overdose Deaths, 2010 - 2019



# Maryland Overdose Deaths by Substance, 2010 - 2019





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Health

# ‘Cries for help’: Drug overdoses are soaring during the coronavirus pandemic

Suspected overdoses nationally jumped 18 percent in March, 29 percent in April and 42 percent in May, data from ambulance teams, hospitals and police shows.

The New York Times

TheUpshot

In Shadow of Pandemic, U.S. Drug Overdose Deaths Resurge to Record

By Josh Katz, Abby Goodnough and Margot Sanger-Katz July 15, 2020

Drug deaths in America, [which fell](#) for the first time in 25 years in 2018, rose to record numbers in 2019 and are continuing to climb, a resurgence that is being complicated and perhaps worsened by the coronavirus pandemic.

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## COVID-19 pandemic deals setback to Maryland’s opioid progress



Kristi King | @KingWTOP  
July 7, 2020, 4:23 PM

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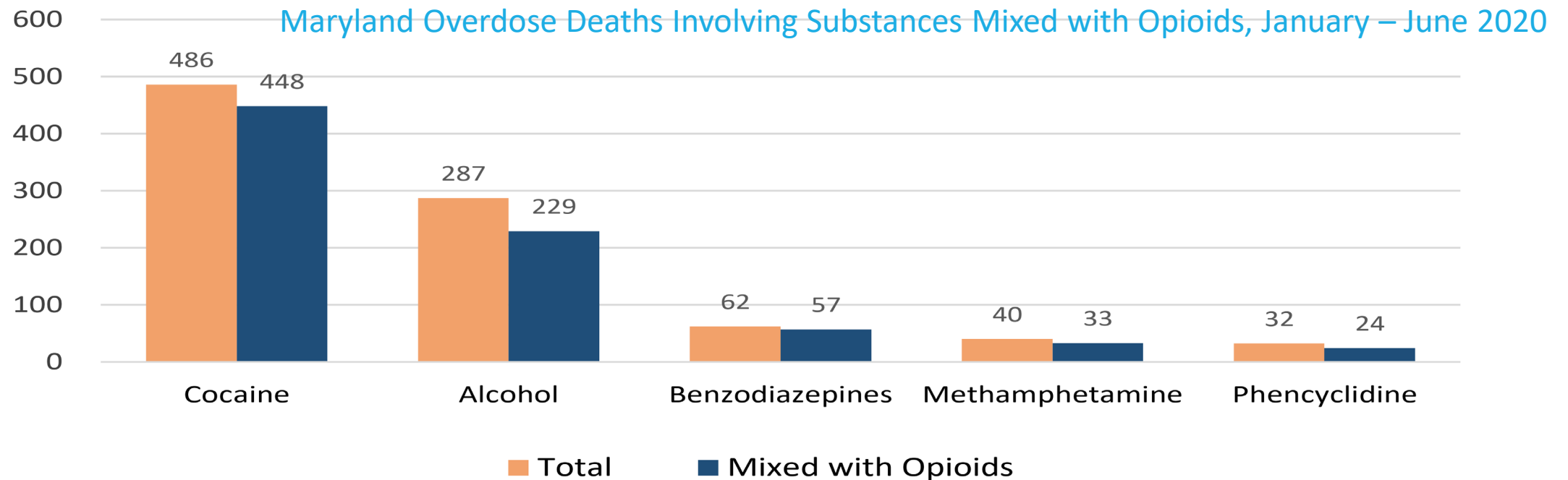
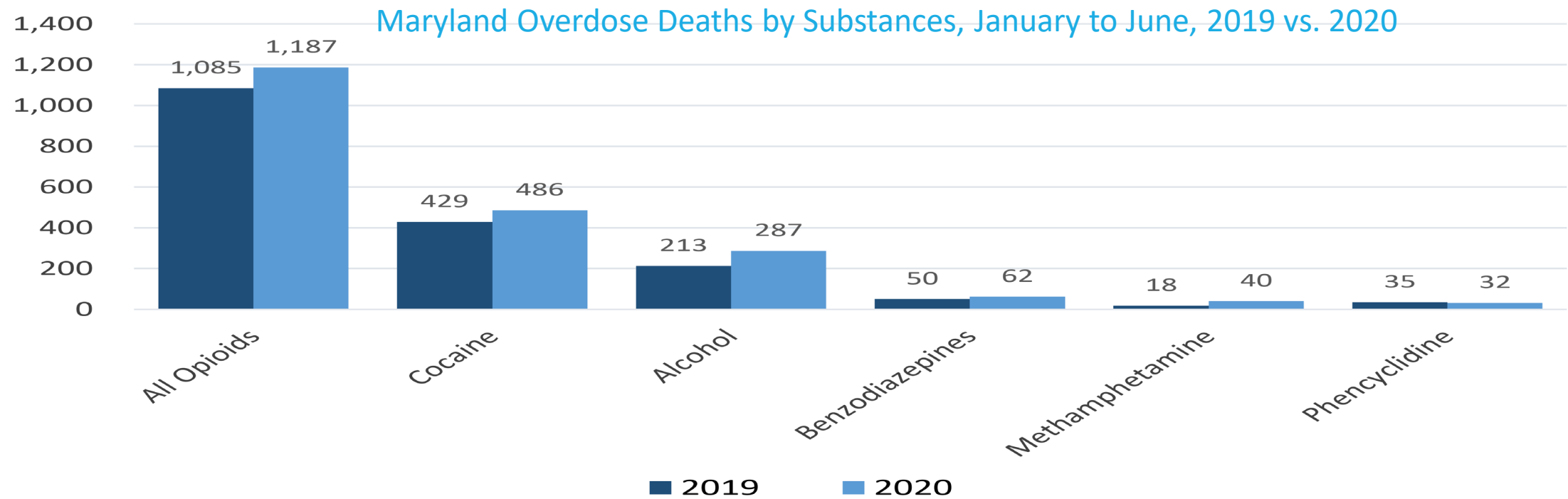
Since the COVID-19 pandemic lockdown began, the nation has been seeing double-digit increases in the numbers of opioid overdoses and deaths compared with last year. But



- Multijurisdictional public health and public safety data
- Links first-responder systems and record management systems with geo mapping data
- Hosted at University of Maryland Baltimore

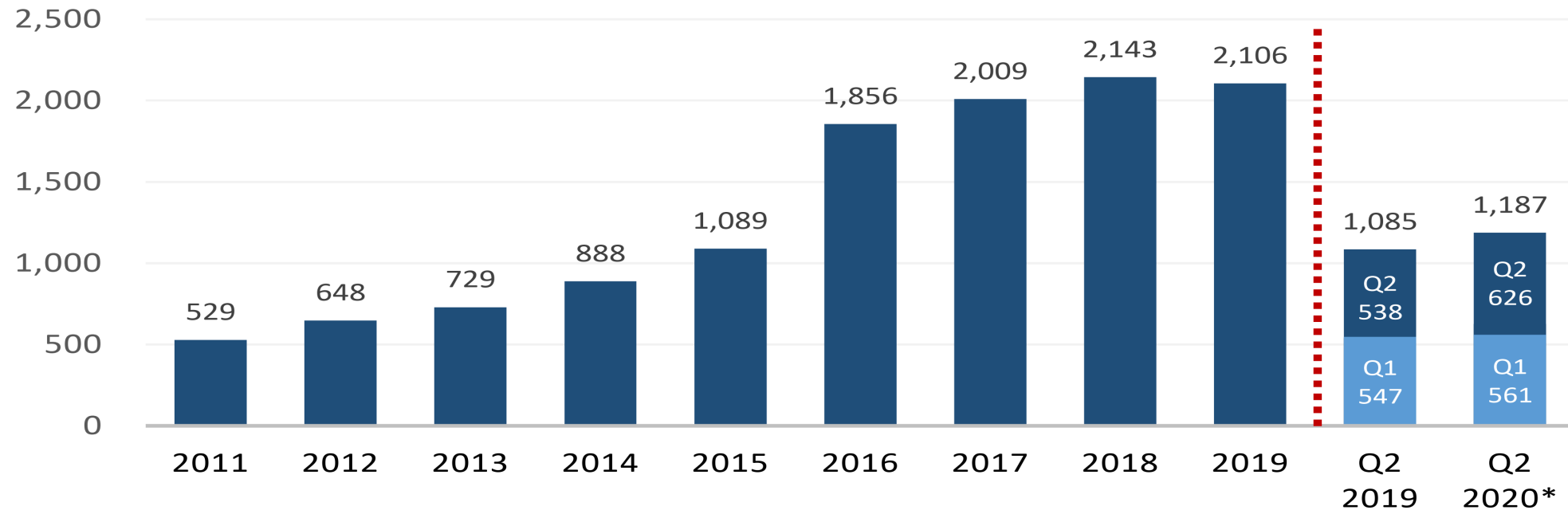
Suspected overdoses nationally — not all of them fatal — jumped 18 percent in March compared with last year, 29 percent in April and 42 percent in May, according to the Overdose Detection Mapping Application Program, a federal initiative that collects data from ambulance teams, hospitals and police.

<https://www.washingtonpost.com/health/2020/07/01/coronavirus-drug-overdose/>



# Maryland Opioid-Related Deaths, January – June 2020

**Figure 2. Opioid-Related Fatalities**  
*2011 through the Second Calendar Quarter, 2020\**



# Impacts of Covid-19

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- Increased stress
  - Fear of illness
  - Financial strain
  - Job loss
- Exacerbation of psychiatric symptoms
- Grief, loss and trauma
- Increased unstructured time/boredom

# Impacts of Covid-19

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- Loss of or reduction in recovery supports
  - Group counseling
  - Self/mutual help (NA, AA Smart Recovery)
  - Religious/Spiritual communities (church, mosque, synagogues)
- Social isolation
  - No one there to administer naloxone

# What Can Providers Do?

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# DSM-5 Opioid Use Disorder

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## Physiology

Tolerance

Withdrawal

## Loss of Control

Use more than intended

Inability to cut down or control use

Give up important activities

Craving

Great deal of time obtaining, using, recovering

## Consequences

Continued use despite physical/psych problems

Role failure

Recurrent interpersonal /social problems

Use in hazardous situations

Mild: 2-3 symptoms; Moderate: 4-5 symptoms; Severe:  $\geq 6$  symptoms



# What Can Providers Do?

- Identify and Respond
  - Universal screening, brief intervention and treatment or referral as appropriate for substance misuse
  - Check in with patients with substance use histories

NIDA Quick Screen Question:					
In the <u>past year</u> , how often have you used the following?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
Alcohol <ul style="list-style-type: none"><li>• For men, 5 or more drinks a day</li><li>• For women, 4 or more drinks a day</li></ul>					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Illegal Drugs					

# What Can Providers Do?

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- Know national, state and local resources
  - American Society of Addiction Medicine (ASAM) Covid-related Guidance
    - <https://www.asam.org/Quality-Science/covid-19-coronavirus>
    - Local State Chapter
  - State Crisis Line
  - Local Health Department

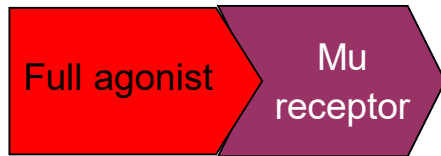
# What Can Providers Do?

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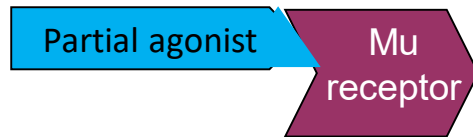
- Prescribe/Dispense Naloxone
  - Patients
    - Histories of substance use disorder
    - Prescribed opioid analgesics
  - Family members and close contacts of patients
- Treat Opioid Use Disorder in your Practice
  - Training (8 hours for MD, 24 hours for NPs/PAs)
    - Provider Clinical Support System (PCSS)
    - American Society of Addiction Medicine (ASAM)
  - Provider Clinical Support System (PCSS)
    - Paired mentor for assistance with buprenorphine prescribing

# FDA Approved Medications for Opioid Use Disorder

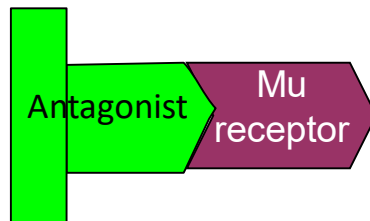
## Methadone



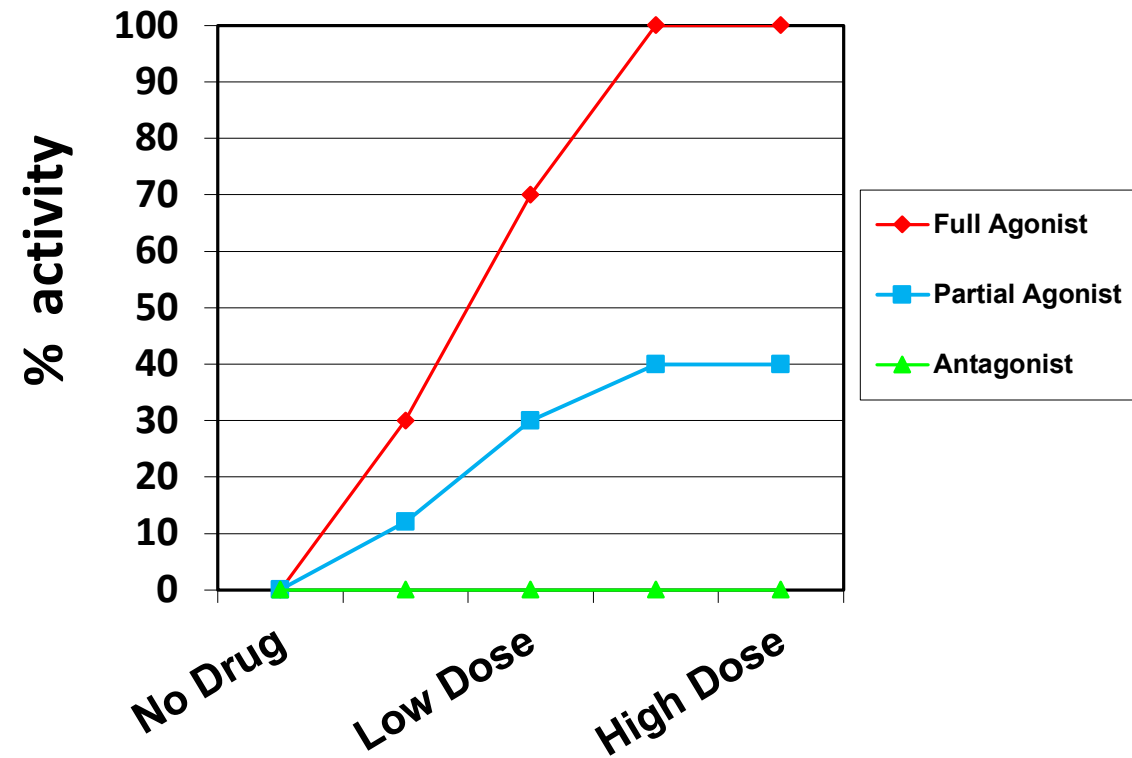
## Buprenorphine



## Naltrexone



## Receptor Activity



	Methadone	Buprenorphine	Naltrexone
Mechanism of Action	Full opioid agonist	Partial opioid agonist	Opioid antagonist
DEA Schedule	Schedule II	Schedule III	Unscheduled
Treatment Location	SAMSHA-approved Opioid Treatment Programs (OTPs)	OTPs or Office-Based Opioid Treatment (OBOT)	Any setting
Available at Retail Pharmacy for Addiction?	No	Yes (except for injectable form)	Yes (except for injectable form)
Precautions	Benzodiazepines or other sedative-hypnotics should be used with extreme caution but <u>should not prohibit initiation</u> of treatment.	Patients with physical dependence should be in withdrawal at initiation. Benzodiazepines or other sedative-hypnotics should be used with extreme caution but <u>should not prohibit initiation</u> of treatment.	Requires 7 -10 days of abstinence before initiation

# Benefits of Opioid Agonist Pharmacotherapy

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- More effective than placebo in ↓ illicit opioid use
  - (Self reports, urine toxicology)
- Good treatment retention
- Saves lives
  - **2.2 - 3.2x** mortality rate when off of buprenorphine or methadone
- Improvements in other recovery areas
  - Decreased criminal activity
  - Reduction in HIV & HCV transmission
  - Increase in employment

METZGER, ET. AL. (1993) JAIDS  
TORRENS, ET. AL, (1997) ADDICTION  
MARSCH (1998) ADDICTION  
JOHNSON ET AL. (2000) NEJM.  
FUDALA ET. AL. (2003) NEJM.  
KAKKO J ET AL. (2003) LANCET.

# Injectable Naltrexone (XR-NTX) Efficacy

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- Compared to placebo
  - Increased abstinence
  - Decreased cravings
- Compared to buprenorphine
  - More difficult to start patients on XR-NTX than BUP-NX (24-week trial)
    - 28% vs 6% unable to be initiated
  - Similar effectiveness if patients can get on it

# Medications for Addiction Treatment (MAT): Goals

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- Minimize harms of continued drug use
- Alleviate signs/symptoms of physical withdrawal
- Opioid receptor blockade
- Diminish and alleviate drug craving
- Normalize and stabilize perturbed brain neurochemistry
- Save Lives



# Buprenorphine Treatment for Hospitalized, Opioid-Dependent Patients

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- 139 inpatients on general medicine service (Aug 2009 – Oct 2012)
  - 67 randomized to detoxification
  - 72 randomized to buprenorphine prescription + linkage
- Outcomes
  - Treatment entry: [52 (**72.2%**) vs. 8 (11.9%),  $P < .001$ ]
  - Buprenorphine at 6 months f/u: [12 (16.7%) vs. 2 (3.0%),  $P = .007$ ]
  - Self-reported prior 30-day illicit opioid use: (0.60; 95% CI, 0.46-0.73;  $P < .01$ )

# Emergency Department–Initiated Buprenorphine/Naloxone

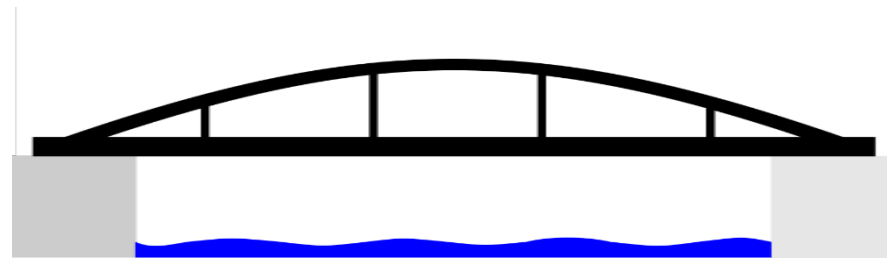
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- 329 Emergency Department patients (Apr '09 – Jun '13)
  - 104: screening + referral
  - 111: screening, brief intervention + facilitated referral
  - 114: screening, brief intervention + buprenorphine prescription with primary care referral
- Outcomes
  - Treatment at 30-day f/u: [89 (**78%**) vs. 50 (45%) vs. 38 (37%),  $p < .001$ ]
  - Self-reported days of illicit opioid use: [5.4 days to 0.9 days vs. 5.6 days to 2.4 days vs. 5.4 days to 2.3 days,  $p < .001$ ]
  - Urine toxicology (% negative): 58% vs. 43% vs. 54%, NS

# Implications for Hospital Medicine Providers

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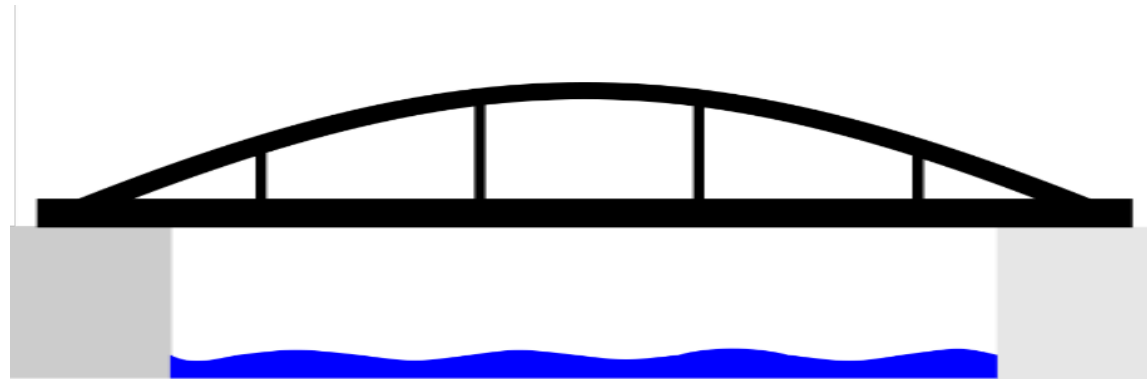
- Strongly consider buprenorphine certification
- Instead of buprenorphine taper protocols for opioid withdrawal, we should strongly consider buprenorphine initiation protocols
- Buprenorphine bridges to treatment for patients



# Implications for Ambulatory Medicine Providers

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- Strongly consider buprenorphine certification and waiver
- Integrate opioid use disorder treatment into your practice
- Need to be on the other side of the bridge to receive the patients



#TreatAddictionSaveLives