



# The Epidemic in a Pandemic: The Opioid Crisis & COVID-19

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# Outline

1. Key Concepts
2. The Epidemic
3. The Epidemic in the Pandemic



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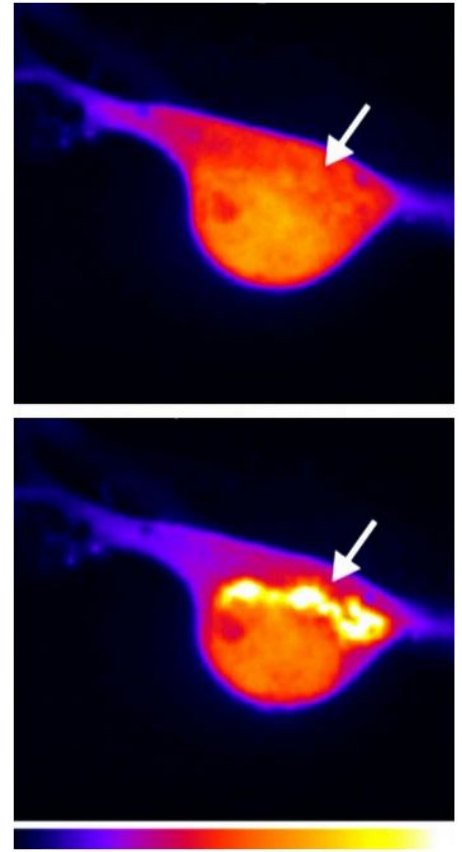


# What are Opioids?

**Opioids** are a group of chemical compounds that share the characteristic of stimulating receptors on the surface of cells called opioid receptors.

Opioid receptors are found in different parts of the brain and throughout the body.

Opioids differ from each other in how they interact with opioid receptors.



A nerve cell before opioid receptor activation (top) and 20 seconds after activation by morphine (bottom). Drs. Miriam Stoeber and Damien Jullié of von Zastrow lab, UCSF



# Opioid Tolerance & Withdrawal

**Tolerance** refers to how the body adapts to opioids so that increasing amounts may be needed to have the same effects. Tolerance occurs because the opioid receptors on the surface of cells become desensitized and because the cells start to produce fewer receptors.

**Withdrawal** is a series of symptoms experienced by people who have been taking opioids in a sufficient dose and duration (usually about 60 mg of morphine or equivalent for a week) and then quickly cut back or stop.

Withdrawal occurs because the brain, skin, eyes, nose, bones and intestinal tract, which became used to the presence of opioids, now respond to their absence.



# Physical Dependence

**Physical dependence** is a concept linked to tolerance and withdrawal.

“My body has become tolerant to opioids, and if I stopped using abruptly, I would experience withdrawal. That means I am now physically dependent.”



# Physical Dependence ≠ Addiction

Anyone who takes opioids in a sufficient dose and duration for any reason will develop physical dependence.

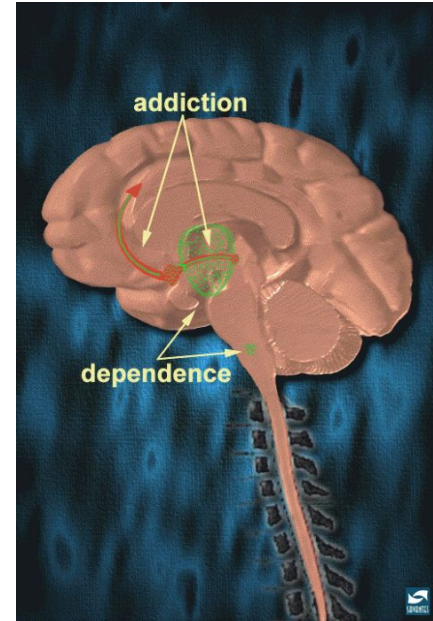
Addiction is a chronic disease: Characterized by pathological craving and compulsion that drives substance seeking even in the face of severe negative consequences to the person's life, including the threat of death.



# Opioid Addiction

“Addiction is considered a brain disorder, because it involves functional changes to brain circuits involved in reward, stress, and self control, and those changes may last a long time after a person has stopped taking drugs.”

– National Institutes of Health





# What is Stigma?

Stigma comes from seeing addiction as a moral failure, not a chronic illness.

Stigma is reflected in language:

- Addict
- Junkie
- Abuser
- Dirty and Clean

Stigma blocks interest in effective policies.

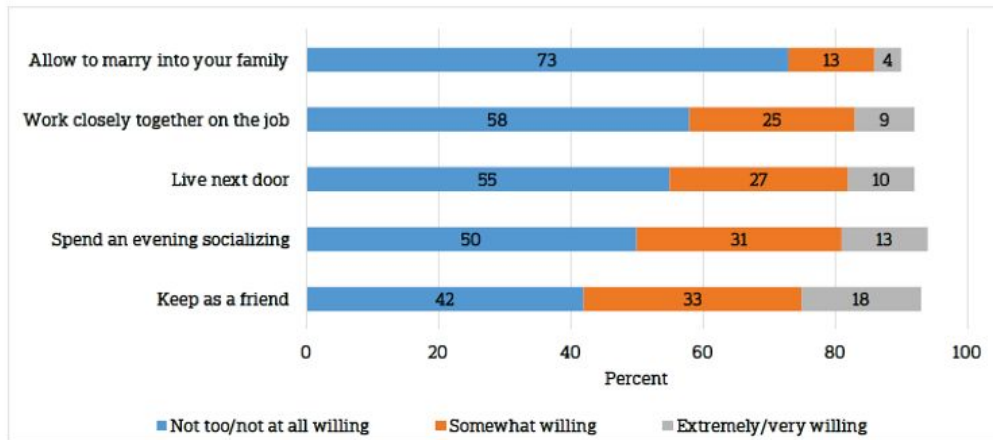
Internalized stigma keeps people from seeking treatment.

[Slide from Dr. Alene Kennedy-Hendricks, JHSPH]



# Impacts of Stigma

## Social Distance Measures in AP-NORC 2018 National Survey



Question: Imagining that same person, how willing would you be to voluntarily [ITEM]?  
Source: AP-NORC Opioid Survey conducted March 14-19, 2018, with 1,054 adults nationwide.

The Associated Press – NORC Center for Public Affairs Research. Americans recognize the growing problem of opioid addiction. April 2018.  
[http://www.apnorc.org/PDFs/Opioids%202018/APNORC\\_Opioids\\_Report\\_2018.pdf](http://www.apnorc.org/PDFs/Opioids%202018/APNORC_Opioids_Report_2018.pdf)

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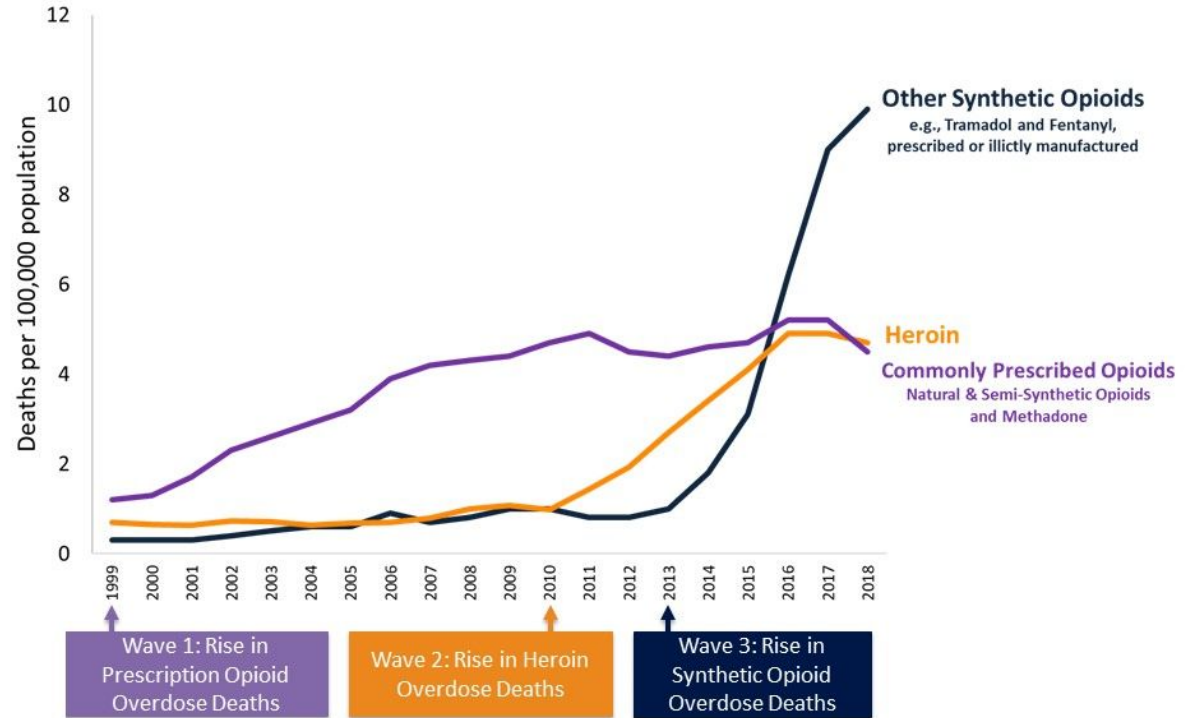
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# The Opioid Epidemic

## 3 Waves of the Rise in Opioid Overdose Deaths

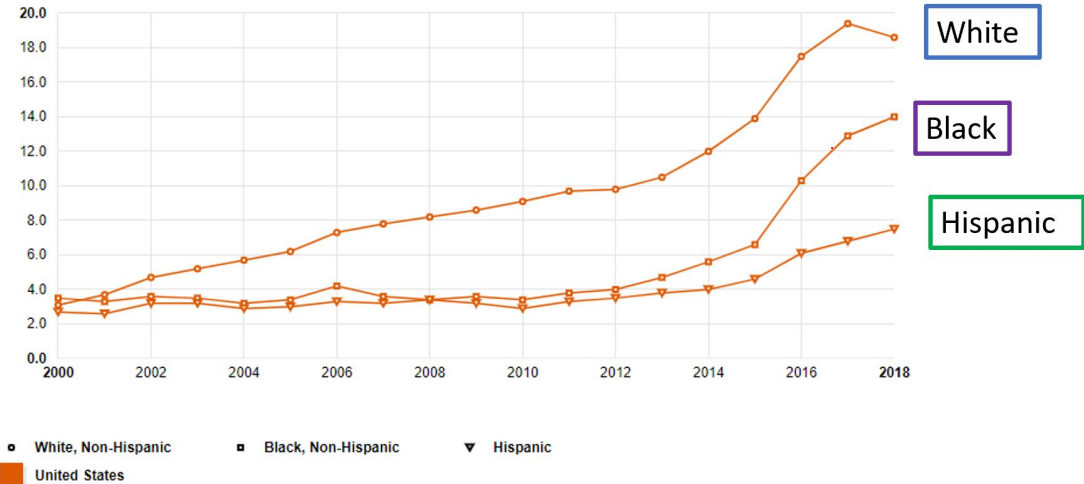


SOURCE: National Vital Statistics System Mortality File.



# The Opioid Epidemic

## Opioid Overdose Deaths by Race



Source: Kaiser Family Foundation



# Consequences

- Decline in life expectancy
- Many complications for health
- Enormous harm to families and communities
- Damage to the economy

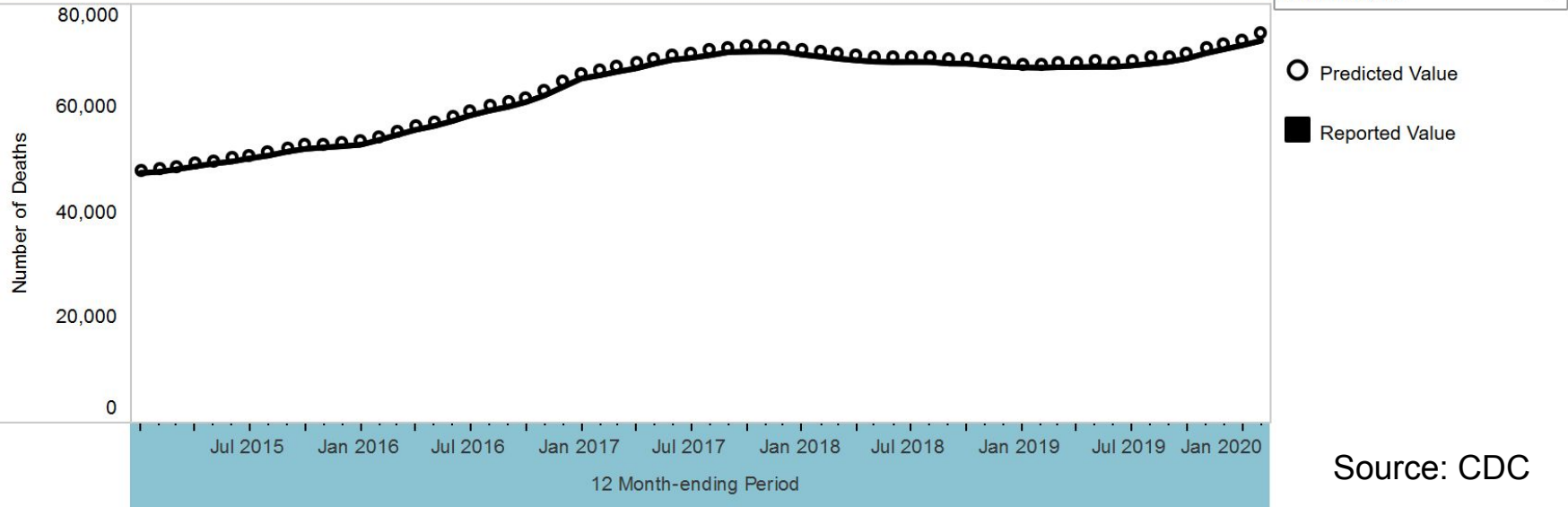


# Overdose Crisis Getting Worse

Based on data available for analysis on:

9/13/2020

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



Source: CDC



# Solutions

- Primary prevention: for people who have not started using drugs
- Reversal: for people in the middle of an overdose
- Harm reduction: for people are still using drugs
- Drug supply: make it safer
- Treatment: for people interested in remission and recovery



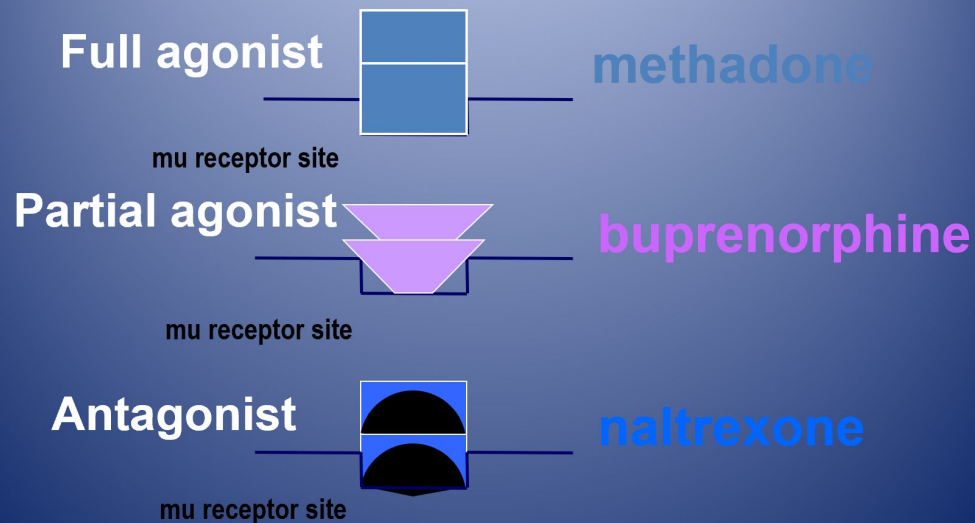


# Effective Treatment for Opioid Use Disorder



# Three Medications

## Medications for Opioid Use Disorder



All 3 medications work at the level of the opioid receptors to reduce cravings.

None of the medications produce euphoria for patients at therapeutic doses.

None of the medications produce fatigue at therapeutic doses.



## Published Evidence to Date

	Depot Naltrexone	Buprenorphine	Methadone
Reduces Cravings	✓	✓	✓
Reduces Misuse	✓	✓	✓
Reduces Overdose		✓	✓
Reduces Infectious Disease		✓	✓
Reduces Mortality		✓	✓
Increases Employment		✓	✓
Reduces Criminality			✓
Track record > 20 years			✓

Medication use is \*NOT\* addiction by another means.




# Following 48,000 People with Opioid Use Disorder

ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

Research Report | [Full Access](#)

## Opioid agonist treatment and fatal overdose risk in a state-wide US population receiving opioid use disorder services

Noa Krawczyk , Ramin Mojtabei, Elizabeth A. Stuart, Michael Fingerhood, Deborah Agus, B. Casey Lyons, Jonathan P. Weiner, Brendan Saloner

### Findings

The study population experienced 371 opioid overdose deaths. Periods in medication treatment were associated with substantially reduced hazard of opioid overdose death compared with periods in non-medication treatment [adjusted hazard ratio (aHR) = 0.18, 95% confidence interval (CI) = 0.08–0.40]. Periods after discharge from non-medication treatment (aHR = 5.45, 95% CI = 2.80–9.53) and medication treatment (aHR = 5.85, 95% CI = 3.10–11.02) had similar and substantially elevated risks compared with periods in non-medication treatments.

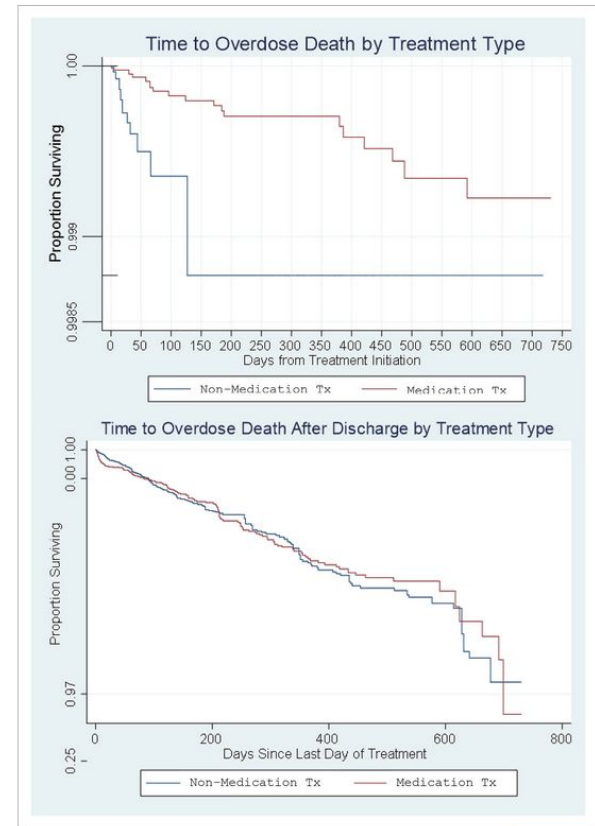


Figure 2

[Open in figure viewer](#) | [PowerPoint](#)

Kaplan-Meier survival curves for opioid overdose death by medication treatment status during treatment (a) and after discharge (b), adjusted for inverse probability of treatment weights. [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]



# Courts: Failing to Continue Medication Is Violation of Law

Federal Judge Issues Groundbreaking Order to a Jail to Allow Methadone Access

**FEDERAL JUDGE RULES JAIL MUST ALLOW ACCESS TO MEDICATION-ASSISTED TREATMENT**



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# COVID-19 Impacts:

## Increased need for Mental Health and Substance Use Support:

### → ↑↑ Stress:

- ◆ KFF poll: 45% of Americans say pandemic had negative impacts on mental health
- ◆ 50% of individuals with a mental health diagnosis have comorbid SUD

### → ↑↑ Economic Hardship:

- ◆ Substance use rates 3x higher in unemployed adults compared to employed adults
- ◆ For every 1% increase in unemployment, increase of .334 overdose deaths per 100,000 people



# COVID-19 Impacts:

- ↓↓ Prevention: Program closures, shifts to teletherapy.
- ↓↓ Reversal: Fewer people using with others to resuscitate them.
- ↓↓ Harm reduction: Interrupted services and limited access.
- Mixed effects on drug supply.
- Mixed effect on treatment.
- MH/SUD budget cuts.

**Substance use up amid pandemic:  
survey**

**CORONAVIRUS**  
**Experts are blaming the  
coronavirus for the surge in opioid  
overdoses**





# COVID-19 and Treatment

The federal government loosened restrictions on medications for opioid use disorder:

- Patient can start buprenorphine via telemedicine
- More flexibility for take-homes with methadone

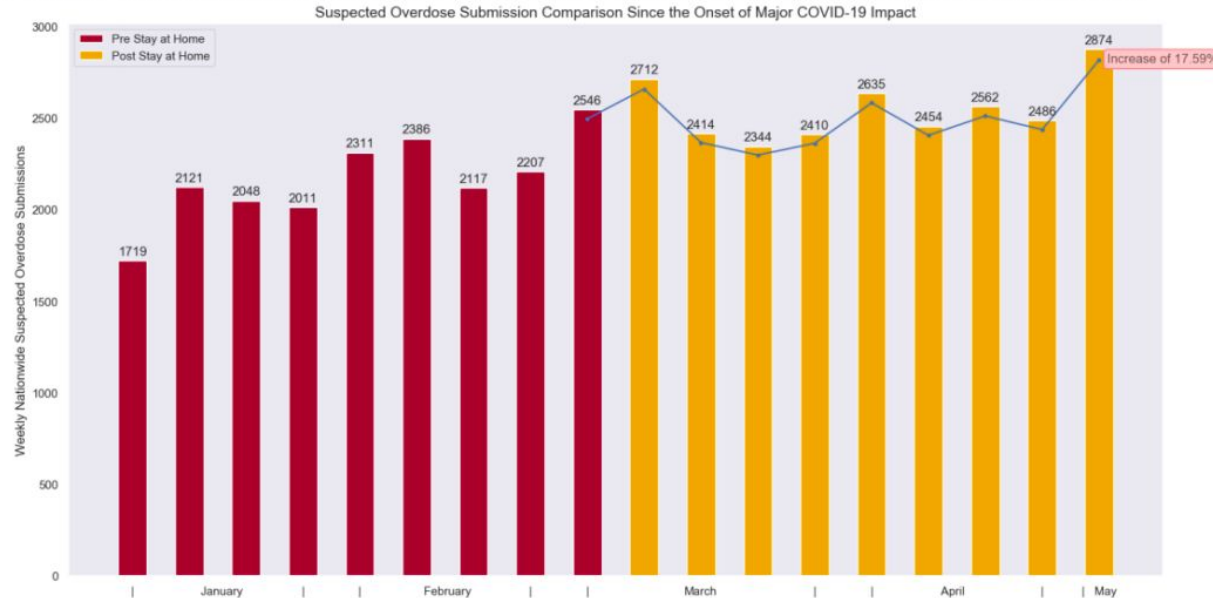
However: No starting methadone without full in-person physical exam, and some states still have other restrictions



# Available Data: More Overdoses

- Overdoses increase as measured by law enforcement

**Figure 2:** ODMAP submissions January 1, 2020 to March 18, 2020 compared to March 19, 2020 to May 19, 2020



# Tracking Project: @OverdoseUpdates



← Epidemic in the Pandemic  
67 Tweets



**Epidemic in the Pandemic**  
@OverdoseUpdates

A @JohnsHopkins student project with links to news reports about changes in overdoses during COVID-19. For access to the complete archive, visit the link below.

📍 Baltimore, MD [rb.gy/dh2cxc](https://rb.gy/dh2cxc) 📅 Joined August 2020

4 Following 72 Followers

Tweets Tweets & replies Media Likes

**Epidemic in the Pandemic** @OverdoseUpdates · 23h  
For access to the complete archive of news reports, visit the link below. Follow us for more overdose updates.

# Data & Surveillance

## *Understand the scope*

- Track the epidemic in the pandemic
  - ◆ Treatment utilization
  - ◆ Access to harm reduction
  - ◆ Ensure tracking of demographic differences (i.e., race)
  - ◆ Detention
- Increased funding at federal and state levels.
  - ◆ Increase staff capacity
- Increased funding for research
  - ◆ Focus on health disparities

# Harm Reduction

## *Ensure supply meets demand*

- Make syringe service programs essential services
  - ◆ Provide PPE
- Allow federal funding to purchase syringes
- Expand free Naloxone distribution

# Treatment

## *Increase accessibility*

- SAMHSA funding
- Expand telehealth
  - ◆ Allow for initiation of methadone via telehealth appointments
  - ◆ Eliminate restrictive regulations
  - ◆ Public & private payers should allow for billing of telehealth
- DEA should allow pharmacies to dispense methadone
- Fund mobile treatment services
- State and local health departments should dispense PPE to all treatment programs

# Special populations

## *Support high risk populations*

- Criminal Justice
  - ◆ Avoid detaining & release individuals arrested for low-level offenses
  - ◆ Ensure re-entry supports
  - ◆ Enable immediate Medicaid coverage upon release
- Housing
  - ◆ Use emergency funding to support housing

# Questions?

## Acknowledgements:

- Sara Whaley
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