# <sup>©</sup> The Opioid Crisis

### Made in America...Fade in America?

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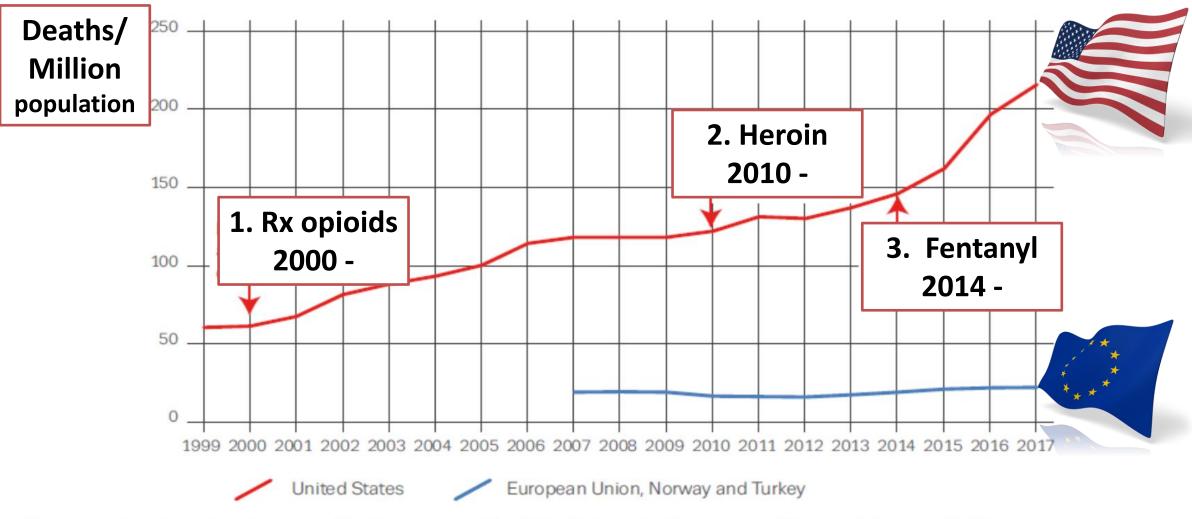
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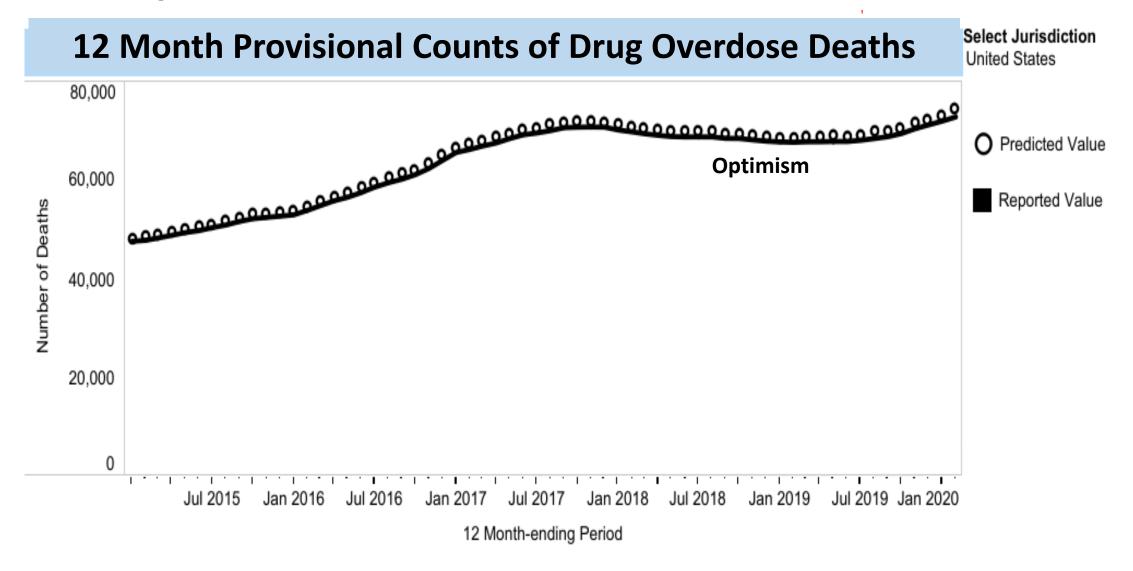


### The Opioid Crisis is a Uniquely American Challenge



Note: Age-adjusted overdose death rates. The European trend for all drug-induced deaths rates per million population aged 15-64 is presente Sources: National Center for Health Statistics, National Vital Statistics System, Mortality; EMCDDA. Both adapted by the EMCDDA.

#### 2018 Optimism has Reverted to Pessimism 9/13/2020



VSRR Provisional Drug Overdose Death Counts, September 2020 https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

# Root Causes

# Generational Forgetting For Decades, Prescription Opioids Avoided for "Chronic Pain"



# Low Quality Science as a Catalyst

### ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients' who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,2 Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare inmedical patients with no history of addiction.

### Recent History of Pain Management with Opioids

#### Pressure on physicians to address pain with opioids increases

Shift blame to provider

If patient has pain...

1990

Tragedy needless pain

Patient movement

1996

#### Pharma \$\$\$ Educating

- Patients
- Clinicians
- Pain Soc.

#### 1998-2000

VA adopts "Pain: 5th vital sign" and mandates aggressive

- Pain evaluation
- Pain treatment

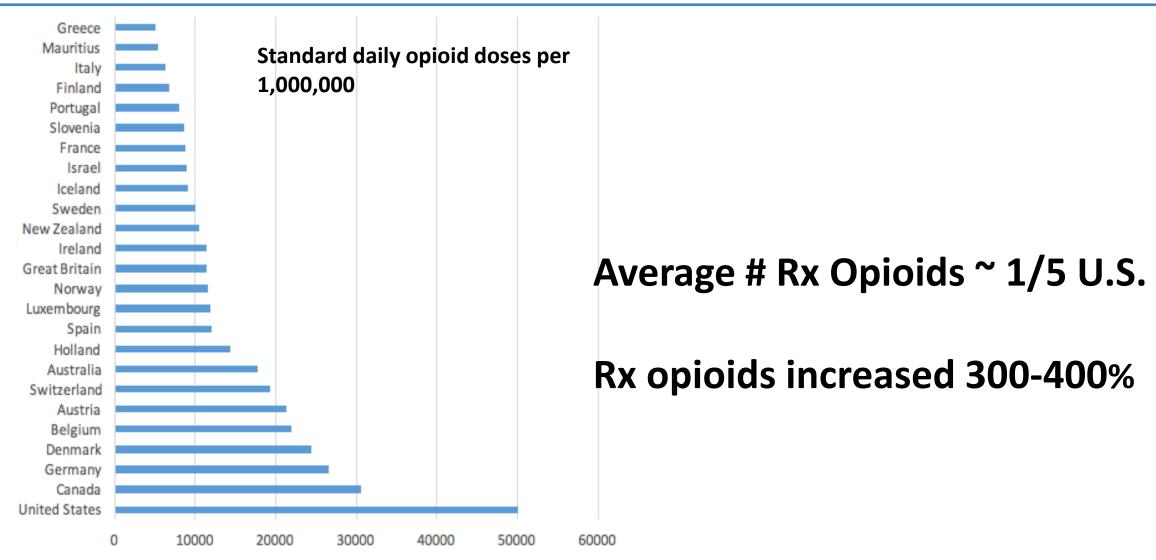
#### 2000

# Joint Commission others, pressure

- Pain assessment
- Pain treatment
- Patient satisfaction
- To accredit
- To reimburse

#### The U.S. Leads the World in Prescription Opioid Daily Doses

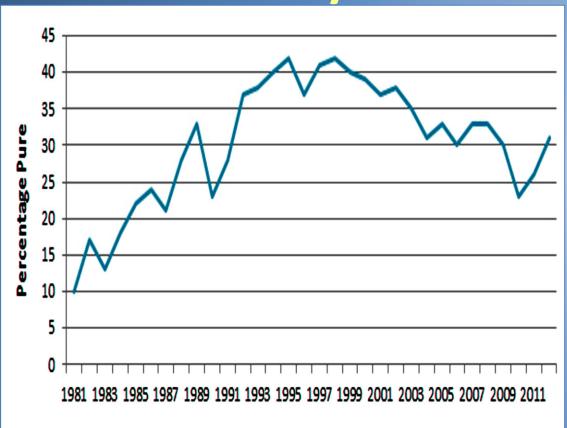
Yet, U.S. doesn't have more pain than European nations



Source: K. Humphreys, <a href="https://www.thelancet.com">www.thelancet.com</a> 390: 437-439. July 29, 2017. Adapted from United Nations International Narcotics Control Board. 2016 Narcotic drugs: estimated world requirements for 2017; statistics for 2015. Vienna, Austria

### Conversion from Rx Opioids to Heroin





#### Price



**Source: Institute for Defense analysis and ONDCP** 

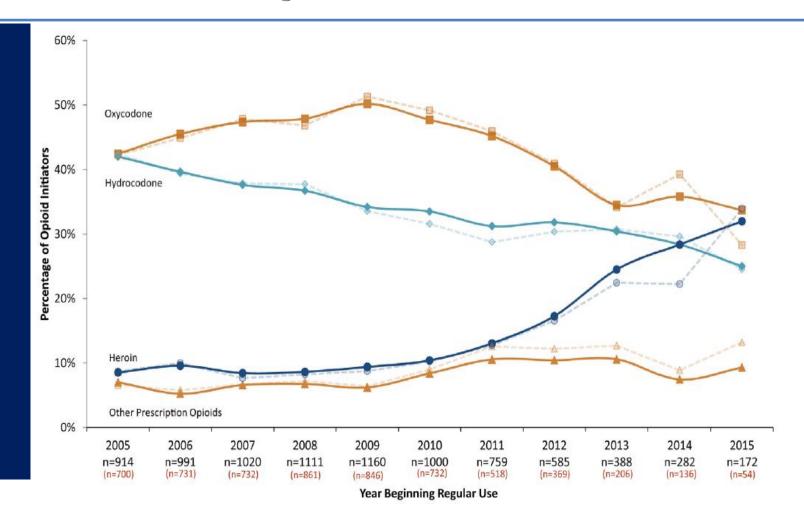
### Conversion from Rx Opioids to Heroin

### Heroin, Fentanyl Changed Landscape

% entering treatment for heroin addiction that initiated with prescription opioids

2005: 91.3%

2015: 68.4%



Cicero TJ, Kasper ZA, Ellis MS. Increased use of heroin as an initiating opioid of abuse: Further considerations and policy implications. Addict Behav. 2018 Dec;87:267-271.

### Why Fentanyl? Incentives Users, Suppliers

#### **Users**

- Reduced costs?
- Heroin, Rx shortages?
- User preferences?
- Easy buy via DarkWeb?

### **Suppliers**

Drug

Cost/1 kg

Drug Trafficking Org
Revenue 1 kg

Heroin

(86% pure)

\$5,000-\$7,000 From Columbia \$80,000

**Fentanyl** 

(99% pure)

\$3,300-\$5,000

**From China** 

\$1,280,000-\$1,920,000



### THE PRESIDENT'S COMMISSION ON COMBATING DRUG ADDICTION AND THE OPIOID CRISIS

#### **Roster of Commissioners**

Governor Chris Christie, Chairman Governor Charlie Baker Governor Roy Cooper Congressman Patrick J. Kennedy Professor Bertha Madras, Ph.D. Florida Attorney General Pam Bondi

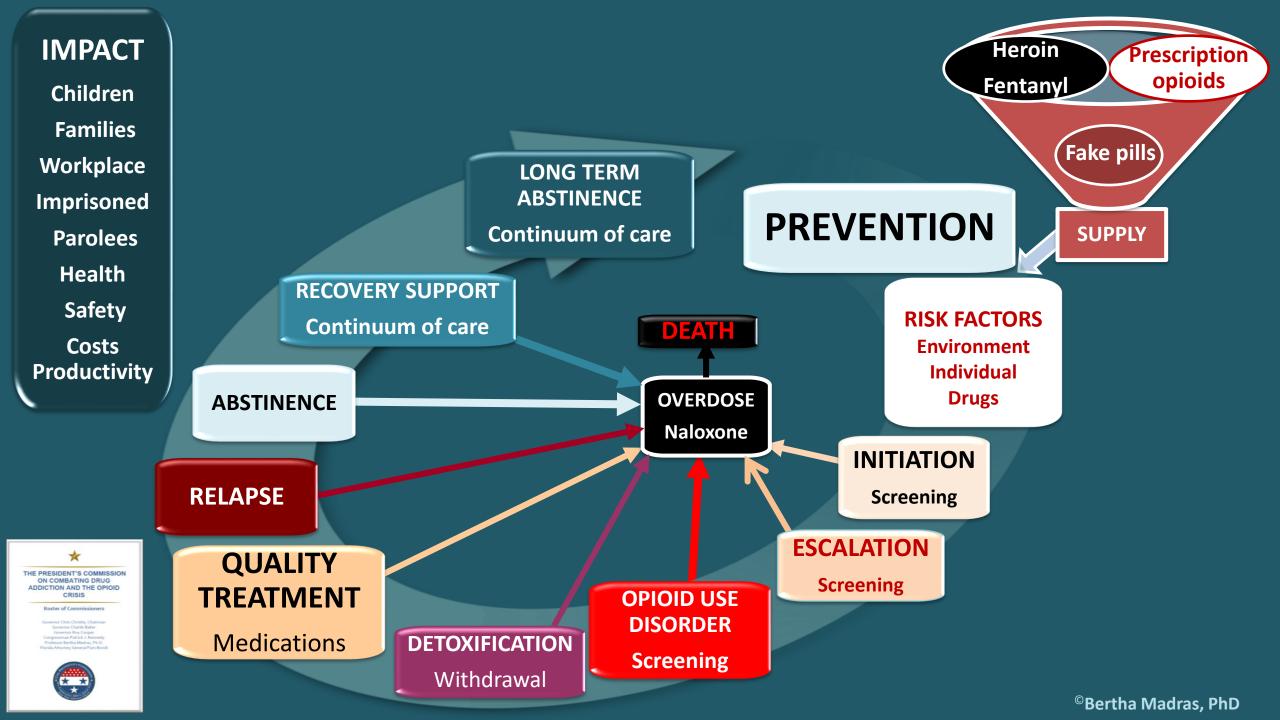


Governor Chris Christie, Chair (NJ)
Governor Charlie Baker (MA)
Governor Roy Cooper (NC)
Congressman Patrick Kennedy (NJ)
Professor Bertha Madras (MA)
Attorney General Pam Bondi (FL)

#### **Commission Report**

June-Nov 2017
Signing of Bipartisan Legislation
"The SUPPORT for Patients and
Communities Act"
Oct 2018





#### Prevention

Media Campaign

- Opioids.thetruth.com
- https://www.youtube.com/watch?v=dbskR wUudzc

Screening
Youth Assessment

- Screening in office-based practices; referral
- Screening in schools; referral to treatment

Reduce supplies

Rx opioids, fentanyl supplies

## **Expand Treatment**

- Screening: substance use, mental health (quality measure)
- Increase addiction training
- Increase treatment capacity
- Increase availability of medications
- Expand rapidly use of Telemedicine
- Recovery support services
- Treatment within 24-48 hours after rescue



- Comply with parity laws
- Quality standards
- Quality outcome measures
- Reimburse true costs
- Quality Recovery Homes
- Recovery coach training
- Medical education

### Improve Government Response

**Expand Good Samaritan Laws** 

Reduce Supply at All Sources

Fill Narcan Rescue, Reporting Gap

**Increase MAT in Criminal Justice** 

More Federal Drug Courts

Issue Uniform Block Grants

Fill Treatment, Recovery Gaps Help families, pregnant women, children, college students, workers, prisoners

#### **Prevention:**

Reduce Supply Heroin Fentanyl Increase sentencing penalties for fentanyl trafficking

Regulate pill presses

**Target counterfeit pill producers** 

Technology for border protection; postal service

**Implement STOP Act** 

**Prevent diversion of Rx opioids** 

### Use Big Data Analytics to Support Solutions

Prevention attitudes and messaging

Supply of all sources - resources

MAT availability and gaps

**Real-time overdoses and deaths** 

Prescribing feedback to physicians

Narcan rescue gaps

Treatment slots, insurance gaps, compliance

### Research and Development

**Better medications to treat OUD** 

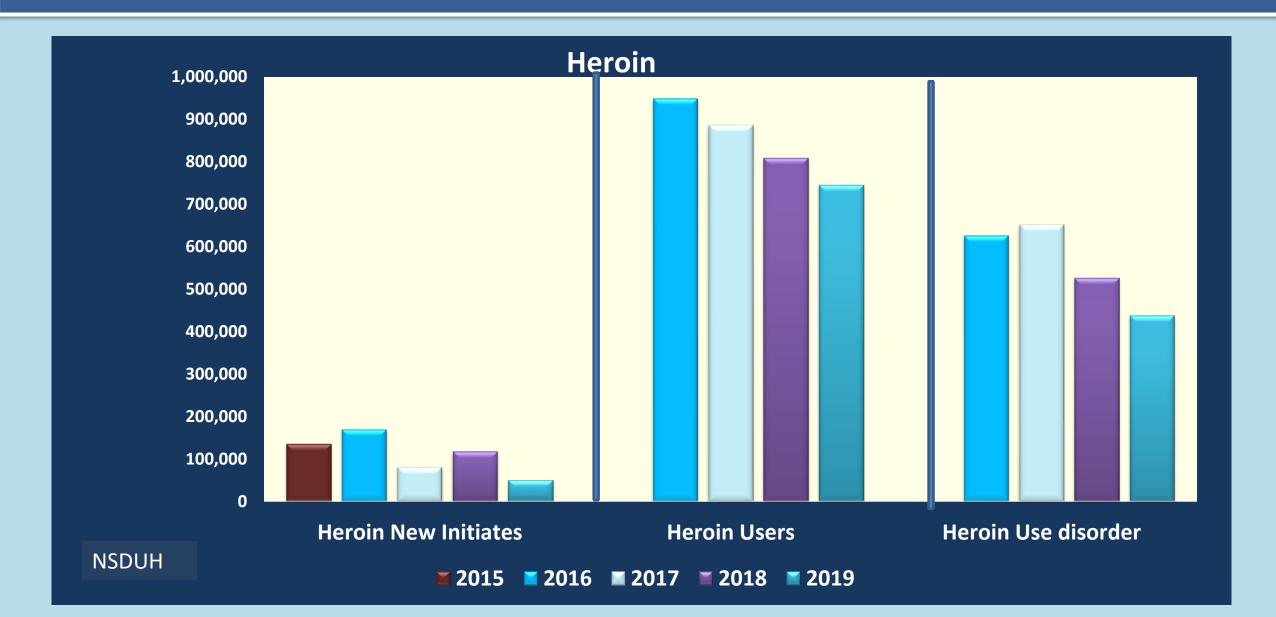
Safer, non-addictive alternatives to opioids

Improved rescue drugs for high potency agonists

Electronic Devices for pain, treatment, rescue

RTC Improve delivery of interventions, PDMP, MAT

### Some Optimism: Heroin and Rx Opioids

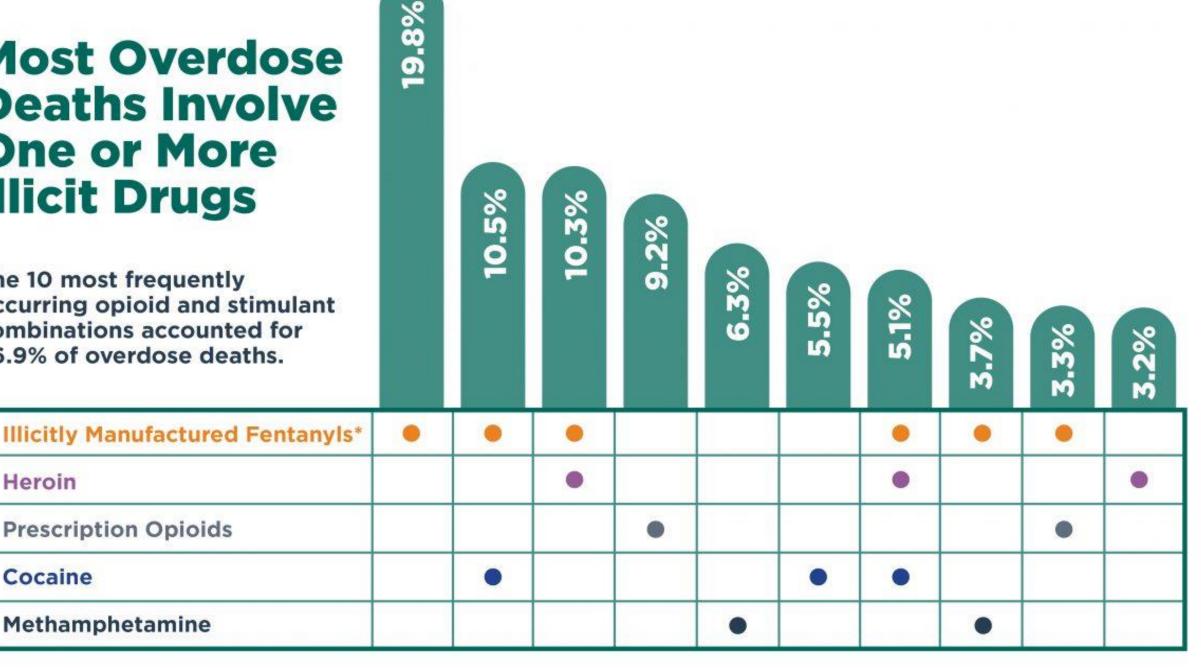


### **Most Overdose Deaths Involve One or More Illicit Drugs**

The 10 most frequently occurring opioid and stimulant combinations accounted for 76.9% of overdose deaths.

Heroin

Cocaine



## Some Progress

- 37.1% Decrease in opioid prescriptions: 244.5M (2014) -153.7M (2019)
- Naloxone prescriptions 2019: 1,000,000; increase from 6,588 (2015)

100,000's physicians accessing CME courses: SUD, pain management

 Buprenorphine certification rose 50,000: >85,000+ physicians and HCP certified for Rx buprenorphine in-office since 2017

I1. QVIA Xponent market research services. ©IQVIA 2020. All rights reserved. 2 Emergent Biosolutions; Xponent IQVIA. Data received June 8, 2020. On file with author. 3 AMA Fact sheet: Physicians' and health care professionals' use of state PDMPs increases 64.4 percent from 2018 to 2019; 739 million queries in 2019. The state-by-state data is available at https://endoverdose-epidemic.org/wp-content/uploads/2020/07/AMA-Fact-Sheet-PDMP-use-and-registrationincrease-2014-2019-FINAL.pdf 4 www.samhsa.gov/medication-assisted-treatment/training-materials-resources/practitioner-programdata, accessed June 30, 2020. 5 Suffoletto B, Zeigler A. Risk and protective factors for repeated overdose after opioid overdose survival. Drug and Alcohol Depend. 2020;209:107890. 6 American Board of Pain Medicine, "Second Annual Survey of Pain Medicine Specialists Highlights Continued Plight of Patients with Pain, And Barriers To Providing Multidisciplinary, Non-Opioid Care." Available at http://abpm.org/component/content/article/296 7 Id.

### **Barriers to Treatment, Transitions**

- ☐ Provider
- Institutional
- **☐** Regulatory
- **☐** Financial
- ☐ Transitions of Care

Improving Access to Evidence-Based Medical Treatment for Opioid Use Disorder: Strategies to Address Key Barriers within the Treatment System Bertha K. Madras, PhD, McLean Hospital and Harvard Medical School; N. Jia Ahmad, MPH, Johns Hopkins Bloomberg School of Public Health; Jenny Wen, MPH, Johns Hopkins University School of Medicine; Joshua Sharfstein, MD, Johns Hopkins Bloomberg School of Public Health; and the Prevention, Treatment, and Recovery Working Group of the Action Collaborative on Countering the U.S. Opioid Epidemic April 27, 2020, NATIONAL ACADEMY OF MEDICNE

### Along Came Covid-19: What Testing Industry Shows

#### Drug testing rates have decreased (facilities closed)

• 70% decline

#### Drug positivity rates have risen

• fentanyl, heroin, nonprescribed opioids

#### Fentanyl positives with other drugs has risen

• amphetamines, benzodiazepines, cocaine, opioids

#### Stay-at-home orders, reduced access to routine testing

may hide extent of crisis

### Health Risks of Covid-19 and Opioid Use Disorders

Inhalation: aerosolized respiratory fluid

Breathing: opioids, virus suppress breathing

Lung function: Smoking can compromise

Immunosuppress: Alcohol, other drugs

#### Social Risks of Covid-19 and Opioid Use Disorders SOCIAL LIFE **ENVIRONMENT OVERDOSE SUPPORT OFFICE-BASED SYSTEMS PURPOSE RESCUE TREATMENT CROWDING ISOLATION REDUCED REDUCED JOB LOSS LESS LIKELY** Homelessness **DEPRESSION Treatment** Prison Support

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### Weaknesses: Opioids in Criminal Justice System

- Opioid use detainees: >25% in state prisons or jails (old data)
- Overdose-related mortality risk: very high (130-fold) in first reentry weeks
- Complex solutions: mental, physical health comorbidities, infectious diseases

# National Association for Drug Court Professionals released guidance in 2019 encouraging drug courts to offer all three forms of medications

#### The American Opioid Epidemic in Special Populations: Five Examples

Carlos Blanco, MD, PhD, National Institute on Drug Abuse; Mir M. Ali, PhD, Office of the Assistant Secretary of Planning and Evaluation; Aaron Beswick, MSW, MPH, Health Resources and Services Administration, Federal Office of Rural Health Policy; Karen Drexler, MD, Veterans Affairs Administration; Cheri Hoffman, Office of the Assistant Secretary for Planning and Evaluation; Christopher M. Jones, PharmD, DrPH, Centers for Disease Control and Prevention; Tisha R. A. Wiley, PhD, National Institute on Drug Abuse; Allan Coukell, CivicaRx; and the Prevention, Treatment, and Recovery Working Group of the Action Collaborative on Countering the U.S. Opioid Epidemic NATIONAL ACADEMY OF MEDICINE October 26, 2020

### To Improve Care for Justice-involved People

- Treatment needs: identify, connect to care prior to, during, after incarceration
- Drug courts: reduced drug-related recidivism ~50% to 37% 3y post-court
- Success: depends on case, staff quality, MAT, providers
- Gaps: significant gaps in providing treatment via drug courts
- Expand: drug court models, medications and social services
- Develop: Standards of consistency, quality drug courts

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## Opioid Crisis: Lessons Learned

### Government regulations failed to protect public

- Vast sums of money spent to promote
- Promoted for many medical conditions
- Promoted as safe and not addictive
- No scientific evidence for chronic use
- Advocates received attention, not opponents
- Addiction, diversion were not anticipated
- High potency drugs flooded nation
- Medical education lagged far behind
- Pandemic creates novel challenges