The Opioid Crisis and Treatment Interventions: The "Other" Pandemic

Highlands University February 18<sup>h</sup> and February 25<sup>th</sup>, 2021

Bruce G. Trigg, MD Addiction Medicine and Public Health Consultant Faculty Disclosure I have no conflicts of interest to declare

# Goals of this talk:

- The overdose epidemic in U.S.
- Opioid use disorder (OUD)
- Medication for OUD (MOUD)
- Harm Reduction
- Political and social barriers to appropriate response
- Next steps

### Glossary

**Consumption Drug Rooms** CDR HCV Hepatitis C Virus Human Immunodeficiency Virus HIV MAT Medication for Addiction Treatment MOUD Medication for OUD OAT **Opioid Agonist Treatment** (methadone & buprenorphine) **Opioid Use Disorder** OUD People Who Inject Drugs PWID People Who Use Drugs PWUD SIF Supervised Injection Facility **Supervised Injection Site** SIS Syringe Service Program SSP

"Covid-19 is a magnifying glass that has highlighted the larger pandemic of racial and ethnic disparities in health."

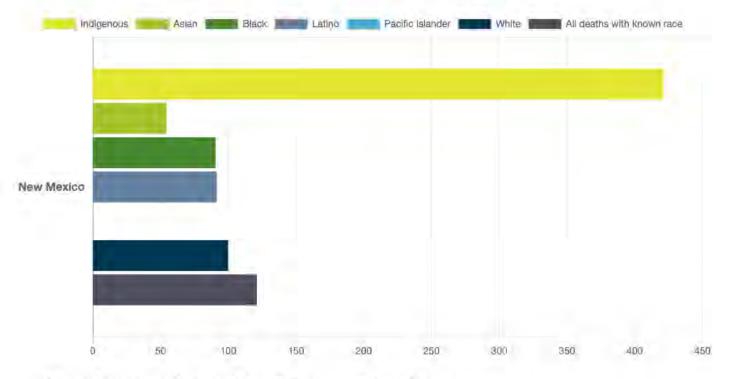
JAMA. Published online May 11, 2020. doi:10.1001/jama.2020.8051

Google	NM covid mortality update				0	x 🏮 Q	
	Q All 🗐 News	🖾 Images 〈	🧷 Shopping 🛛 🕑 V	ideos : More	Se	ttings Tools	
	About 22,000,000	results (0.74 secon	nds)				
COVID-19 alert	Daily change						
oronavirus isease							
ew Mexico	Deaths 💌	United States 💌	New Mexico 👻	All time 👻			
verview	60				Deat	17, 2021 ths: 12 y avg: 14	
atistics	40				1000		
esting					mm	A	
ews	20	Make 1		Jul .		no.	
		man	In marine asi	m			
ealth Info	ō						
	i Deaths	Jun 1 — 7-day average	Aug 3	Oct 5	Dec 7	Feb 8	
	Each day shows d	<ul> <li>7-day average</li> <li>eaths reported since t</li> </ul>	he previous day - Upda			Feb 8	
oping	I Deaths	<ul> <li>7-day average</li> <li>eaths reported since t</li> </ul>	he previous day - Upda			Feb 8	
oping	Each day shows d	<ul> <li>7-day average</li> <li>eaths reported since t</li> </ul>	he previous day - Upda			Feb 8	
oping	Deaths Each day shows d Source: <u>The New</u> Cases	<ul> <li>7-day average</li> <li>eaths reported since t</li> <li>York Times - About t</li> </ul>	he previous day – Upda his data			Feb 8	
oping	Deaths Each day shows d Source: <u>The New</u> Cases	<ul> <li>7-day average</li> <li>eaths reported since t</li> </ul>	he previous day - Upda			Feb 8	
oping	Deaths Each day shows d Source: The New Cases	<ul> <li>7-day average</li> <li>eaths reported since t</li> <li>York Times - About t</li> </ul>	he previous day - Upda <u>his data</u> New Mexico <b>*</b> Deaths			Feb 8	
oping	Deaths Each day shows d Source: The New Cases Total ~	<ul> <li>7-day average</li> <li>eaths reported since t</li> <li>York Times - About t</li> </ul>	he previous day Upda his data New Mexico • Deaths 3,564			Feb 8	
oping	Deaths Each day shows d Source: The New Cases	<ul> <li>7-day average</li> <li>eaths reported since t</li> <li>York Times - About t</li> </ul>	he previous day - Upda <u>his data</u> New Mexico <b>*</b> Deaths			Feb 8	
oping	Deaths Each day shows d Source: <u>The New</u> Cases Total • Cases 181K +271 Location	- 7-day average eaths reported since t York Times - About t	he previous day Upda his data New Mexico • Deaths 3,564		ours ago Gases +	Deaths	
oping	Deaths Each day shows d Source: The New Cases Total ~ Cases 181K +271	- 7-day average eaths reported since t York Times - About t	he previous day Upda his data New Mexico • Deaths 3,564		oura ago		
oping	Deaths Each day shows d Source: <u>The New</u> Cases Total • Cases 181K +271 Location	- 7-day average eaths reported since t York Times - About t	he previous day Upda his data New Mexico • Deaths 3,564		curs ago Cases 4 51,431	Deaths 825	
ealth Info oping	Deaths Each day shows d Source: <u>The New</u> Cases Total • Cases <b>181K</b> +271 Location Bernalillo Count	- 7-day average eaths reported since t York Times - About t United States -	he previous day Upda his data New Mexico • Deaths 3,564		Cases 4 51,431 +116 22,362	Deaths 825 +3 376	



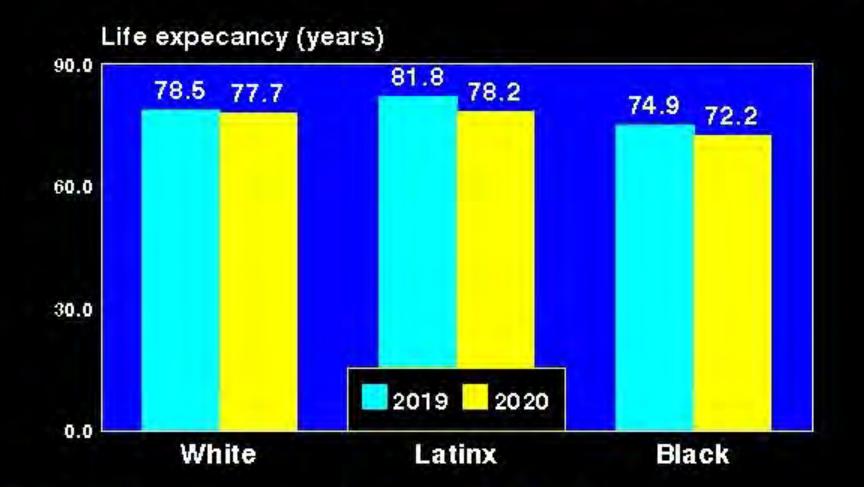
VIEW THE AGE-ADJUSTED RATES

#### COVID-19 DEATHS PER 100,000 PEOPLE, THROUGH JAN. 5, 2021



\* Latino ethnicity is reported separately from non-Hispanic race groups in New Mexico.

## COVID-19 Has Sharply Reduced Black and Latinx Life Expectancy



#### Source: Andrastay and Goldman MedRxiv preprint 9/15/2020

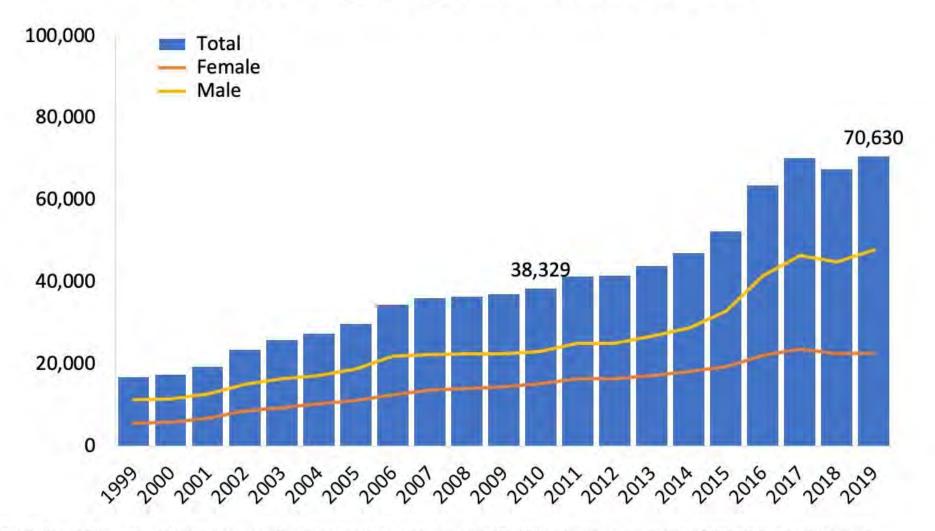
# Why was the U.S. so Vulnerable to COVID-19?

- Deteriorating health status
- Weakened public health capacity
- Increasing economic inequality
- Racism that harms people of color and erodes support for safety-net programs
- Wasteful health care system that prioritizes profitability over needs

More than 750,000 people have died **since 1999** from a drug **overdose**.

Two out of three drug **overdose deaths** in 2018 involved an **opioid**.

### Figure 1. National Drug-Involved Overdose Deaths\* Number Among All Ages, by Gender, 1999-2019



\*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

### Overdose Deaths Accelerating During COVID-19

Expanded Prevention Efforts Needed

#### **Press Release**

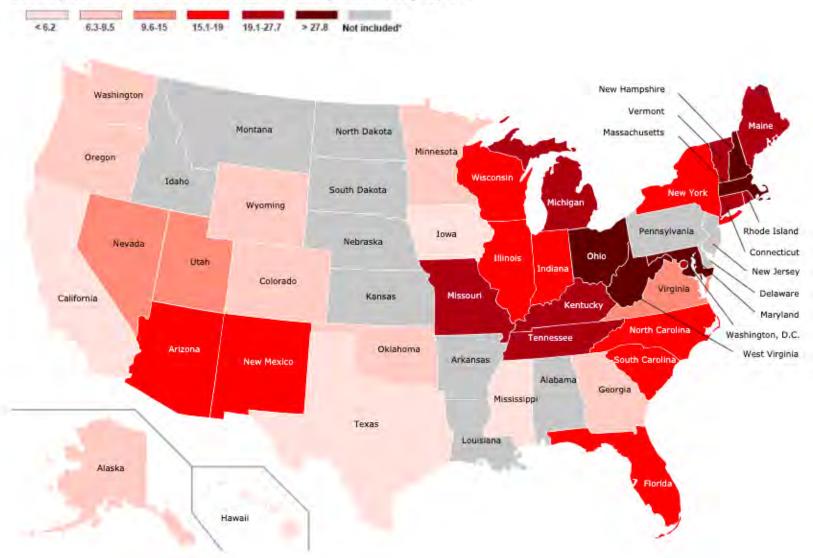
Embargoed Until: Thursday, December 17, 2020 Contact: Media Relations (404) 639-3286

Over 81,000 drug overdose deaths occurred in the United States in the 12 months ending in May 2020, the highest number of overdose deaths ever recorded in a 12-month period, according to recent provisional data from the Centers for Disease Control and Prevention (CDC).

While overdose deaths were already increasing in the months preceding the 2019 novel coronavirus disease (COVID-19) pandemic, the latest numbers suggest an acceleration of overdose deaths during the pandemic.

### Opioid Summaries by State

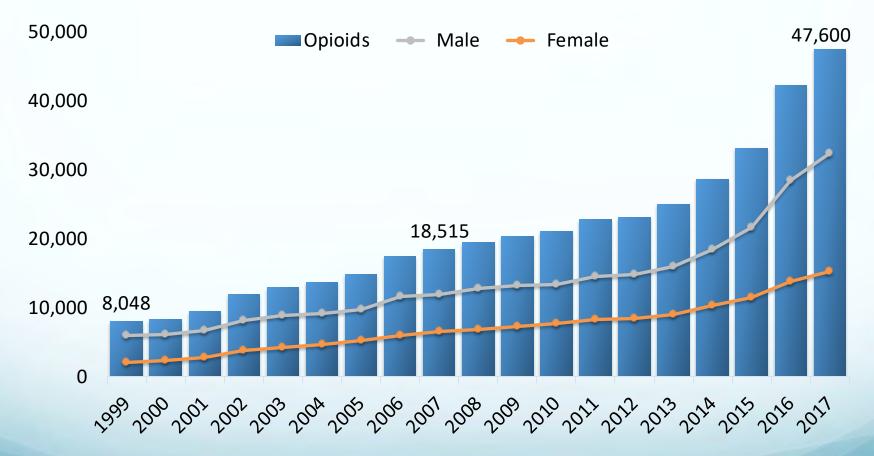
Drug overdose data comes from the CDC WONDER site. Available data is currently from 2018 with 2019 data usually being released in early 2021, at which time, these pages will be updated.



#### 2018 Opioid-Involved Overdose Death Rates (per 100,000 people)<sup>1</sup>

### Figure 3. National Drug Overdose Deaths Involving Any Opioid,

Number Among All Ages, by Gender, 1999-2017

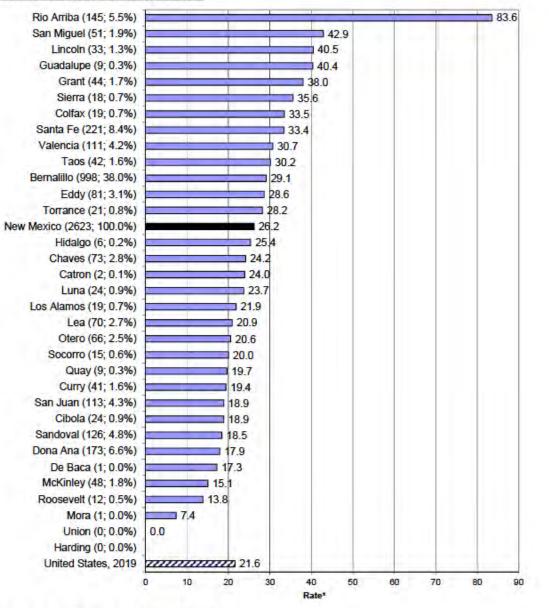


Source: : Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDEROnline Database, released December, 2018

#### DRUG OVERDOSE DEATH (continued)

Chart 2: Drug Overdose Death Rates\* by County, New Mexico, 2015-2019

County (# of deaths; % of statewide deaths)



\* All rates are per 100,000, age-adjusted to the 2000 US standard population Sources: NMDOH BVRHS death files and UNM-GPS population files (NM); NCHS death and population files (US); SAES

New Mexico Substance Use Epidemiology Profile

Page 33

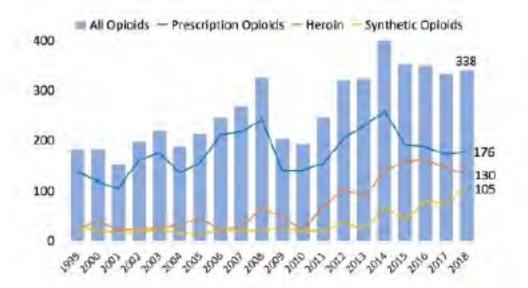


Figure 1. Number of drug overdose deaths involving opioids in New Mexico, by opioid category. Drug categories presented are not mutually exclusive, and deaths may have involved more than one substance. Source: CDC WONDER.

# What is Fentanyl?

- Most powerful opioid routinely used in human medicine
  - 50 100 x painkilling power of morphine
  - Often used to treat post-surgical and cancer pain
- Short acting opioid with a rapid onset
- Began to appear in large quantities as Illegally Manufactured Fentanyl (IMF) in 2013
  - Often mixed with heroin and in fake pills
  - Large doses sometimes cause chest wall rigidity

Naloxone does work on fentanyl-related overdoses

OF OVERDOSE DEATHS INVOLVING HEROIN OR PRESCRIPTION OPIOIDS IN 2018:

15%

MOST NONMEDICAL USERS OF PRESCRIPTION OPIOIDS REPORT OBTAINING DRUGS:

- Free from a friend or relative
- Bought from a friend or relative
- Taken without asking from a friend or relative

TAKEN WITHOUT ASKING IS MORE COMMON AMONG THE YOUNGEST USERS, EMPHASIZING THE NEED FOR APPROPRIATE STORAGE OF THESE DRUGS.

- National Survey on Drug Lise and Health

#### RESPIRATORY DEPRESSION IS ONE EFFECT OF HEROIN OR OPIOIDS

The victim fails to breathe enough to keep the brain and other organs supplied with oxygen

72%

involved heroin

involved both

prescription opioids and heroin

prescription opioids

involved

Naloxone reverses the effects of opiates, including respiratory depression and can save lives

### THINGS YOU CAN DO TO PREVENT DRUG OVERDOSE

.......

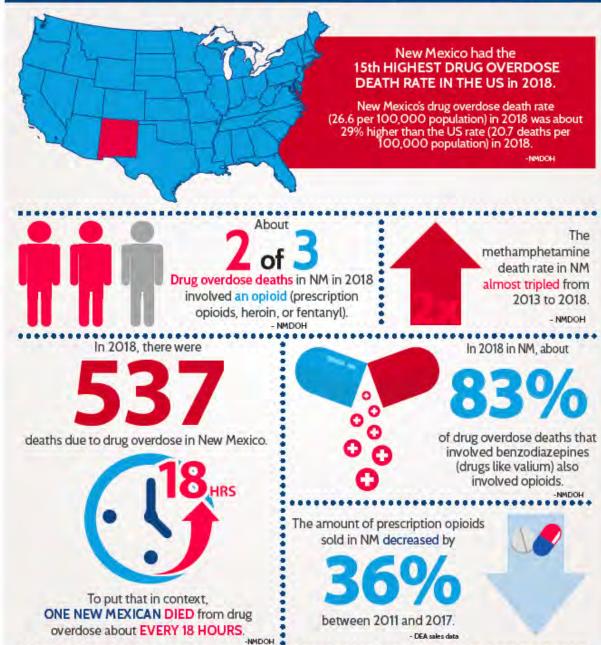
- Never take a medicine not prescribed for you, or other than as prescribed.
- Never share prescriptions.

42%

- Confirm all medicines that you take with your healthcare provider at every visit.
- Get naloxone! Naloxone is a drug that can reverse an opioid overdose.
- All pharmacists can dispense naloxone without a prescription.
- If you are concerned about your use of controlled substances (medications) or illicit substances, see your healthcare provider and ask for help!
- Your healthcare provider can help you determine the appropriate treatment.
- Medication-assisted treatment (MAT) is available to treat opioid use disorder.



### DRUG OVERDOSE IN NEW MEXICO



HEALTH

# U.S. life expectancy declines again in sobering 'wake-up call'

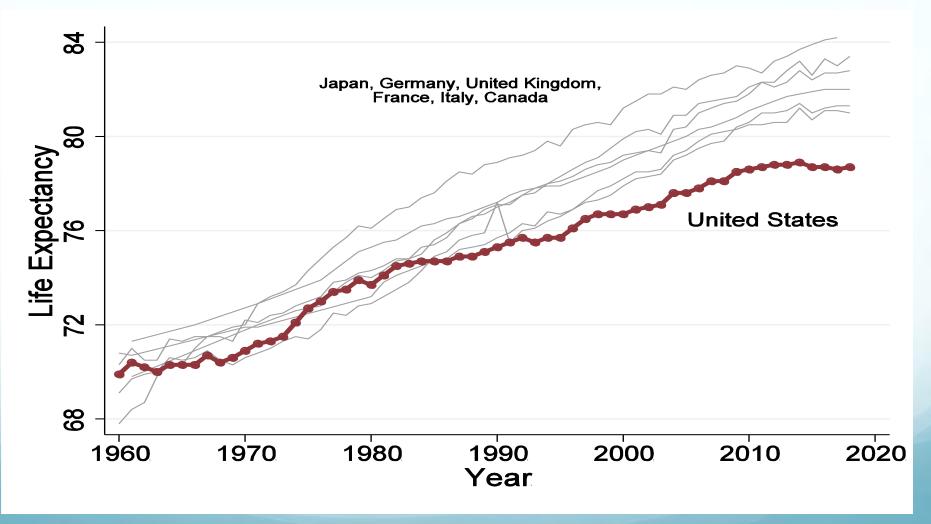
By ASSOCIATED PRESS / NOVEMBER 29, 2018



SPENCER PLATT/GETTY IMAGES

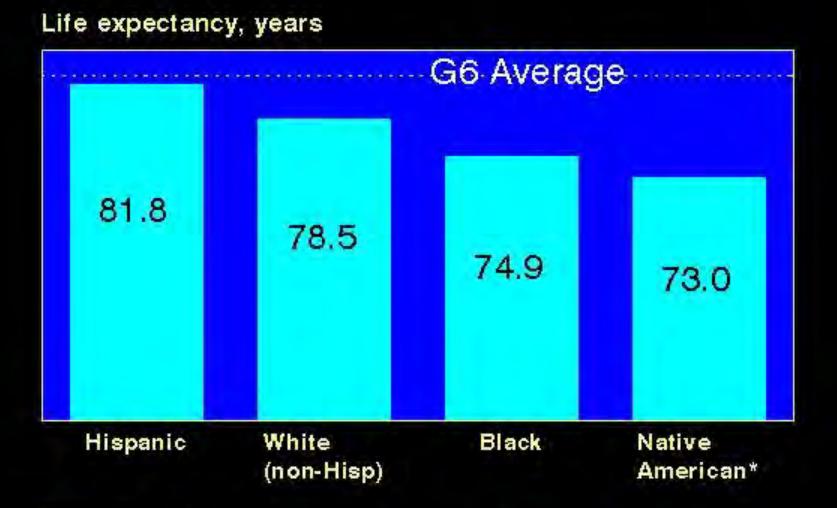
 EW YORK — Suicides and drug overdoses pushed up U.S. deaths last year, and drove a continuing decline in how long Americans are expected to live.

# Life expectancy in the US and other G7 countries, 1960–2018



### **Black and Native Americans Die Younger**

But Life Expectancy for Every Group is Shorter Than Other G7 Nations



Source: NCHS, IHS, OECD Other G7 nations = Canada, France, Germany, Italy, Japan, UK Jul 19, 2018, 01:12pm EDT

### 'Diseases Of Despair' Contribute To Declining U.S. Life Expectancy



Joshua Cohen Contributor 🛈 🕀

#### Healthcare

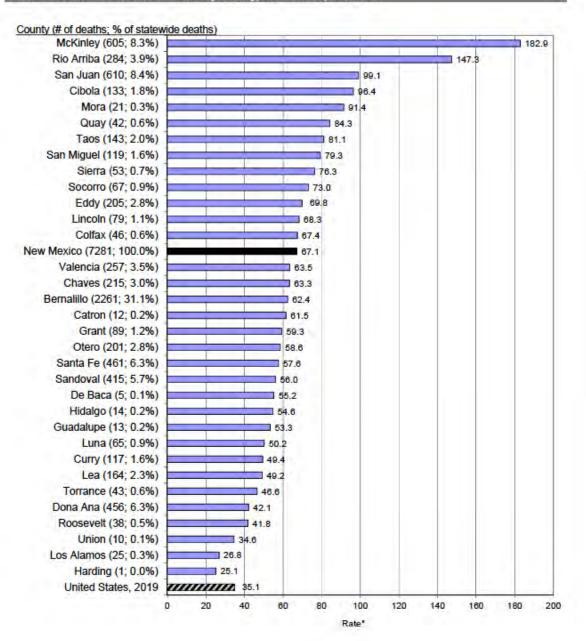
I write about prescription drug value, market access, healthcare systems, and ethics of distribution of healthcare resources

() This article is more than 2 years old.



#### ALCOHOL-RELATED DEATH (continued)

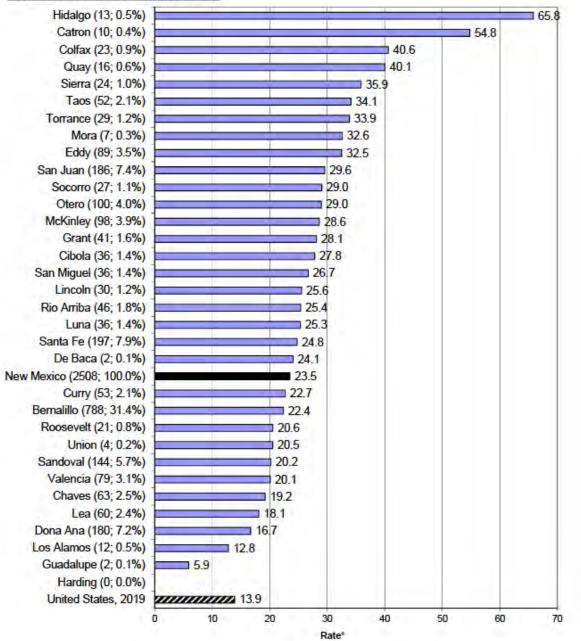
Chart 2: Alcohol-Related Death Rates\* by County, New Mexico, 2015-2019



#### SUICIDE (continued)

Chart 3: Suicide Rates\* by County, New Mexico, 2015-2019

County (# of deaths; % of statewide deaths)



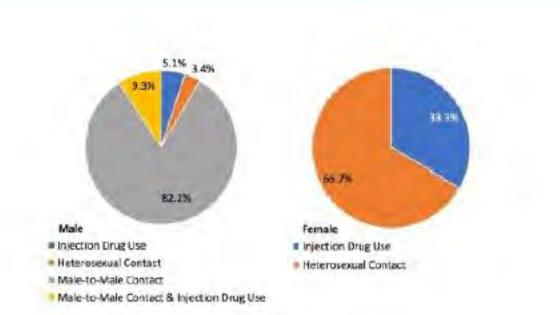
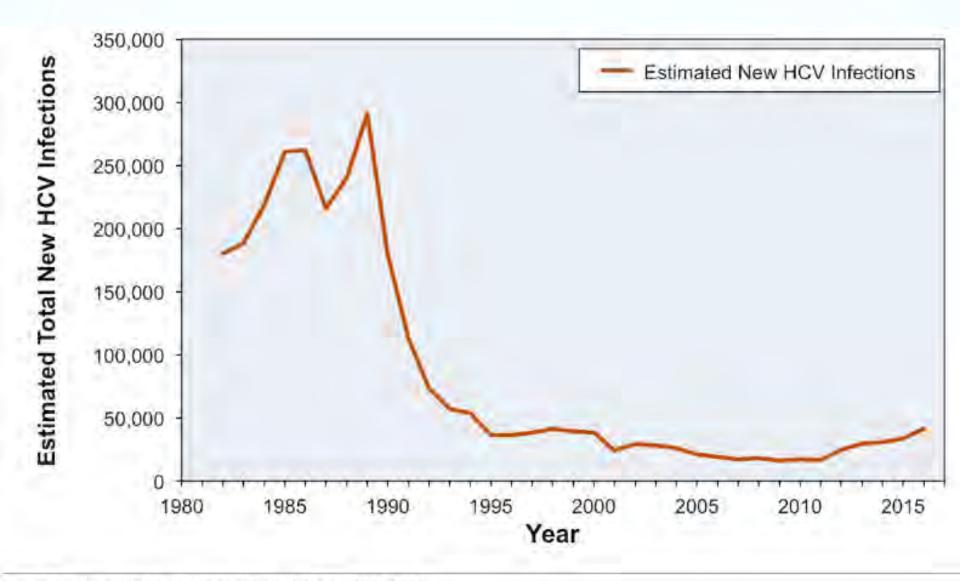


Figure 2. New Mexico: Estimated percent of male vs. female with new HIV diagnoses, by transmission category, 2017. Percentages may not add up to 100% due to rounding. Source: CDC NCHHSTP, AtlasPlus.



#### Figure 1 - Hepatitis C Incidence in United States, 1982-2016

This graphic represents the estimated number of new hepatitis C infections per year.

### SYPHILIS IN NEWBORNS IS ON THE RISE IN U.S.

Congenital syphilis is a tragic disease that can cause miscarriages, premature births, stillbirths, or even death of newborn babies.

In the past 4 years, cases of congenital syphilis have

### **MORE THAN DOUBLED**

362

462 2014

492 2015

639 2016

918

80%

The chance of a mother passing syphilis onto her unborn baby if left untested or untreated.

**`** 

Source: U.S. Centers for Disease Control and Prevention

https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/02/26/more-babies-are-being-born-with-syp..

**PROJECTS** 

FEATURES

ABOUT

GET INVOLVED

TOPICS



Louisville, Kentucky. Many opioid users also are using methamphetamine, which is more likely to promote risky sexual behavior, increasing the odds of contracting syphilis. More women are passing on syphilis to their babies - with deadly results.

Timothy D. Easley/The Associated Press

#### STATELINE DAILY EMAIL

SEARCH



# **Twin Epidemics**

- Drug overdose deaths
- Opioid Use Disorder involving pain medications and heroin (estimated at 2.4 million in US in 2015)
- The key driver of the overdose epidemic is underlying substance abuse disorder.

Medication-Assisted Therapies — Tackling the Opioid- Overdose Epidemic; *NEJM* 4/24/14

## **Responding** to the **Heroin Epidemic**

### **PREVENT** People From Starting Heroin

#### Reduce prescription opioid painkiller abuse.

Improve opioid painkiller prescribing practices and identify high-risk individuals early.

### REDUCE Heroin Addiction

#### Ensure access to Medication-Assisted Treatment (MAT).

Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

### **REVERSE** Heroin Overdose

#### Expand the use of naloxone.

Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

# iatrogenesis noun

iat·ro·gen·e·sis | \-'jen-ə-səs () \ plural iatrogeneses \ - sēz () \

### **Medical Definition of introgenesis**

: inadvertent and preventable induction of disease or complications by the medical treatment or procedures of a physician or surgeon





A REPORTER AT LARGE OCTOBER 30, 2017 ISSUE

### THE FAMILY THAT BUILT AN EMPIRE OF PAIN

The Sackley dynasty's ruthless marketing of painkillers has generated billions of dollars—and millions of addicts.



By Patrick Radden Keefe



- Drug reps told physicians that "fewer than one percent" of patients who took OxyContin became addicted.
- In fact, a 1999 Purdue-funded study of headache patients who used OxyContin found that 13% became addicted

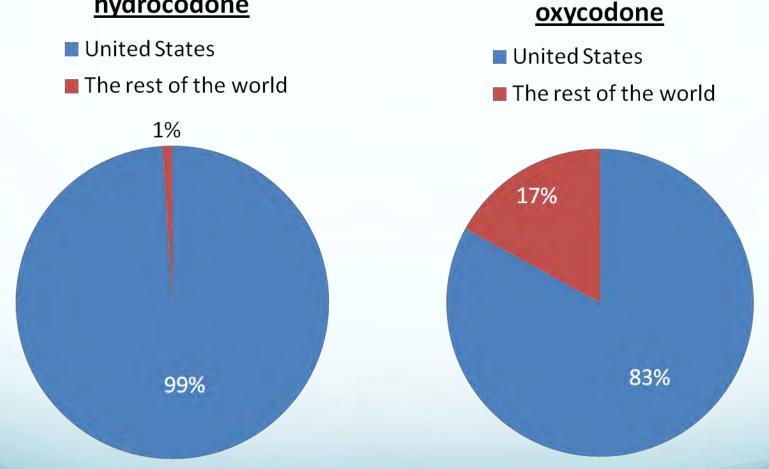
Purdue gave physicians coupons for free first prescriptions of Oxycontin

• 34,000 redeemed

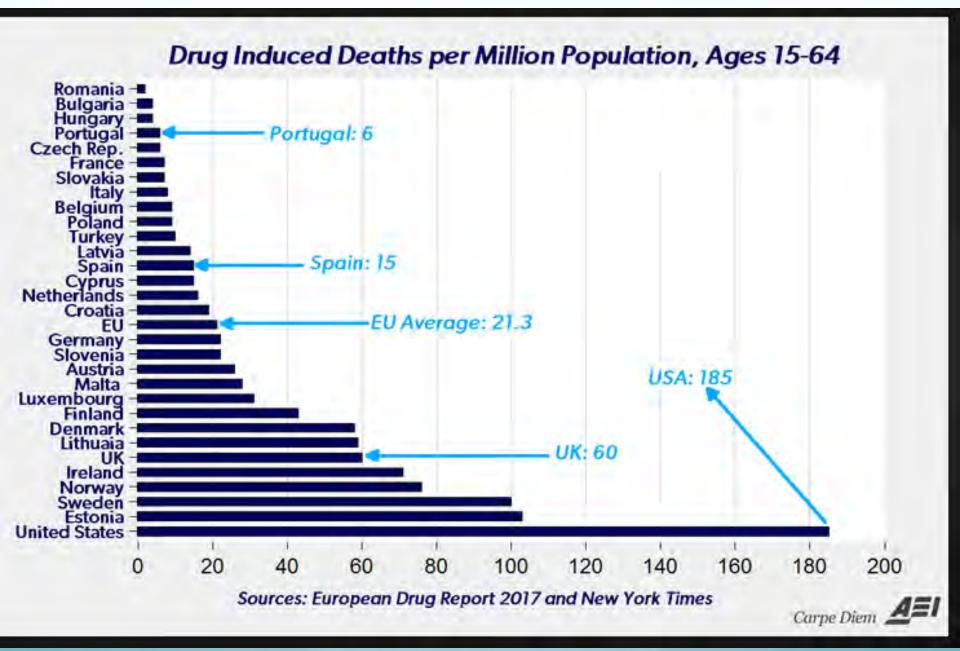


## **Global Opioid Consumption**

### hydrocodone



Manchikanti L, et al. Pain Physicians. 2012 15(35) ES9-38



## Big Pharma Paid Doctors Millions in Opioid Campaign, Study Says

By <u>Elaine Silvestrini</u> Edited By <u>Kevin Connolly</u> Last modified: *April 17, 2018* 

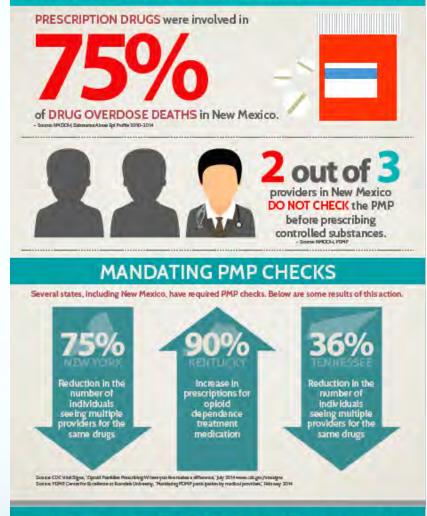
Pharmaceutical companies promoting prescription opioids made more than \$46 million in payments to doctors across the United States in a 29-month period, according to a new study published in the American Journal of Public health.

Nearly half of the payments were made to promote fentanyl, a synthetic opioid that is 50 to 100 times more potent than morphine. This page features 7 Cited Research Articles

FACT CHECKED



#### PRESCRIPTION MONITORING PROGRAM



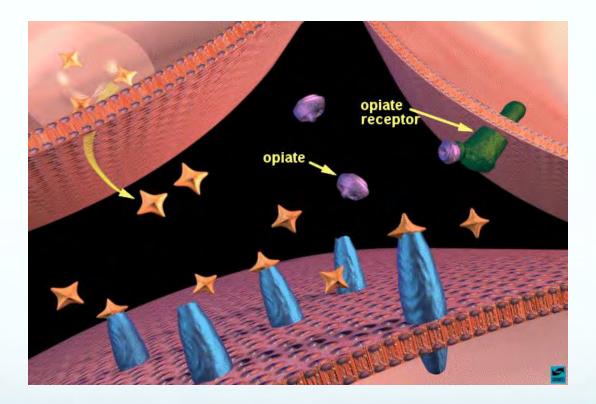
### PRESCRIPTION MONITORING PROGRAM FREQUENTLY ASKED QUESTIONS

#### WHAT IS THE PRESCRIPTION DRUG MONITORING PROGRAM (PMP)?

The Prescription Drug Monitoring Program (PMP) is a state-wide electronic database administered by the New Mexico Board of Pharmacy that tracks the dispensing and prescribing of controlled substances.

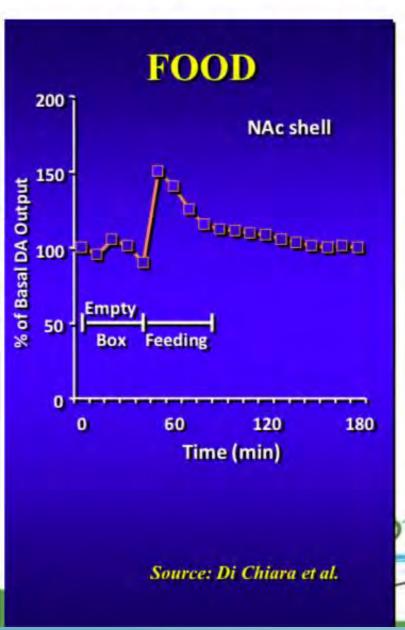
#### WHO REPORTS PRESCRIPTION INFORMATION TO THE NEW MEXICO PMP?

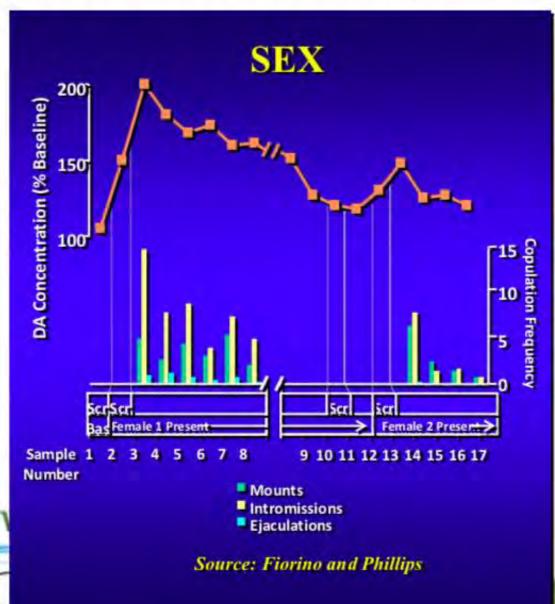
Pharmacies who fill prescriptions for controlled substances report to the PMP within 24 hours of filling a prescription.

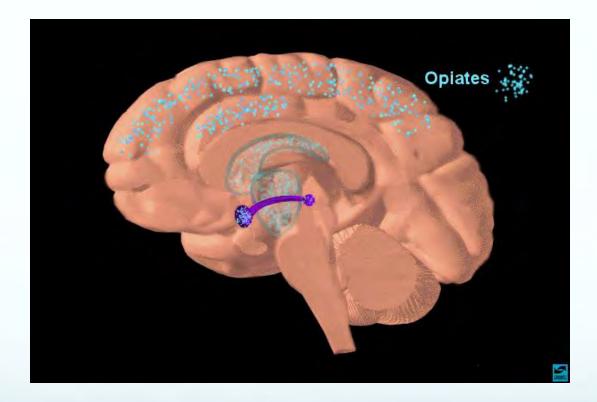




### **Natural Rewards Elevate Dopamine Levels**







### **DSM-5 Criteria for Substance Use Disorders**

1	Use in larger amounts or for longer periods of time
	than intended

- **2** Unsuccessful efforts to cut down or quit.
- **3** Excessive time spent taking the drug
- **4** Failure to fulfill major obligations
- **5** Continued use despite problems
- 6 Important activities given up
- **7** Recurrent use in physically hazardous situations
- 8 Continued use despite problems
- 9 Tolerance
- **10** Withdrawal
- **11** Craving

Severity is designated according to the number of symptoms endorsed:

- 0 1: No diagnosis
- 2 3: mild SUD
- 4 -5 : moderate SUD
- 6 or more: Severe SUD\*

#### \*Severe SUD=addiction

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

# **Opioid Use Disorder**

- DSM 5 Definition
- 3 C's for at least 12 months
  - Loss of **C**ontrol
  - Compulsive use
  - Continued use despite negative **C**onsequences



Marblehead, Mass. In Suburbia, Tired of Everything KATHARINE Q. SEELY, NY Times

Ms. Harvey, 24, had been shooting heroin for three years. She had been in and out of detox eight times altogether. But it had always been someone else's idea.

Ms. Harvey had been a popular honors student. But she developed anorexia. Alcohol was next. By 21, she was hooked on heroin.

She estimated that at her worst, she was shooting up a staggering number of times a day, perhaps as many as 15; heroin, cocaine, fentanyl. She overdosed five times.

That night in October, she went into detox. Four days later, she checked out. She went back to her friends and drugs, developing an abscess on her arm, probably from dirty needles.

Two weeks later, she was back in detox. This time, she stayed, then entered a 30-day treatment program.

Among her words of advice: Tell your children you love them, because it might be the last thing you say to them.•

# MAT Medication for Addiction Treatment

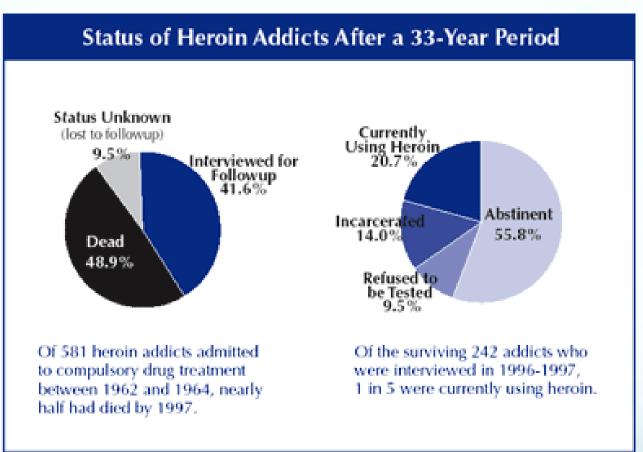
# MAT

Pharmacotherapy which is combined with psychosocial support to treat addiction.

## Use of MAT

- Consistent with a medical model that treats OUD as a chronic, relapsing disease (like diabetes or high blood pressure).
- Uses a long-acting, legal, opioid medication to
  - prevent withdrawal
  - minimize craving
  - block the use of opiates

## **33-Year Study Finds Lifelong, Lethal Consequences of Heroin Addiction**



### Volume 16, Number 4 (October 2001)

## Goals of MAT

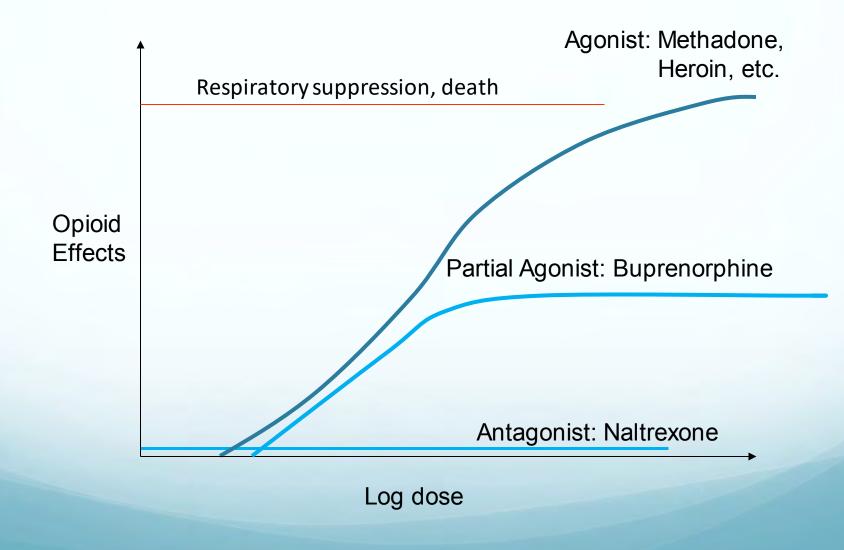
- To reduce mortality
- To reduce transmission of blood-borne viruses
- To improve patients' general health and well being (psycho-social functioning)
- To reduce drug-related crime
- To reduce opioid misuse

## Three Medications FDA Approved for Treatment of OUD

### • Preferred Treatments:

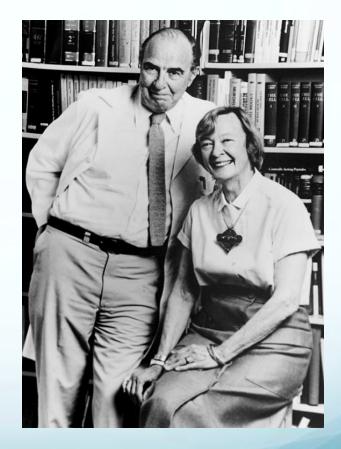
- Methadone (since 1973)
  - Full Opioid Agonist
- Buprenorphine (since 2002)
  - Partial Opioid Agonist
- Alternative Treatment:
  - Naltrexone Long-acting injectable (since 2010)
    - Opioid Antagonist

# Pharmacology of MAT



# History of Methadone

- Synthesized in Germany during WWII
- In 1960s at Rockefeller University in New York City, Drs. Vincent Dole and Marie Nyswander, performed studies showing effectiveness for treatment of heroin addiction
- First clinics opened in NYC in mid-1960s



## Methadone

- First used as treatment of opioid use disorder in USA in 1966. FDA approved in 1972
- Oral opioid agonist given daily in special addiction clinics (OTP)
- Highly effective in reducing heroin use with associated decreases in risk behaviors
- Gold standard in treatment of opioid use disorders
- What does methadone do?
- Eliminates withdrawal symptoms, diminish cravings, and blocks the use of illicit opioids

## Methadone Regulation

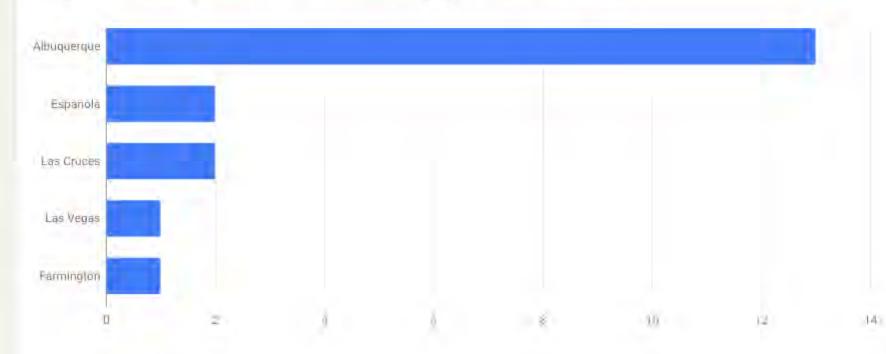
- Can only be dispensed by licensed Opioid Treatment Programs (OTPs)
- Must follow federal and state regulations
- Requires daily dispensing (six days a week) for first 90 days
- By one year, eligible patients can receive up to 2 weeks of take-home doses
- Eventually may receive 14 to 30 day supply
- For <18 must document 2 unsuccessful treatments without medication and consent of legal guardian



### Methadone dosing in a regulated clinic



### Top 5 cities by methadone clinic population in NM





5600 Fishers Lane - Rockville, MD 20857 www.samhsa.gov - 1-877-SAMHSA-7 (1-877-726-4727)



3/16/2020

#### **Opioid Treatment Program (OTP) Guidance**

SAMHSA recognizes the evolving issues surrounding COVID-19 and the emerging needs OTPs continue to face.

SAMHSA affirms its commitment to supporting OTPs in any way possible during this time. As such, we are expanding our previous guidance to provide increased flexibility.

#### FOR ALL STATES WITH DECLARED STATES OF EMERGENCY

The state may request blanket exceptions for all stable patients in an OTP to receive 28 days of Take-Home doses of the patient's medication for opioid use disorder.

The state may request up to 14 days of Take-Home medication for those patients who are less stable but who the OTP believes can safely handle this level of Take-Home medication.

#### FOR STATES WITHOUT A DECLARED EMERGENCY

Each OTP can provide a blanket exemption request for its clinic per the guidance above (i.e., up to 28 days for stable patients and up to 15 days for less stable patients).

These requests do not have to be submitted on a per-patient basis. Programs and states should use appropriate clinical judgment and existing procedures to identify stable patients. Please note an increased medication supply will likely accompany these requests. Therefore OTPs and states must ensure that there is enough medication ordered and on hand to meet patient needs.

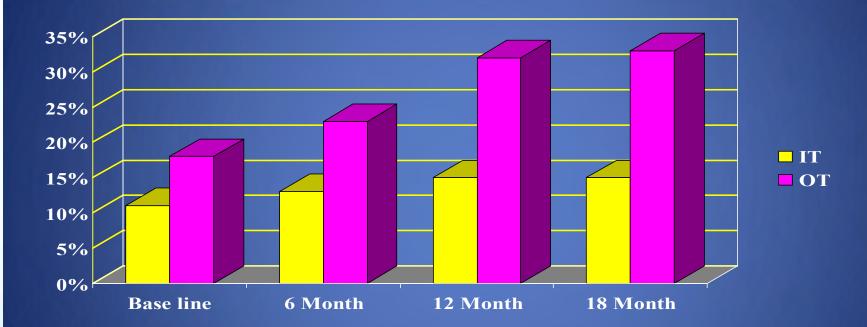
### Pharmacologic Properties of Heroin and Methadone

	Heroin	Methadone
Onset of action	Immediate	30 minutes
Duration	4 to 6 hours	24 to 36 hours
Route of administration	Injection, Snorting, or Smoking	Oral

Treatment Outcome Data: Methadone Maintenance

- 4-5 fold reduction in death rate
- reduction of drug use
- reduction of criminal activity
- engagement in socially productive roles
- reduced spread of HIV
- excellent retention
- (see: Joseph et al, 2000, Mt. Sinai J.Med., vol 67, # 5, 6)

### **HIV Conversion In Treatment**

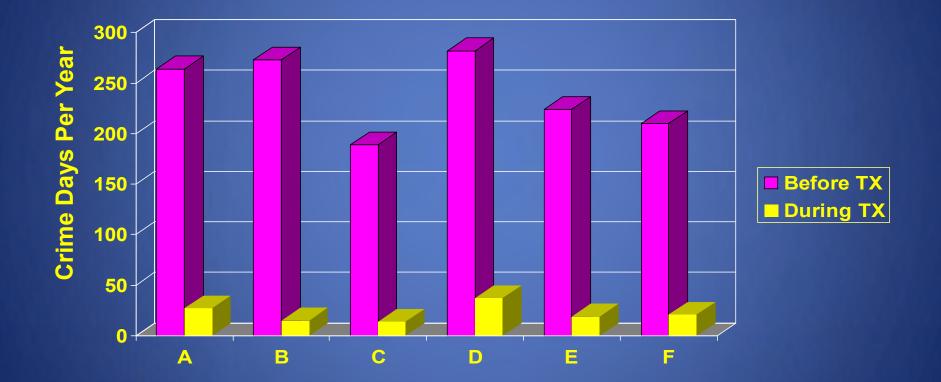


HIV infection rates by baseline treatment status. In treatment (IT) n=138, not in treatment (OT) n=88 Source: Metzger, D. et. al. J of AIDS 6:1993. p.1052

**Opioid Maintenance Pharmacotherapy - A Course for Clinicians - 1997** 

Note: This slide shows protection from HIV sero-conversion by enrollment in MMT: the longer the treatment © Martin, J. 2012 the more relative protection from HIV.

### Crime Among 491 Patients Before and During MMT at 6 Programs



#### Adapted from Ball & Ross - The Effectiveness of Methadone Maintenance Treatment, 1991

Opioid Agonist Treatment of Addiction - Payte - 1998

Note: This shows criminal activity at six different methadone maintenance programs, comparing rates before © Martin, J. 2012 treatment (pink) to during treatment (yellow).

## History of Buprenorphine in US

- First synthesized as an analgesic in 1966 in England
- Recognized as potential addiction treatment by US government researchers, 1970s
- First medication for OUD available for office-based primary care practices
- Approved by the US Government, 2002

# Regulation of Buprenorphine

- Initially only qualified physicians could prescribe.
- Since 2016, advance practice clinicians: Nurse Practitioners (NP) and Physician Assistants (PA) can prescribe
- Requires training/certification. 8 hrs. for physicians and 24 hrs. for NPs/PAs
- Limits number of patients in treatment in first year to 30.
- After 1 year can apply to have up to 100 patients. In special situations can have up to 275 patients.

### Medications for Opioid Use Disorder

The DEA has changed their guidance regarding prescribing and dispensing methadone and prescribing buprenorphine

- Telemedicine is permitted for initial visits as well as regular visits for controlled substances including buprenorphine and other opioids
  - Can be done via Facetime, Skype, or any other video method. They are waiving HIPAA enforcement (!)

https://www.deadiversion.usdoj.gov/coronavirus.html

https://www.hhs.gov/about/news/2020/03/17/ocr-announces-no tification-of-enforcement-discretion-for-telehealth-remote-comm unications-during-the-covid-19.html#.XnEjN738juc.twitter

# Buprenorphine

- Eliminates withdrawal symptoms, diminish cravings, and blocks the use of illicit opioids
- Usual dose is 12 to 16 mg (blocking dose). Maximum dose is 24 mg.
- Sublingual formulation generally used once or split into two doses daily (can be dosed 3 times a week)
- Only detectable on specific lab test
- Minimal sedating and unlikely to overdose (due to ceiling effect)

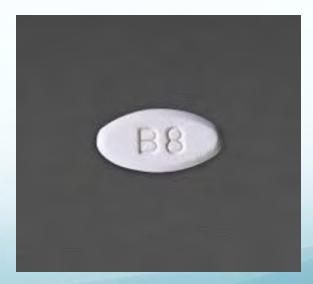
## **Buprenorphine Formulations**

- Buprenorphine + naloxone
- Naloxone lowers abuse potential  $\rightarrow$  causes withdrawal if other opiates are present
  - Naloxone not active when taken by sublingual route
- Buprenorphine without naloxone
  - Used in pregnancy
- Sublingual film (Suboxone<sup>™</sup>)
- Now approved generic films and tablets
- Buccal film (Bunavail™)
- Generic tablets (Zubsolv™)
- Monthly injection (Sublocade<sup>™</sup>)
- Q6 month implants (Probuphine™)









# Induction and Maintenance

- Induction requires 12 hours of abstinence and mild to moderate withdrawal to avoid precipitated withdrawal
- Usually achieve therapeutic dose in first two to three days (for most people: 12 to 16 mg buprenorphine daily)
- Maintenance treatment most effective. Generally recommend at least one year of treatment, but many will require longer period; no limit on length of treatment
- Weekly follow up visits initially
- When stable generally do follow up every one to two months

#### Buprenorphine for Opioid Use Disorder Pharmacology and Administration

### **Buprenorphine Drug Interactions**

Buprenorphine should be used cautiously with other **Central Nervous System (CNS)** depressants, including benzodiazepines, alcohol and other sedative drugs.<sup>24,25</sup>

- Excessive sedation, respiratory depression, impaired cognition, and death can occur.<sup>26, 27, 28, 29, 30, 31, 32</sup>
- Buprenorphine's "ceiling effect" may be overcome when administered with other CNS depressants, particularly benzodiazepines; this can potentially increase the risk of overdose and fatalities.<sup>37</sup>
- Concomitant treatment with benzodiazepines and buprenorphine can be accomplished with careful monitoring. If deemed medically necessary, treatment with benzodiazepines or other CNS depressants is not a reason to withhold buprenorphine treatment.<sup>34</sup>

#### Buprenorphine for Opioid Use Disorder Special Populations

# **Pregnancy and Breastfeeding Women**

- Opioid misuse during pregnancy carries the risks of overdose, pregnancy termination, and other health consequences.<sup>1,2</sup> These risks must be weighed against the risks of using medication for the treatment of Opioid Use Disorder (OUD) in pregnancy. Opioid Agonist Treatment (OAT) is recommended over abstinence-based treatments or withdrawal management in pregnant women who are physically dependent on opioids.<sup>3</sup>
- Methadone has historically been considered the "gold standard" for treatment of OUD in pregnant women,<sup>2</sup> however, recent data have supported that buprenorphine is a reasonable alternative.<sup>4,5</sup> It may be associated with a shorter length of stay and less medication treatment for Neonatal Abstinence Syndrome (NAS) in neonates with buprenorphine treated mothers, compared to that seen with methadone treatment.<sup>6</sup>
- Human data on use of buprenorphine in pregnancy is limited; however, available data do not indicate increased risk of malformations due to buprenorphine exposure.<sup>5,6</sup>

#### Buprenorphine for Opioid Use Disorder Special Populations

### Adolescents

- Patients younger than 18 years of age are at particularly high risk for serious complications of addiction (e.g., overdose deaths, suicide, HIV, other infectious diseases).<sup>3</sup>
- Buprenorphine is indicated only for the treatment of patients who are aged 16 years and older, however some evidence supports off-label treatment of OUD with buprenorphine in younger adolescents.<sup>3,4,24,25</sup>
- Clinicians should be aware of legal and ethical considerations unique to adolescents.
- Involving and obtaining consent from the parents and guardians of minors seeking treatment for OUD is currently required under NY Mental Hygiene Law 22.11, unless provider determines that seeking such involvement and consent would have a detrimental effect on the course of the treatment.
- Adolescents may benefit from treatment in specialized facilities that provide multidimensional services specific to teens.<sup>4</sup>
- All patients, including adolescents, have a high relapse rate if buprenorphine is used only for detox and may benefit from longer term maintenance treatment with buprenorphine in order to maintain

# Buprenorphine VS. Methadone

- Reduces IDU
- Retains pt in treatment
- Decreases craving
- Stops withdrawal
- Costs \$ 5-13 per day

# Like Methadone ... Unlike Methadone ...

- Low potential for OD
- Prescribed in MD office
- No sedation
- Easy taper/detox
- Rarely used concurrently with other opiates

# Randomized Controlled Trial of Buprenorphine

●40 Heroin users

 Buprenorphine 8mg/day vs.

taper + placebo

 All received counseling, groups

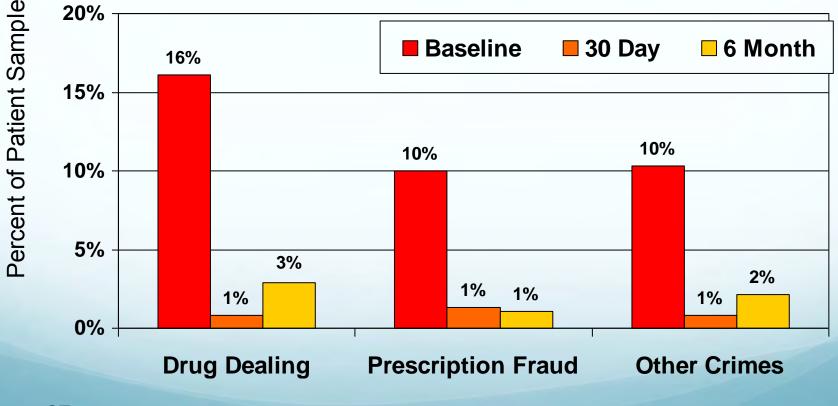
Followed for 1 year

	Buprenor -phine	Placebo
Retained at 1 yr	70%	0
% died	0	20%

Kakko et al, Lancet 2003

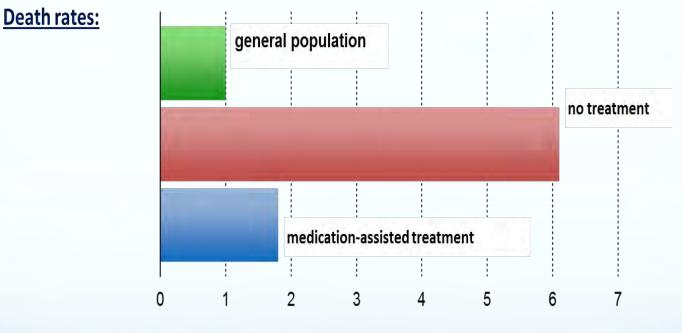
# Buprenorphine Patient Outcomes: Specific Criminal Activities





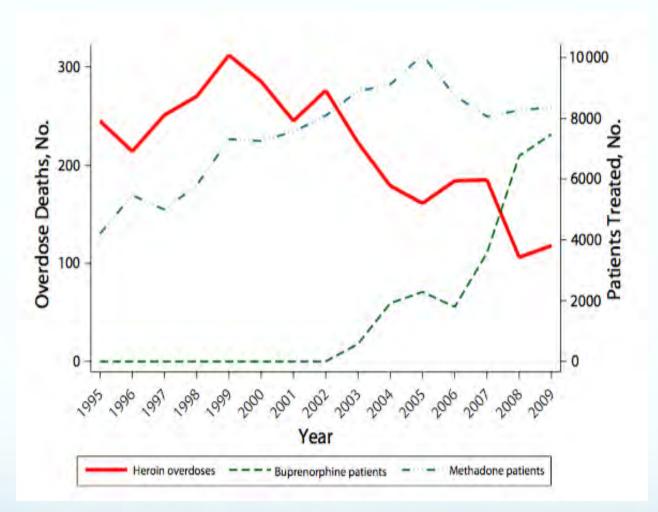
SAMHSA Patient Longitudinal Study, 2005

# Benefits of MAT: Decreased Mortality



Standardized Mortality Ratio

Dupouy et al., 2017 Evans et al., 2015 Sordo et al., 2017

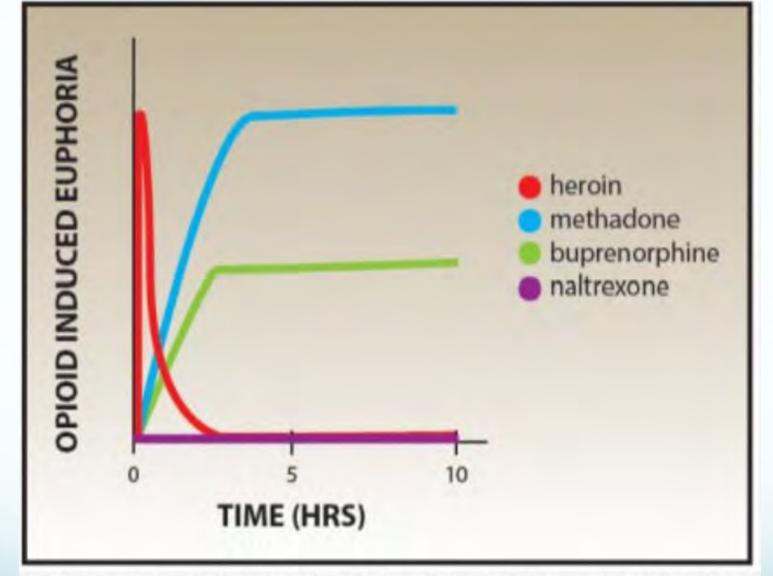


#### Opioid overdose deaths and buprenorphine treatment: Baltimore, MD 1995-2009

American Journal of Public Health, 2013

# Does MAT Replace One Addiction for Another?

- NO! Addiction is compulsive use of a drug despite the harm caused by its use.
- Most people on MAT dramatically decrease and most will eventually stop all use of opiates.
- Patients are able to address other mental health, medical and social problems.
- Most lead normal healthy lives.
- Success generally requires continuation of treatment including linkage to psychosocial support services when needed.



Opioid receptor activity. Heroin (red line) activates opioid receptors fully and quickly. Methadone (blue) is also a full agonist, but the activation is much slower and longer lasting. Buprenorphine (green) activates the receptors partially, with a similar time course to methadone. Naltrexone (purple) is an opioid receptor antagonist and therefore prevents receptor activation.<sup>41,42</sup>

Patients with opiate addiction can be treated by their primary care provider

- OUD is a chronic condition, patients with opiate addiction need an ongoing relationship with a primary care provider to optimize their care.
- Relying only on inpatient rehab is like relying on hospitalists to care for patients with diabetes.

What are the Best Practices for Providing Buprenorphine Treatment?

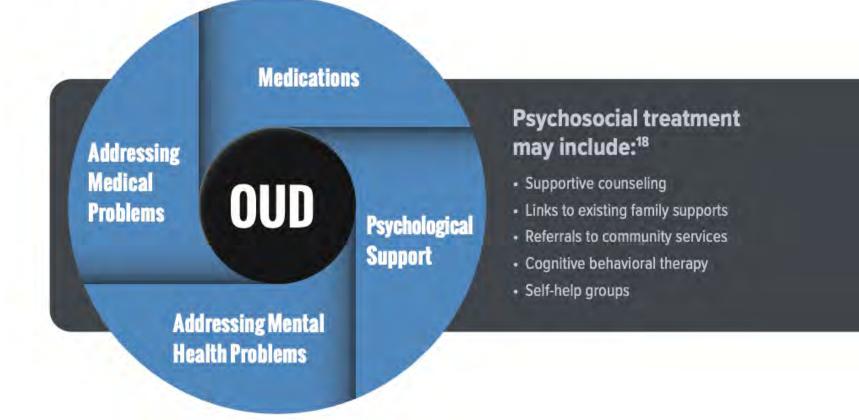
Low threshold to start
 High threshold for discontinuation

# Some characteristics of low-threshold treatment

- Abstinence not imposed as a condition of treatment
- Patient-centered
- Collaborative
- Same-day treatment entry
- Harm-reduction approach
- Flexibility
- Accessible
  - Including availability in non-traditional settings
- Non-punitive
- Anonymous

### Potential components of OUD treatment:<sup>17</sup>

Psychosocial support can improve quality of life and outcomes from Substance Use Disorder (SUD) treatment, but is not an absolute requirement for patients on medication for OUD. Providing referral options based on the needs of the patient is sufficient and should be documented.<sup>18</sup>



# NIH Consensus Statement 1997

"Although a drug-free state represents an optimal treatment goal, research has demonstrated that this goal cannot be achieved or sustained by the majority of opiate-dependent people."

Effective Medical Treatment of Opiate Addiction. NIH Consensus Statement 1997 Nov. 17-19;15(6):5

#### Relapse to IV Drug Use After MMT 105 Male Patients who Left Treatment



Note: When patients taper off of methadone maintenance, relapse is almost universal. There is no way to predict who are the 18% of patients who will not relapse within a year. During medically supervised withdrawal, close observation and keeping open the possibility of resuming therapeutic doses promptly is indicated.

# How long should buprenorphine treatment continue?

- Relapse rate of 80% within 12 months of discontinuing MAT.
- Treatment should be continued for as long as patient is benefiting from treatment and wishes to continue it.
- Slow taper is preferred.
- Provide encouragement, support, follow-up, and a back up plan for those who discontinue treatment.

Early cessation of buprenorphine treatment can have catastrophic effects, including death!

# Can Buprenorphine Be Abused?

- Diversion is due, in large part, to difficulty in obtaining legal medical treatment
- Not generally a preferred drug of abuse due to slow-onset of action.
- Much less overdose risk than other opiate drugs and medications
- Higher doses protect ("block") from use of other opiates

# Naltrexone

- \* Not a scheduled drug
- \* FDA approval for ages 18 and over
- Opioid competitive antagonist, blocks mu opioid receptor
- \* Monthly injection depot available (Vivitrol)
- \* Can cause abrupt opiate withdrawal
- \* Also used for alcohol use disorder
- Not useful if patient requires opiates for pain control as well

# Extended-Release Naltrexone

- Shorter experience (approved 2011) and a few controversial studies comparing directly to buprenorphine and methadone
- No opioid use is *required* for at least 7 days to begin treatment
- Difficulty with inductions (28% failure in an inpatient study) and low retention (estimated that half of patients only receive one or two injections).
- Some positive experiences with socially stable and highly motivated patients

Relapse after discontinuation increases risk of overdose

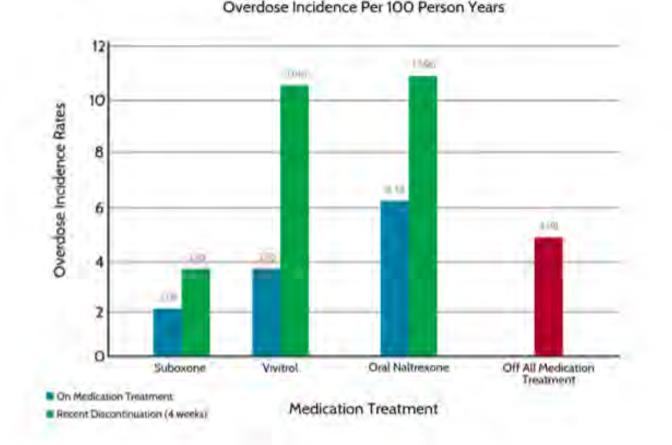


Figure 1. Controlling for demographics (age, sex, geographic region) and clinical factors (type of insurance coverage, co-occurring substance use disorders, other prescription medications, clinician visits), Suboxone was the only treatment associated with lower risk of overdose compared to periods of no medication treatment.

# US Food and Drug Administration (FDA) approved medications

Medication	Euphoria	Overdose Risk	Effectiveness	Other
Methadone	Some	Low	<ul> <li>✓ mortality</li> <li>✓ illicit opioids</li> <li>✓ criminality</li> </ul>	Good data Structured Inexpensive
Buprenorphine	Minimal	Minimal	<ul> <li>mortality</li> <li>illicit opioids</li> <li>HIV risk</li> </ul>	Good data Convenient Feasible
Long-acting naltrexone	None	None	↓ illicit opioids	Minimal data Expensive

Sharma Substance Abuse & Rehabilitation 2016

### NALTREXONE

- Few studies comparing directly to buprenorphine and methadone.
- Some positive experience with socially stable and highly motivated patients.
- Questions about patients continuing to take medication (adherence) and remaining in treatment unless mandated (low rates of retention in care).
- Heavy promotion by manufacturer of extended-release injection form without adequate evidence of superiority over first-line medications.

Substance Abuse and Mental Health Service Administration. (2019, November 22). Naltrexone. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/treatment/naltrexone

# What about naltrexone?

 Massive uptake within criminal justice system. Often as only medication being made available.

- Data limited. Largest study involving justice-involved patients recruited those with <u>preference for "opioid free" treatment</u>.
- Limited patient interest. Only 4 of 303 chose naltrexone in RI correctional setting when given options for other therapies.

Lee, Joshua D., et al. "Extended-release naltrexone to prevent opioid relapse in criminal justice offenders." New England journal of medicine 374.13 (2016): 1232-1242.

Green, Traci C., et al. "Postincarceration fatal overdoses after implementing medications for addiction treatment in a statewide correctional system." *JAMA psychiatry* 75.4 (2018):

# Vivitrol™

- Aggressive marketing to public, judges, sheriffs and lobbying of politicians raises ethical concerns
- Very expensive (approx. \$1,000 per month)
- Conclusion: Most addiction specialists in the US consider naltrexone to be a second-line treatment for opiate addiction.
- Currently offered as the only MAT option in hundreds of US jails, prisons and drug courts.

Vivitrol (naltrexone for extended-release injectable suspension)

VIVITROL® with counseling is proven to **prevent relapse** to opioid dependence after detox.

Please see Brief Summary of Important Facts about VIVITROL to the right, including who should not take VIVITROL

#### BRIEF SUMMARY OF IMPORTANT FACTS ABOUT VIVITROL

This is the most important information I subsolt have about VMITID(2). WHITE is the max ensure of the inter, including WHITE is the max ensure of the inter, including WHITE is the maximum of the inter, including white is the maximum of the inter is the inter is the maximum of the inter is the inter is

2. Section (page) introduces, in a value about color instance, you can use a minimum color page of the page of

tark unne • tizednese al healthcare provider may need to stop traiting you with WitTRDL if you get tegen or symptoms o Free or a preservation operation methods and all of activity dependences. The stream of the preservation provides a stream of expenditions, read methods in a special dependences, address quard advantations, must also taking opsisita befree years shart meaning VMTRO. To be effective WMTRO with of or advantation of dependency processors and as a case-withing VMTRO, may it with other advantation of dependency processors and as a case-withing VMTRO.

werene it is not not not not not that the and affective is charges. Who should not receive VIVITROL? Is not notive VIVITROL if you

evir unique ta los es pleyestas dependences en reporte derestinorige metalemente en reporta di constructivo del metale estas del seguitaria de la constructiva del metale estas del seguitaria del accessione estas della constructiva del metale estas della constructiva del metale estas della constructiva della const

foreness, navani jed venitleg, darites, v stonauti opnje, ulimp, to oslivano a avj d te kovjenitem in WINTER, o the lajud used to me WINTER, uerti. See the nodication guide for the full lat of argedeets.

What should full fin my hardhourge product fabries receiving VMTML21 between works VMTML21 and the should have provide in the source of the should have provide in the source of the so are being treated for attrated dependence but also can or are addected to spaceting medicines or optical strend drops, it is imported that yes bill your healthcare for before streng VIVITROL to avoid having sudden optical withdrawed symplasm when her VIVITROL to calment.

are other possible serious side effects of VIVITROL?

and mead. Substitutions the level of levelship of excitate the frequency and south becomes the level wereform and provide souther stry are frequency biology and theory. Biol 2010, Biol 2010, and an analysis of the strength of the level strength of providence that is maximal levels. The strength excitation of the strength of the level strength of the baseling and the strength of the strength of the strength of the strength of the REL. The first final theorem provides or get medical in they right using if these strength of these excitations are strength of the strength of the strength of the strength of the REL. The first final theorem provides or get medical integrity right using if these strength of these

of your back • chent pain • being dazy to faint an side effects of VIVITROL may include: • senting • senting

This is only a summary of the most important information atom ford one obviousing / An you for information of monator. That for Monatoria of Monatoria, and Antonia and Antonia officer fl.

Alkermes

#### Adverse Effects<sup>19,21,22,24</sup>

#### Buprenorphine

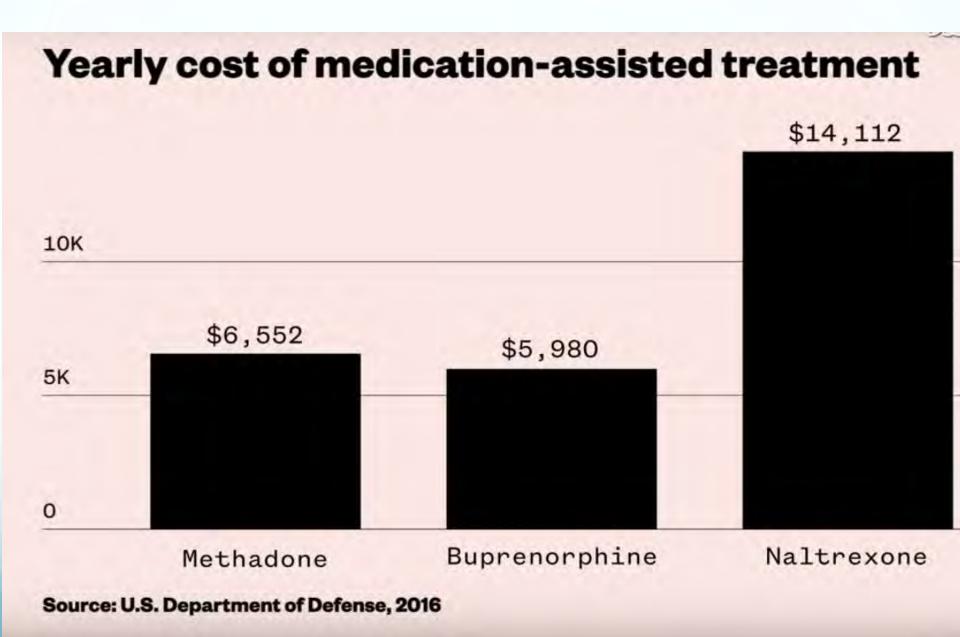
 Adverse effects are similar to those of other opioids: constipation, nausea, vomiting, headache, anxiety and sleep disturbances.

#### 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.



Barriers to Proper Treatment

# Audio Link

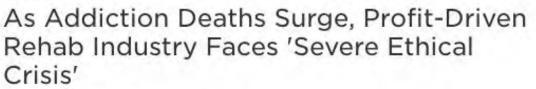
https://n.pr/3jTEwn3

NATIONAL

16

¥

82



+ PLAYLIST

\*

P

<>

February 15, 2021 · 7:08 AM ET Heard on Morning Edition

BRIAN MANN

- 4-Minute Listen



This 2017 photo shows a slogan is on the storefront of Journey, a former substance abuse treatment center, in Lake Worth, Fla. Now closed, it was one of two centers owned by Kenneth Chatman, who is now serving a 27-year federal prison sentence for health care traud and money laundering convictions. Lynne SladityAP

#### Scientology Base Denied by Officials

By Jeff Proctor Copyright © 2009 Albuquerque Journal Journal Staff Writer

The Second Chance drug rehab program was pitched to lawmakers and the judiciary as the missing link in a broken system that recycled non-violent drug offenders between jails, prisons and the streets.

The past year, it has struggled through money problems and accusations that it is housing ineligible inmates. On Saturday, faced with a city-delivered Jan. 31 deadline to vacate, Second Chance officials moved the last of its inmates out. But throughout the program's two plus years of operation, an underlying cause of concern has been its close ties to Scientology.

Since it opened in October 2006, Second Chance officials have said the program has its roots in "secular discoveries" made by Scientology founder L. Ron Hubbard.

They have insisted that the program is not based in Scientology. Some officials are Scientologists.

Former and current Second Chance employees tell a different story. They say "everything that happens there is based in Scientology" and offer the following to back up their claim:

 Inmates and employees are put through "courses" and "ethics training" that are straight out of the Scientology playbook.

Scientology-related entities have played a major role in operations at Second Chance.

•Second Chance has received the vast majority of its money from wealthy Scientologist donors.

•And the program itself, according to the employees, is virtually the same as Narconon, a drugrehabilitation program started by Scientologists, and Criminon, a criminal justice program run by Scientologists that is used in prisons. Both of those programs are based on Hubbard's teachings and were classified by the IRS in a 1993 court case as "Scientology-related."

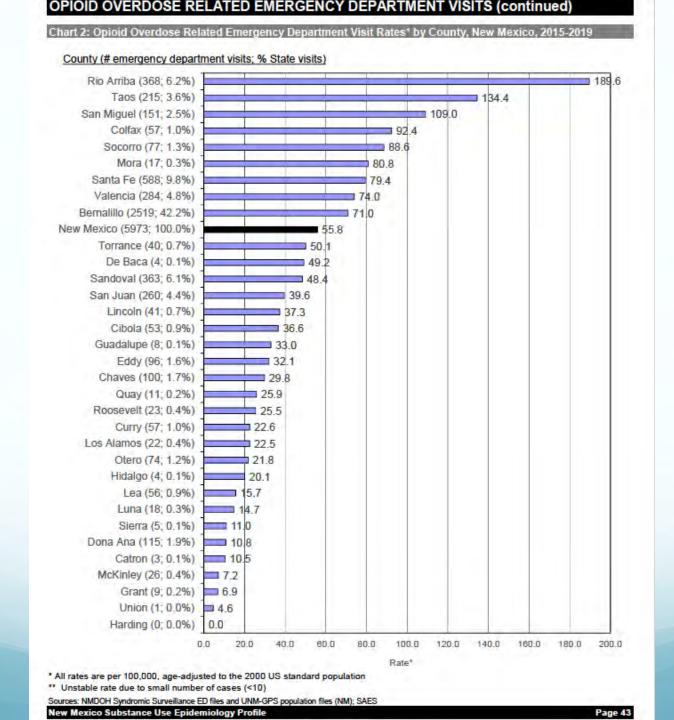
The program has received nearly \$1 million in state and county funds and about \$350,000 in federal money.

# Rehab industry

- Detox without initiation of Opioid Agonist Treatment (methadone or buprenorphine) has failure rate of 90% and places patients at risk of overdose death.
- Long term inpatient Rehab is a multibillion dollar industry frequently paid out-of-pocket by families.
- May cost anywhere from \$10,000 to \$50,000 per month.

# Buprenorphine is Underutilized

- Difficulty getting access to treatment Too few trained; too few prescribe (7% U.S. doctors)
- Missed opportunities to start treatment: emergency departments, prisons and jails, hospitals
- Stigma and misunderstanding by the public, medical, drug treatment, criminal justice workers
- Punitive policies ("War on Drugs") and administrative barriers
- Excessive cost of medications
- Market-based health care shuns patients with chronic diseases such as OUD



Today, New Mexico's incarceration rates stand out internationally

INCARCERATION RATES COMPARING NEW MEXICO AND FOUNDING NATO COUNTRIES	
New Mexico	829
United States	673
United Kingdom	
Portugal	
Luxembourg	
Canada 💴	
France 399	
Italy 👘	
Belgium	
Norway 24	
Netherlands	
Denmark 200	
Iceland 38	
Incorceration rates per 100,000 population	

Source: https://www.prisonpolicy.org/global/2018.html

In the U.S., incarceration extends beyond prisons and local jails to include other systems of confinement. The U.S. and state incarceration rates in this graph include people held by these other parts of the justice system, so they may be slightly higher than the commonly reported incarceration rates that only include prisons and jails. Details on the data are available in States of Incarceration: The Global Context. We also have a version of this graph focusing on the incarceration of women.

## 1 in 5 incarcerated people is locked up for a drug offense

450,000 are incarcerated for nonviolent drug offenses on any given day.

## State prisons

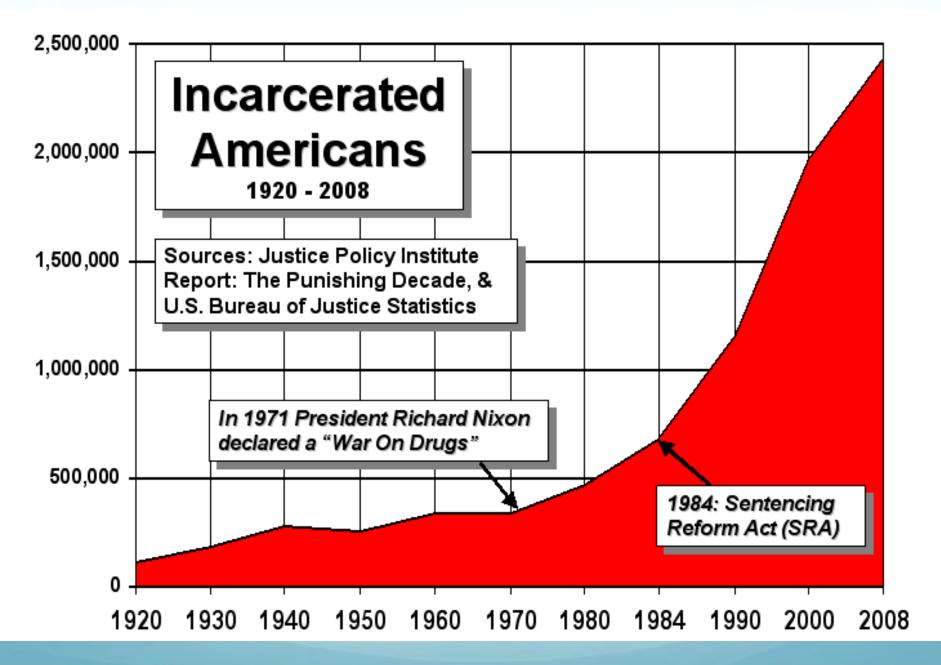
Local jails 120,000 Unconvicted 37,000 Convicted

#### Federal

78,000 Bureau of Prisons 22,000 U.S. Marshals

Youth 2,100 Military 80

https://www.prisonpoli cy.org/about.html

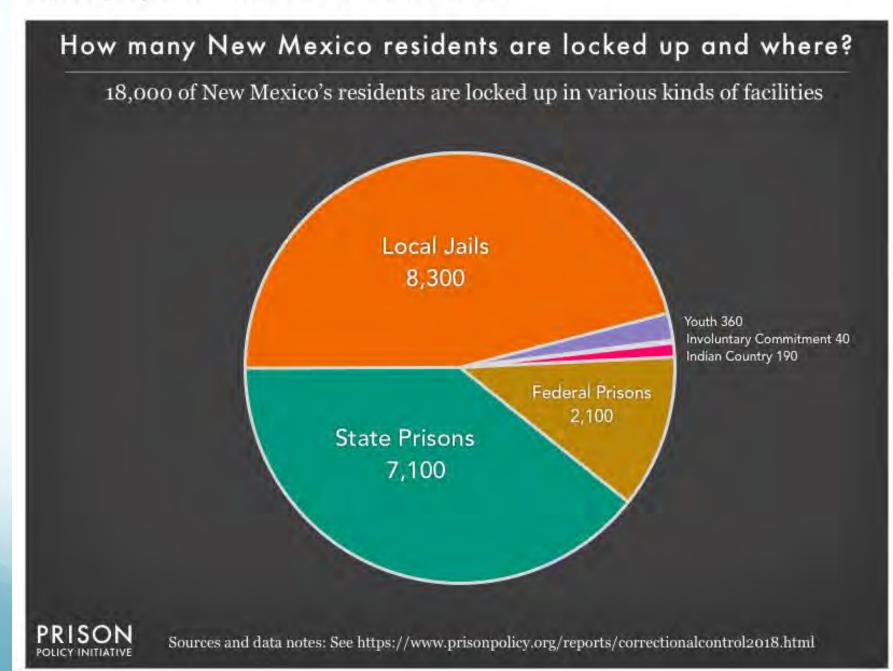


## John Ehrlichman, Nixon's domestic policy chief, explains the origin of the War on Drugs

"...We knew we couldn't make it illegal to be either against the war or Black, but by getting the public to associate the hippies with marijuana and Blacks with heroin and then criminalizing both heavily, we could disrupt those communities."

> https://harpers.org/archive/2016/04/legalize-itall/

#### 18,000 people from New Mexico are behind bars



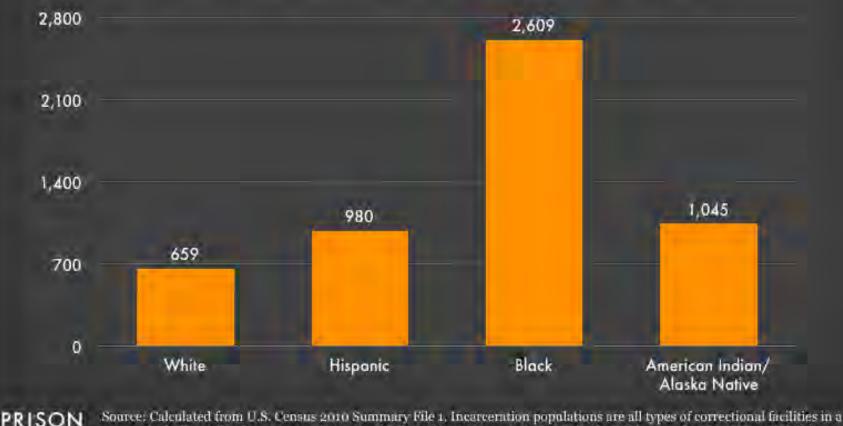
New Mexico's criminal justice system is more than just its prisons and jails



People of color are overrepresented in prisons and jails

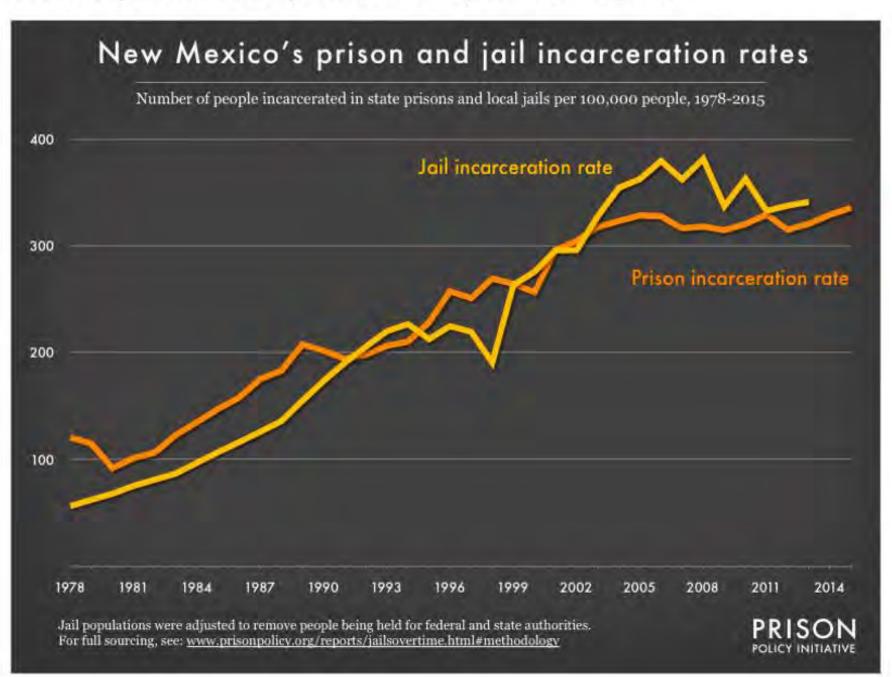
## NEW MEXICO INCARCERATION RATES BY RACE/ETHNICITY, 2010

(Number of people incarcerated per 100.000 people in that racial/ethnic group)



state, including federal and state prisons, local jails, halfway houses, etc. Statistics for Whites are for Non-Hispanic Whites

Rates of imprisonment have grown dramatically in the last 40 years

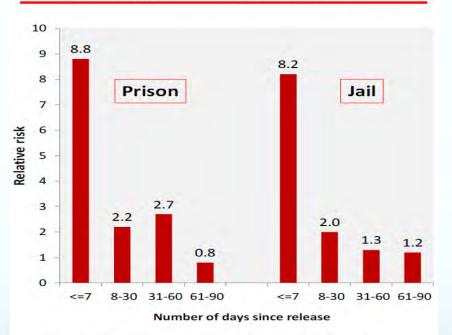


# Why MAT in Criminal Justice settings?

- 65% of incarcerated population in US meet criteria of SUD \* (https://www.centeronaddiction.org/newsroom/pressreleases/2010-behind-bars-II)
- OUD prevalence estimated at 17 to 19%
- Many are incarcerated due to their drug use
- Only 10 to 20% of general population with opiate addiction are being treated and even fewer in the criminal justice system

## Risk of Overdose Death After Release

Relative Risk\* of Dying of an Unintentional Opioid Overdose by Time Since Release from Prison or Jail, Maryland, 2007-2013.



\*Compared to deaths occurring 91-365 days following release

http://bha.dhmh.maryland.gov/OVERDOSE\_PREVENTION/Documents/corrections%20brief\_V3.pdf

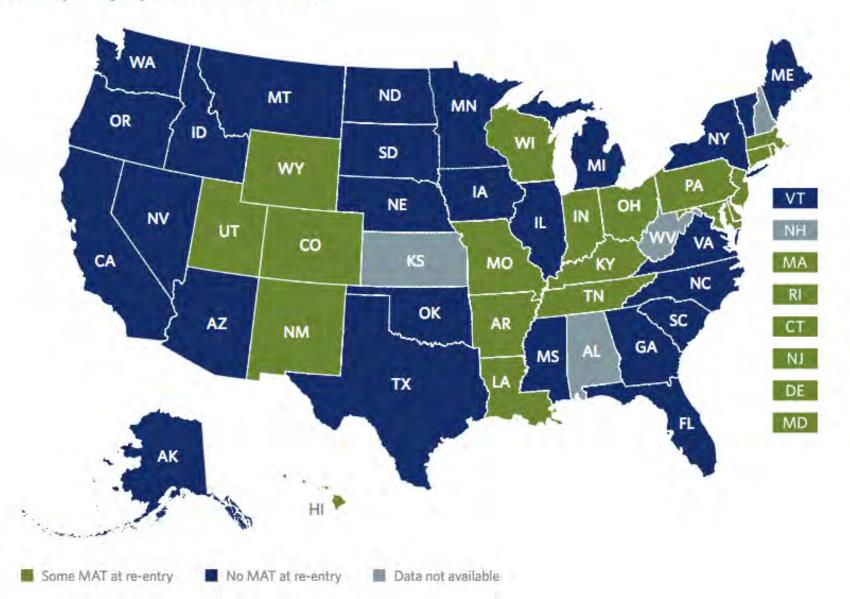
## What are the benefits of MAT in corrections?

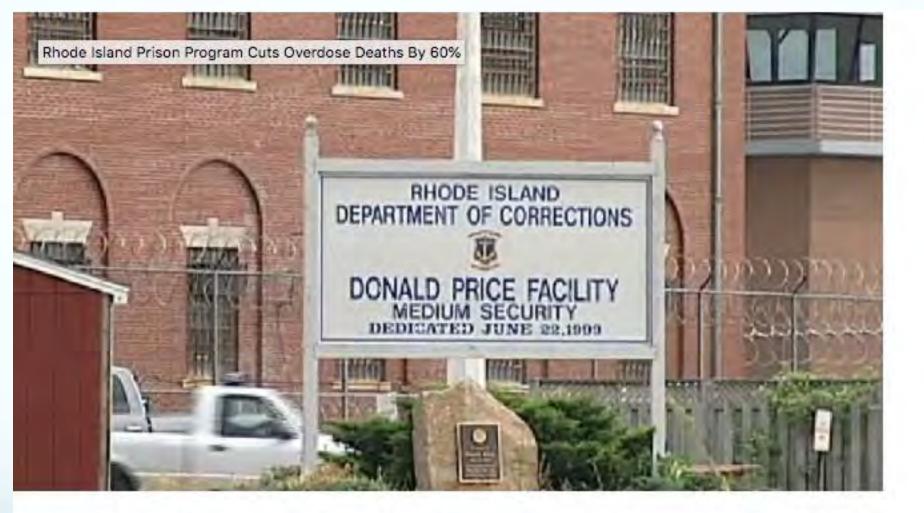
Benefits	Evidence
Reduces <b>illicit opioid use</b> post- incarceration	Mattick, Breen, Kimber, & Davoli, 2009
Reduces criminal behavior post- incarceration	Deck el al., 2009
Reduces mortality and <b>overdose risk</b> post-incarceration	Degenhardt et al., 2011; Kerr et al., 2007
Reduces <b>HIV risk behaviors</b> (i.e., injection drug use) post-incarceration	MacArthur et al., 2012

Additional social, medical, and economic benefits of providing MAT to inmates who are opioid-dependent are welldocumented

(Rich et al., 2015; Zaller et al., 2013; McKenzie et al., 2012; Heimer et al., 2006; Dolan et al., 2003)

### Figure 14 Few State Prisons Facilitate MAT Upon Re-Entry MAT policy by state, fiscal 2016





## **Innovative Program in RI Cuts Prisoner Overdose Deaths**

As the opioid crisis continues to unfold, growing percentages of inmates enter prison addicted, and often overdose upon release. Now a new program in Rhode Island offers hope for addicted prisoners.



# JOIN US FOR A CONVERSATION ON JUNE DECARGERATION JUNE JUSA

COVID-19 is spreading rapidly through prisons and jails in the United States. Join us for a discussion and Q&A on decarceration strategies and how the Emergency Community Supervision Act will help us continue our work to **#FreeThemNow.** 



DeAnna Hoskins

U.S. Senator Cory Booker New Jersey

Dr. Homer Venters, M.D. Fmr Chief Medical Officer of NYC Juli System

Xavier McElrath-Bey Far Senteniang of Youth - Represent Justice

FRIDAY, MAY 1 · 12:15-1:15PM ET · FACEBOOK LIVE REGISTER TO WATCH LIVE AT BIT.LY/JLUSAMAY1

## What is Harm Reduction?

HARM REDUCTION is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use.

HARM REDUCTION is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs

The Harm Reduction Coalition

# Harm Reduction Program Goals

- Reduce the incidence of blood-borne infections
    $\rightarrow$  HIV, HBV, HCV
- Reduce the incidence of other diseases caused by reusing or sharing syringes → abscesses, endocarditis, septicemia
- Prevent deaths from accidental overdose
- Educate clients on safer use strategies
- Assist clients to access drug treatment and other related health services





# Which one has the substance use disorder?

## They all do.

Through help we have achieved and sustained recovery.

For more information about treatment **call 762-2901.** For more information about **stopping the stigma** visit us at *uhs.net* In the event of a crisis call 762-2257.





# Instead of Saying This ...

PATIENT

TREATMENT



Alcoholic -----> Person with alcohol use disorder Substance Abuser ----> Person with a substance use disorder

Clean (as in "he/she is clean") Person in recovery/person who is not currently using substances

Dirty (as in "he/she is dirty") -----> Person who is currently using substances

Dirty Urine -----> Positive Urine Clean Urine -----> Negative Urine

Replacement/Substitution — Medication-assisted

vedication-assisted treatment, medicine, or medication



For information about treatment **call 762-2901**. In the event of a crisis call **762-2257**. For more information about **stopping the stigma** visit us at **uhs.net** 



PUBLIC HEALTH

## Mapping How The Opioid Epidemic Sparked An HIV Outbreak

January 14, 2018 · 6:00 AM ET

HEATHER BOERNER



A needle exchange program at the Austin Community Outreach Center in Austin, Ind., is aimed at stopping spread of HIV.

#### Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015

Caitlin Conrad<sup>1</sup>, Heather M. Bradley<sup>2</sup>, Dita Broz<sup>2</sup>, Swamy Buddha<sup>1</sup>, Erika L. Chapman<sup>1</sup>, Romeo R. Galang<sup>2,3</sup>, Daniel Hillman<sup>1</sup>, John Hon<sup>1</sup>, Karen W. Hoover<sup>2</sup>, Monita R. Patel<sup>2,3</sup>, Andrea Perez<sup>1</sup>, Philip J. Peters<sup>2</sup>, Pam Pontones<sup>1</sup>, Jeremy C. Roseberry<sup>1</sup>, Michelle Sandoval<sup>2,3</sup>, Jessica Shields<sup>4</sup>, Jennifer Walthall<sup>1</sup>, Dorothy Waterhouse<sup>4</sup>, Paul J. Weidle<sup>2</sup>, Hsiu Wu<sup>2,3</sup>, Joan M. Duwve<sup>1,5</sup> (Author affiliations at end of text)

#### On April 24, 2015, this report was posted as an MMWR Early Release on the MMWR website (http://www.cdc.gov/mmwr).

On January 23, 2015, the Indiana State Department of Health (ISDH) began an ongoing investigation of an outbreak of human immunodeficiency virus (HIV) infection, after Indiana disease intervention specialists reported 11 confirmed HIV cases traced to a rural county in southeastern Indiana. Historically, fewer than five cases of HIV infection have been reported annually in this county. The majority of cases were in residents of the same community and were linked to syringe-sharing partners injecting the prescription opioid oxymorphone (a powerful oral semi-synthetic opioid analgesic). As of April 21, ISDH had diagnosed HIV infection in 135 persons (129 with confirmed HIV infection and six with preliminarily positive results from rapid HIV testing that were pending confirmatory testing) in a community of 4,200 persons (1).

The age range of the 135 patients is 18-57 years

identified as syringe-sharing or sex partners, and 54 (42.2%) are social contacts regarded as at high risk for HIV infection.

Injection drug use in this community is a multi-generational activity, with as many as three generations of a family and multiple community members injecting together. IDU practices include crushing and cooking extended-release oxymorphone, most frequently 40 mg tablets not designed to resist crushing or dissolving. Syringes and drug preparation equipment are frequently shared (e.g., the drug is dissolved in nonsterile water and drawn up into an insulin syringe that is usually shared with others). The reported daily numbers of injections ranged from four to 15, with the reported number of injection partners ranging from one to six per injection event.

Like many other rural counties in the United States, the county has substantial unemployment (8.9%), a high proportion of adults who have not completed high school (21.3%), a substantial proportion of the population living in poverty

www.cdc.gov/mmwr/preview/mmwrhtml/mm6416a4.htm

New Mexico's needle exchange program provided 9.8 million syringes in 2018





Joshua Panas

September 20, 2019 10:23 PM

ALBUQUERQUE, N.M.- A program in New Mexico allows people to exchange dirty needles for sterile needles.

# GET NALOXONE

RESOURCES

NEXT NALOXONE

OUTSIDE OF NY ABOUT CONTACT GET NALOXONE DONATE

# What is Naloxone?

 Naloxone is a medication that reverses the effects of opioid overdose by blocking the opioid's action on the brain and restoring breathing.



 Naloxone's only purpose is to reverse overdose; it is not a "recreational" drug and does not cause a "high."



 The use of naloxone, in combination with rescue breathing, can save a life.



HARM REDUCTION

## How One Group Is Expanding Access to Overdose-Reversing Drugs Through the Mail

Since people can already order fentanyl and other harmful drugs via the darknet, NEXT wants to make obtaining items that reduce harm just as easy to get.

By Mais Szelevitz | Mar 1 2019, 6:32pm



Courtesy of NEXT Harm Reduction

Recent and Current Prices for Naloxone.*				
Naloxone Product	Manufacturer	Previous Available Price (yr)	Current Price (2016)	
Injectable or intranasal, 1 mg-per-milliliter vial (2 ml) (mucosal atomizer device separate)	Amphastar	\$20.34 (2009)	\$39.60	
Injectable				
0.4 mg-per-milliliter vial (10 ml)	Hospira	\$62.29 (2012)	\$142.49	
0.4 mg-per-milliliter vial (1 ml)	Mylan	\$23.72 (2014)	\$23.72	
0.4 mg-per-milliliter vial (1 ml)	West-Ward	\$20.40 (2015)	\$20.40	
Auto-injector, two-pack of single-use prefilled auto- injectors (Evzio)	Kaleo (approved 2014)	\$690.00 (2014)	\$4,500.00	
Nasal spray, two-pack of single-use intranasal devices (Narcan)	Adapt (approved 2015)	\$150.00 (2015)	\$150.00	

\* Price information was obtained from Medi-Span Price Rx (Wolters Kluwer Clinical Drug Information).

#### <u>Perspective</u>

The Rising Price of Naloxone — Risks to Efforts to Stem Overdose Deaths

Ravi Gupta, B.S.,
Nilay D. Shah, Ph.D.,
and Joseph S. Ross, M.D., M.H.S.
December 8, 2016
N Engl J Med 2016; 375:2213-2215
DOI: 10.1056/NEJMp1609578

Naloxone reverses 95% of overdoses, but many recipients don't ...

https://www.wsls.com/health/naloxone-reverses-95-of-overdoses-bu ...

#### HEALTH [HTTPS://WWW.WSLS.COM/HEALTHY-LIVING]

### Naloxone reverses 93% of overdoses, but many recipients don't survive a year

Failure to get treatment often fatal

By NADIA KOUNANG, CNN

Posted: 11:59 AM, October 30, 2017

10% one year mortality (33% from overdoses) after naloxone rescue.

Presented 10/30/17 at the American College of Emergency Physicians' annual conference in Washington.

#### The New York Times Magazine

Account ~

## Trapped by the 'Walmart of Heroin'

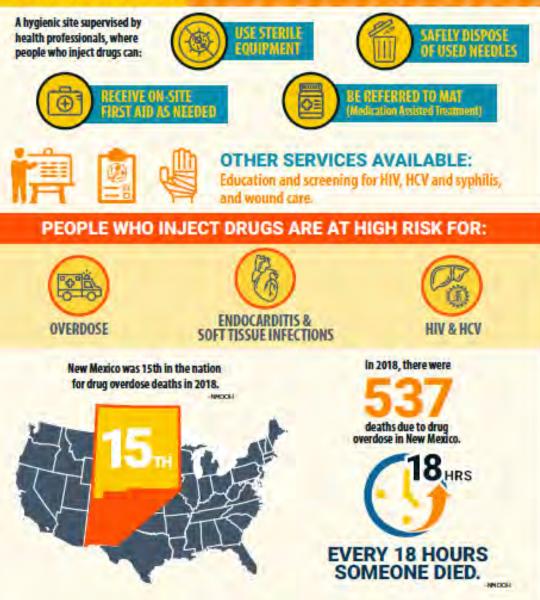
A Philadelphia neighborhood is the largest open-air narcotics market for heroin on the East Coast. Addicts come from all over, and many never leave.





## SAFE INJECTION SITES(SIS)





#### THERE IS NO SANCTIONED SIS IN THE UNITED STATES.

The first sanctioned site was in Switzerland in 1986, and more have been opened in Australia, Cauada, Denmark, France, Germany, Luxembourg, the Netherlands, Norway and Spain.



#### PEOPLE WHO PARTICIPATE IN A SIS HAVE:



#### NO PARTICIPANT IN AN SIS HAS EXPERIENCED A FATAL OVERDOSE WHILE AT THE SITE.



Each dollar spent generates savings of \$2.33 on 5 averted outcomes:

- HIV infections
- HCV Infections
- averted overdose deaths
- Increased MAT uptake
- reduced skin and soft tissue infections



For more information please contact Karen Edge al Karen.Edge@state.nm.us

2021 LEGISLATIVE SESSION

12 hours ago

### Legislators seek to reform drug laws

By Andy Lyman



The New Mexico State Capitol, or Roundhouse Wikicommons.

New Mexico lawmakers have tried to take on drug addiction and deadly overdoses for decades.

# How is Canada doing?

- More than 50 gov't funded DCRs; more planned
- iOAT including Heroin-Assisted Treatment
- NHP funds naloxone, needle and syringe and harm reduction outreach programs
- Prioritizes buprenorphine treatment. No Vivitrol<sup>™</sup>.
- MAT in prisons
- In 2018, announced roll-out of Prison Needle Exchange Program (PNEP) at two federal prisons.
- Fewer overdose deaths than USA:
  11.8/100,000 vs. 20.7/100,000 (2018)







In this March 27, 2020 photo, a patient arriving to pick up medication for opioid addiction is given hand sanitizer at a clinic in Olympia, Wash., that is currently meeting patients outdoors... **Read More** 

PHOTOGRAPH BY TED S. WARREN, AP PHOTO

SCIENCE | CORONAVIRUS COVERAGE

# The pandemic may fuel the next wave of the opioid crisis

# COVID-19 is Especially Dangerous for PWUD

- Often older with chronic medical conditions
- Access to clean water, soap, sanitizer, masks may be limited
- SSPs closed or limited hours so less access to clean syringes, naloxone, equipment
- Difficulties of sheltering in place or isolating themselves
- Many have co-occurring disorders
- Access to drug supplies may be disrupted and therefore forced to seek drugs from new sources
- Drug supply likely to be contaminated and highly toxic
  - Medical providers overwhelmed, reassigned or not available for medications including MAT

"Overdoses go up, paradoxically, as supply goes down," says <u>Daniel Ciccarone</u>, a professor at the UCSF School of Medicine. During shortfalls, people will substitute drugs they're less familiar with, or change their habits, making dosing less reliable and potentially causing a spike in overdoses. A chagrined Ciccarone predicts that the pandemic may usher in <u>a fifth wave of the opioid</u> <u>crisis</u>.

National Geographic 4/21/20

## No Judgement No Shaming No Preaching JUST LOVE!

Call if you're going to use when you're alone. An operator will ask for your first name, EXACT location, and the # you're calling from. If you stop responding after using, we will notify EMS of your location, & possible overdose

NEVER

1(800)484-3731 www.NeverUseAlone.com Starting March 25th, NYC Health + Hospitals will begin operating a virtual buprenorphine (Suboxone) clinic in response to the COVID-19 emergency.

The virtual buprenorphine clinic will serve all New Yorkers seeking opioid addiction treatment for continuation or initiation of buprenorphine.

Referrals from all NYC H+H staff are welcome!

Clinic hours (by phone or video conference): Mon - Fri, 9 AM - 5 PM

For appointments and referrals, call: 212-562-2665

**Bellevue Building A Room 235** 

## **Key Take-Home Points**

- Many different options for many different clients: NO ONE SIZE FITS ALL
- If clients are using any opioid (heroin, fentanyl, pills), they are good candidates for medication therapy
- Methadone and buprenorphine dramatically decrease risk of death and have many individual and societal benefits

# What Must Be Done?

- Address the structural and social determinants of health; jobs, housing, living wage, education, systemic racism
- Improve health professional training in caring for patients with SUD
- End racialized War on Drugs and mass incarceration.
  - Legalizing adult use of recreational cannabis 14 states, D.C., the Northern Mariana Islands, and Guam. Another 16 states and the U.S. Virgin Islands have decriminalized its use.
  - Decriminalizing personal possession (i.e. Oregon, Portugal)
- Expand harm reduction and MAT access
- Support Improved Medicare-for-All, single-payer, not-for-profit national health program

## MARTIN LUTHER KING

Of all the forms of inequality, injustice in health care is the most shocking and inhumane.

Speaking before the Second National Convention of the Medical Committee for Human Rights. Chicago, Illinois. March 25 1966.







# THANK YOU

Bruce G. Trigg, MD

trigabov@gmail.com