

A Worsening Drug Overdose Crisis:

Behind the Numbers

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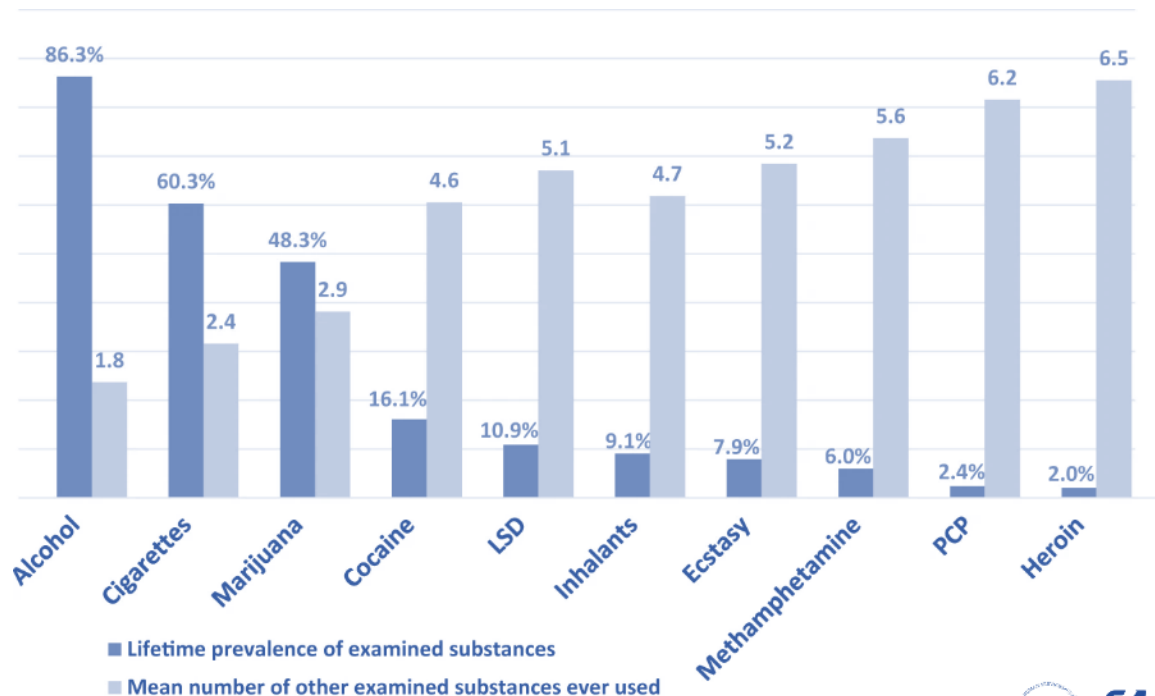
April 14, 2021



Lifetime Prevalence of Substance Use and Mean Number of Other Substances Used - 2018

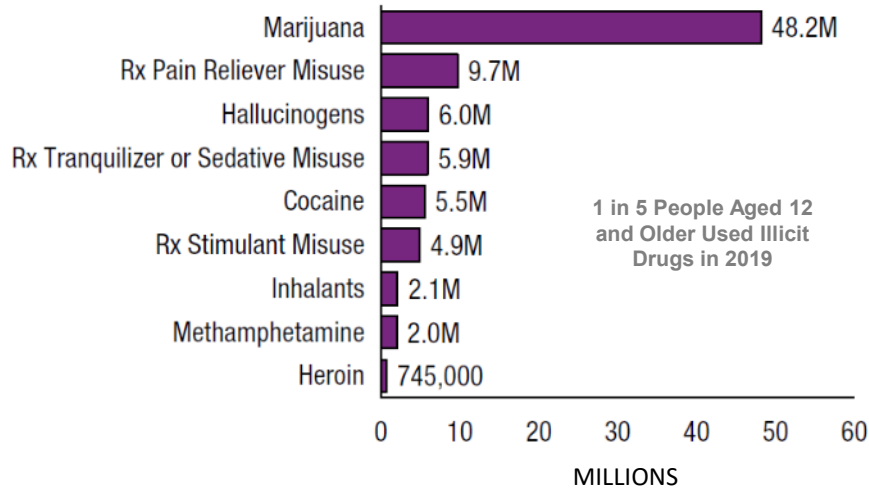
The more widely used a drug, the less likely users are to use other drugs

Less frequently consumed substances are rarely the first used and often added later in substance use trajectories



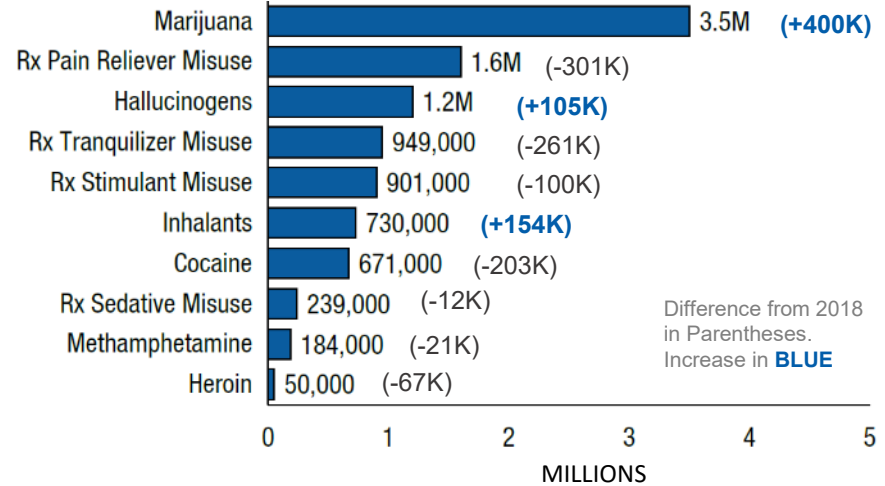
Drug Use Patterns in the United States - 2019

Past Year Illicit Drug Use



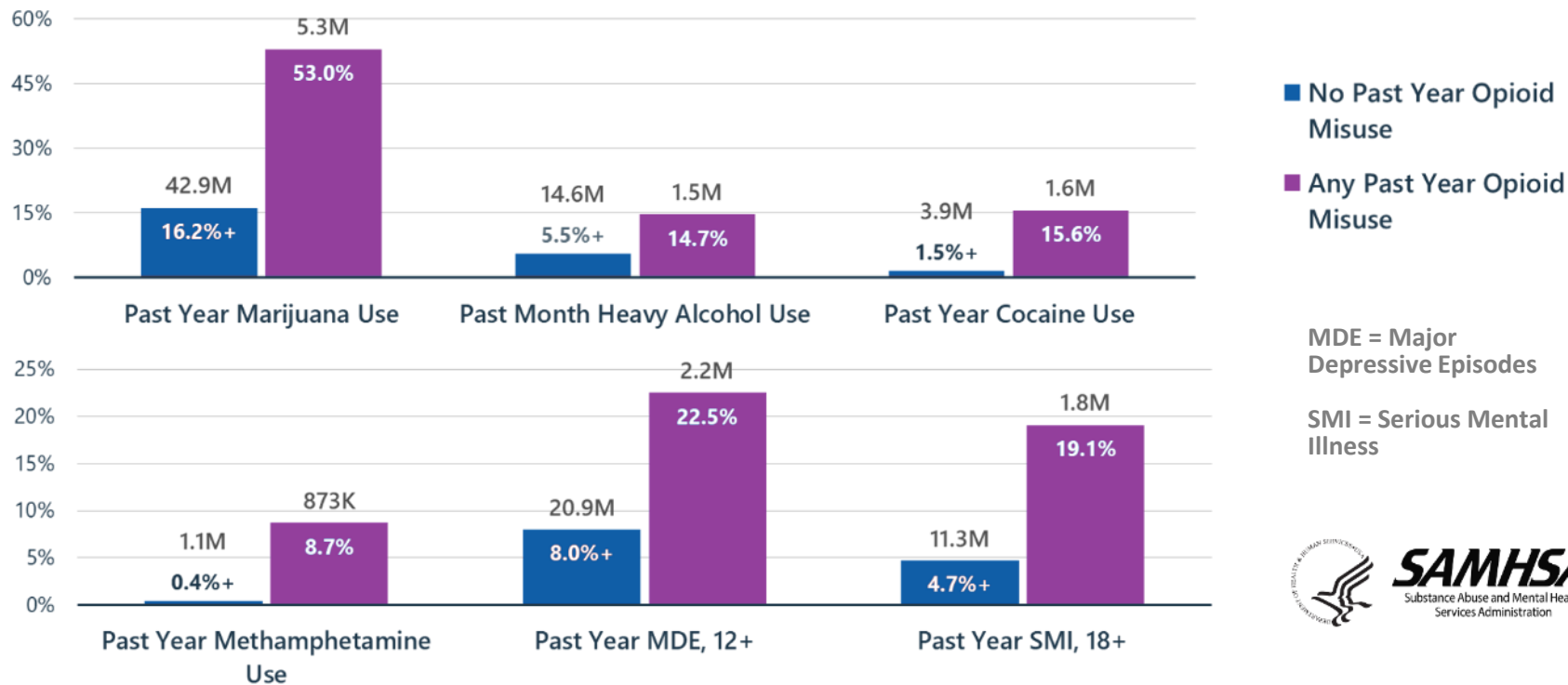
Almost 20 percent INCREASE in users – over 9.5 million more people – from 2015 alone

Past Year Initiates



The number of past year initiates of substances declined in many categories from 2018

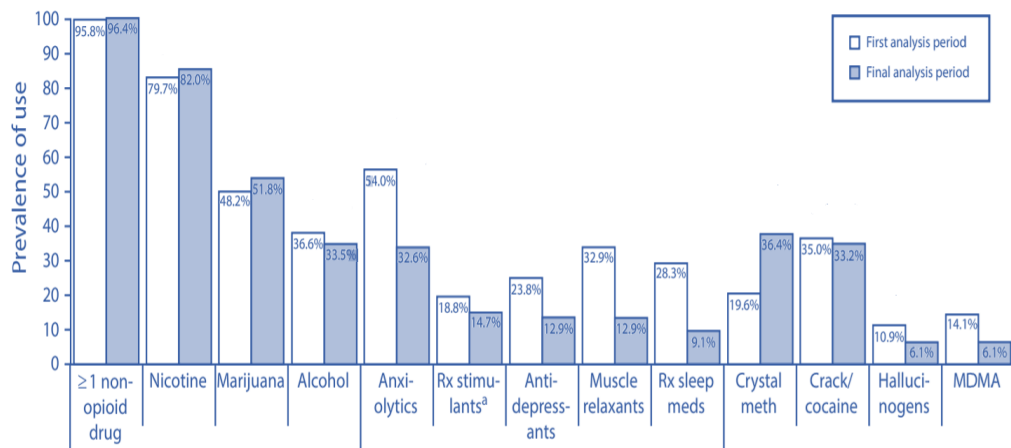
Co-Occurring Use of Opioids and Other Substances in 2019



SOURCE: National Survey on Drug Use and Health (NSDUH) - 2020

+ Difference between this estimate and the estimate for people with past year opioid misuse is statistically significant at the .05 level.

Changing pattern in co-occurring opioid and nonopioid drug use in the United States between 2011 and 2018



Prevalence rate of past month non-opioid drug use

- Survey of past month co-use of prescription and illicit opioids and 12 nonopioid psychoactive drug classes in national sample of persons entering treatment of opioid use disorder.
- Past-month illicit opioid use increased from 45% in 2011 to 70% in 2018.
- Use of prescription opioids alone dropped from 55% to 30%.
- Past-month use of at least 1 nonopioid drug occurred in nearly all participants (> 90%), with significant increases in methamphetamine (+85%)

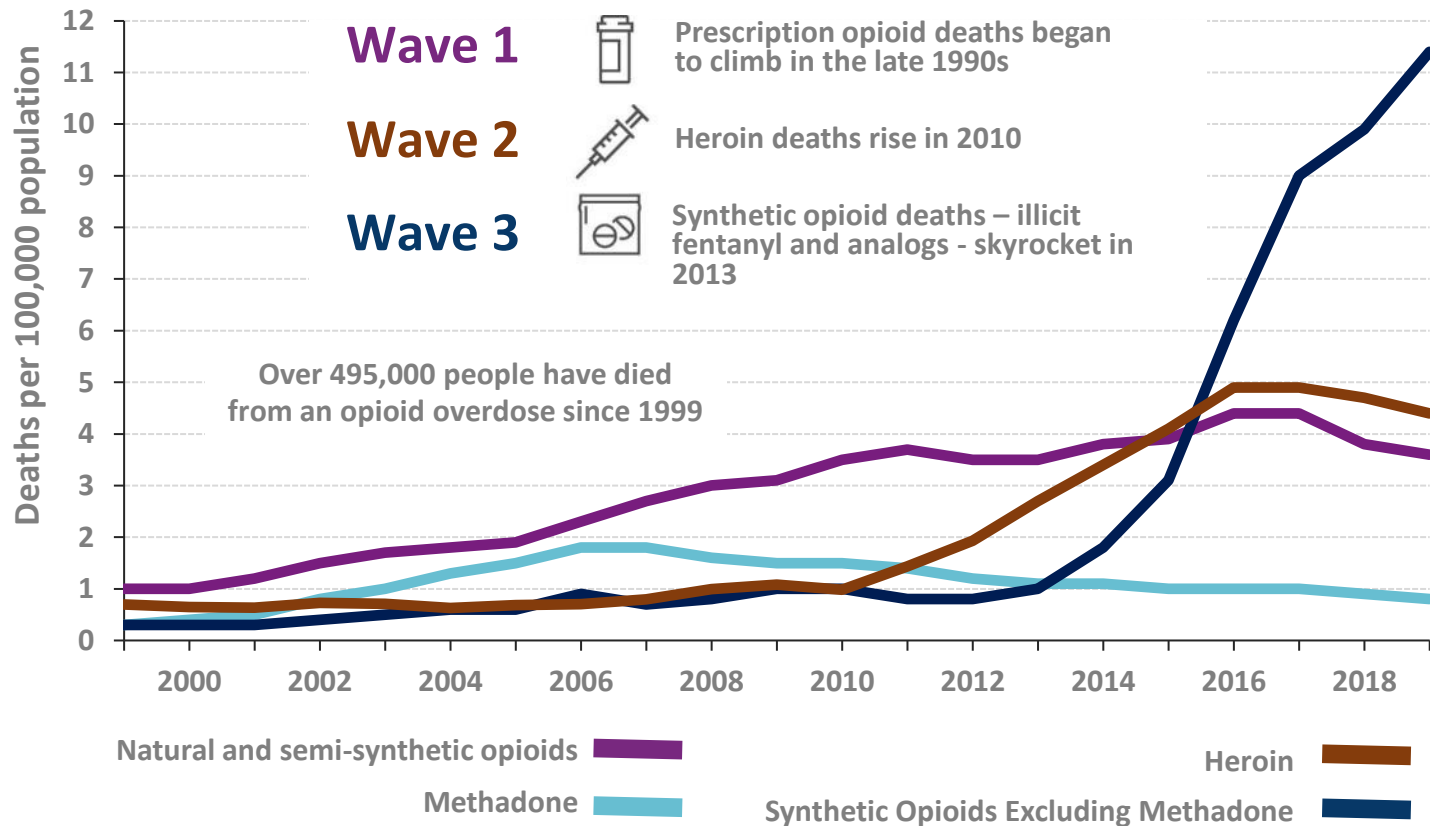
Prevalence of specific substance use disorders (SUDs) among VA patients with an opioid use disorder (OUD) diagnosis in 2017

	Among OUD + 1 other SUD (<i>n</i> = 15 075) % (<i>n</i>)	Among OUD + \geq 2 other SUDs (<i>n</i> = 23 588) % (<i>n</i>)	Among total OUD cohort (<i>N</i> = 65 741)
Alcohol use disorder	50.0% (7531)	83.1% (19 592)	41.3% (27 123)
Cannabis use disorder	13.1% (1968)	54.4% (12 728)	22.4% (14 696)
Cocaine/stimulant use disorder	18.7% (2823)	71.7% (16 915)	30.0% (19 738)
Sedative use disorder	6.7% (1010)	23.4% (5509)	9.9% (6519)
Other substance use disorder	11.6% (1743)	47.6% (11 234)	19.7% (12 977)

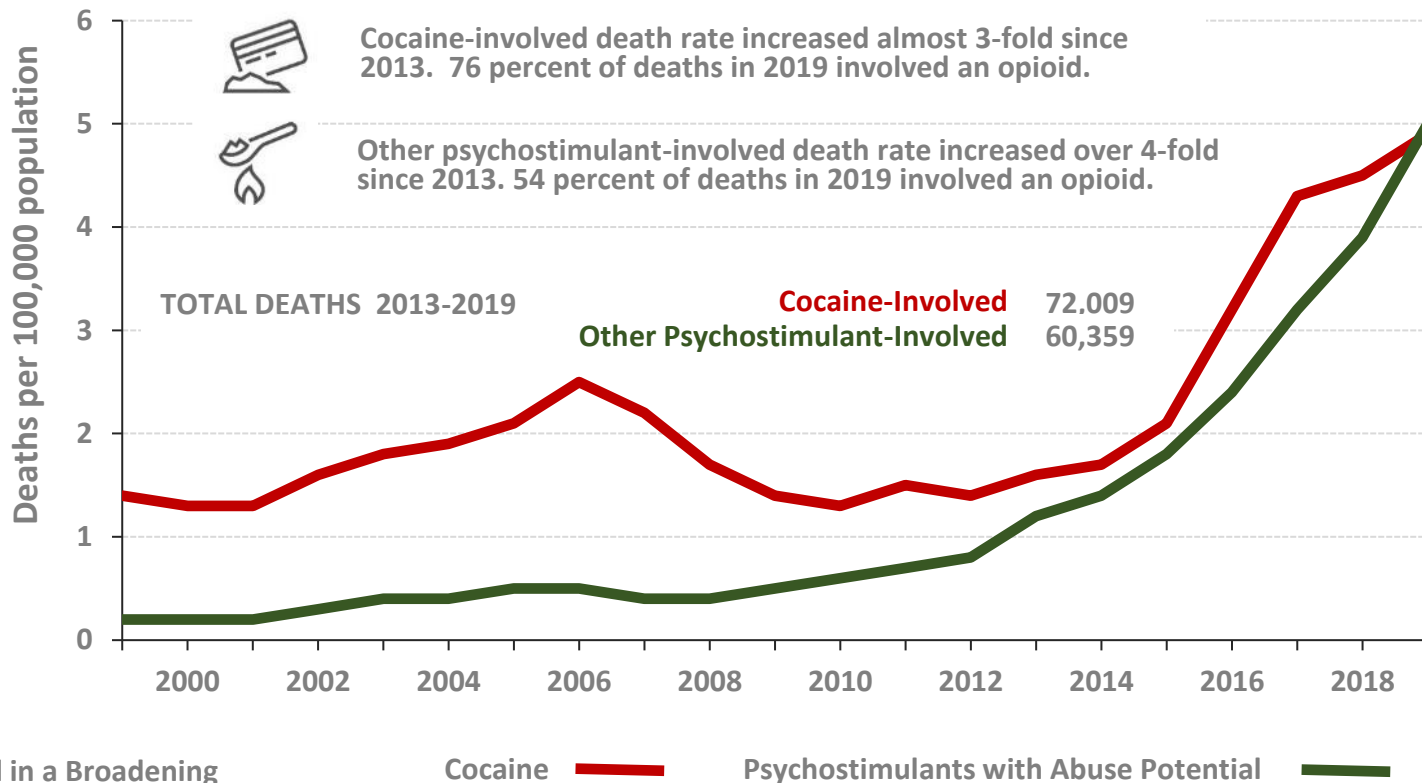


Source: Lin, Bohnert, Blow, Gordon, Ignacio, Kim, & Ilgen (2021). *Addiction*, 116(1), 96-104.

Waves of the U.S. Opioid Overdose Epidemic



Drug Overdose Deaths Involving Cocaine and Psychostimulants with Abuse Potential in the US are Increasing Too



Opioid Deaths Nested in a Broadening Drug Overdose Epidemic.

Number of opioid overdose deaths by opioid type in 25 states from January to June 2018

Characteristic	Opioid deaths with information on involved opioids, Jan–Jun 2018, no. (%)
Total opioid overdose deaths	13,415 (100)
Opioid drug class or drug involved in opioid deaths	
Any prescription opioid	3,853 (28.7)
Any illicit opioid	11,124 (82.9)
Any suspected IMF	9,105 (67.9)
Any suspected heroin	5,281 (39.4)
Any fentanyl analog	2,678 (20.0)
Any U-series	63 (0.5)
Common mutually exclusive combinations of opioids involved in opioid deaths	
Opioid combinations co-involving IMF	
IMF with no other illicit opioids	4,320 (32.2)
IMF with heroin	2,566 (19.1)
IMF with fentanyl analogs	1,172 (8.7)
IMF with heroin and fentanyl analogs	1,008 (7.5)
Illicit opioid combinations not co-involving IMF	
Heroin with no other illicit opioid	1,534 (11.4)
Fentanyl analogs with no other illicit opioid	312 (2.3)
Prescription opioid with no illicit opioid	2,291 (17.1)
All other combinations of opioids	212 (1.6)

Note: IMF is illicitly manufactured fentanyl. Refer to source for other footnotes

Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

August 30, 2019

Weekly / Vol. 68 / No. 34



**Polysubstance overdose epidemic
driven by fentanyl**

Source: Gladden, O'Donnell, Mattson, Seth (2019). MMWR 68 (34), 737



Majority of Opioid Deaths Involve Other Non-Opioid Drugs

63%
**of all opioid deaths
also involved other drugs**

34% COCAINE



33% BENZODIAZEPINES



12% METHAMPHETAMINE

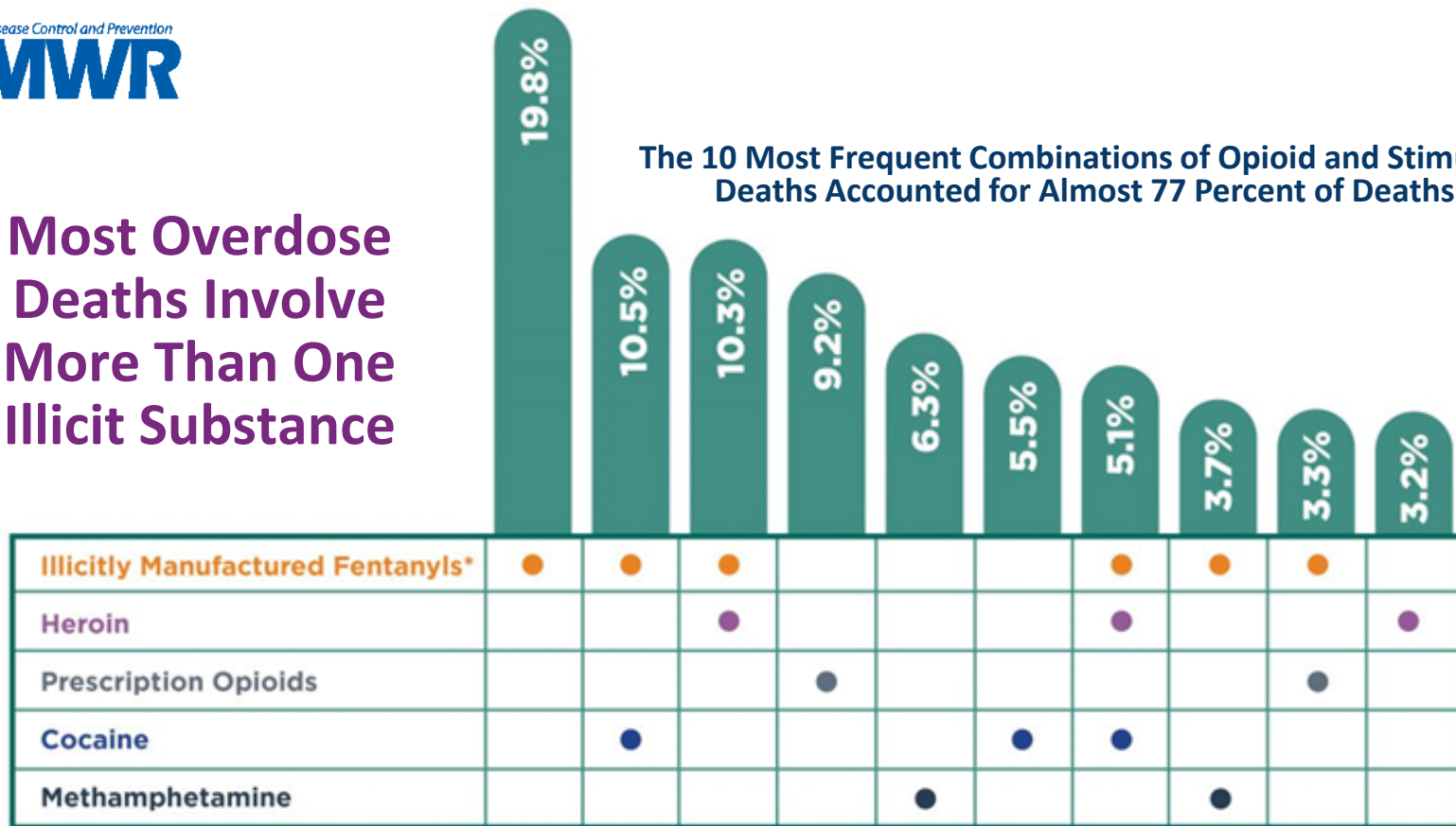


CDC's State Unintentional Drug Overdose Reporting System (SUDORS), 25 states, January–June 2018.

MMWR [cdc.gov](https://www.cdc.gov)

Most Overdose Deaths Involve More Than One Illicit Substance

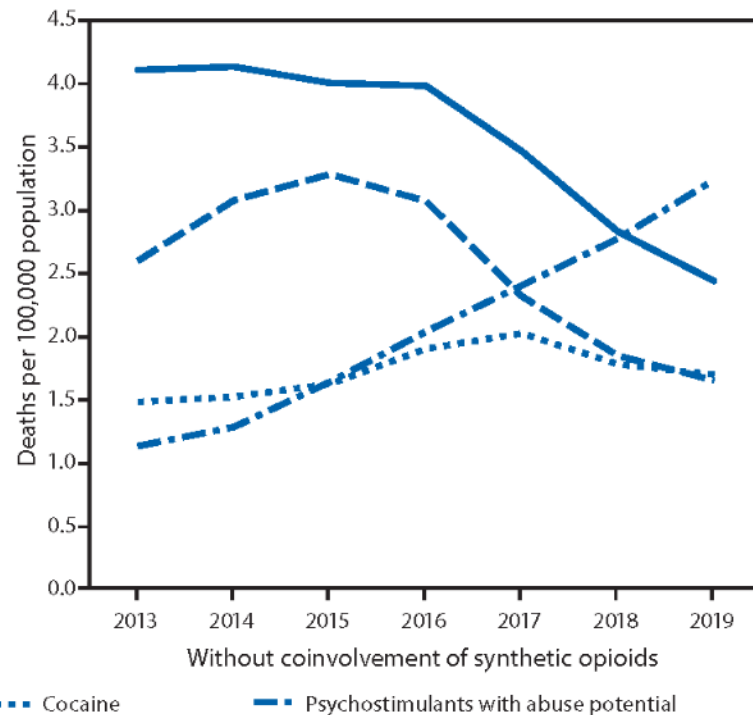
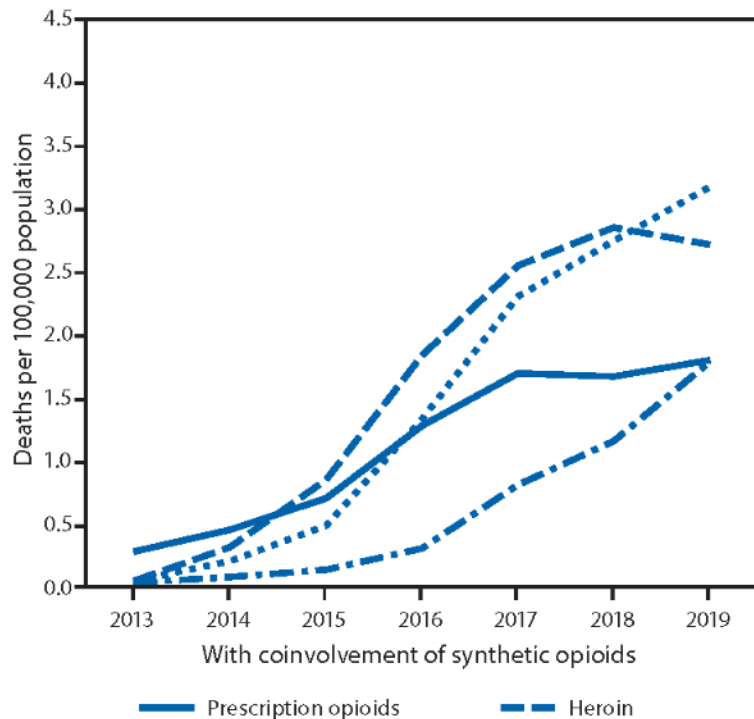
The 10 Most Frequent Combinations of Opioid and Stimulant Deaths Accounted for Almost 77 Percent of Deaths



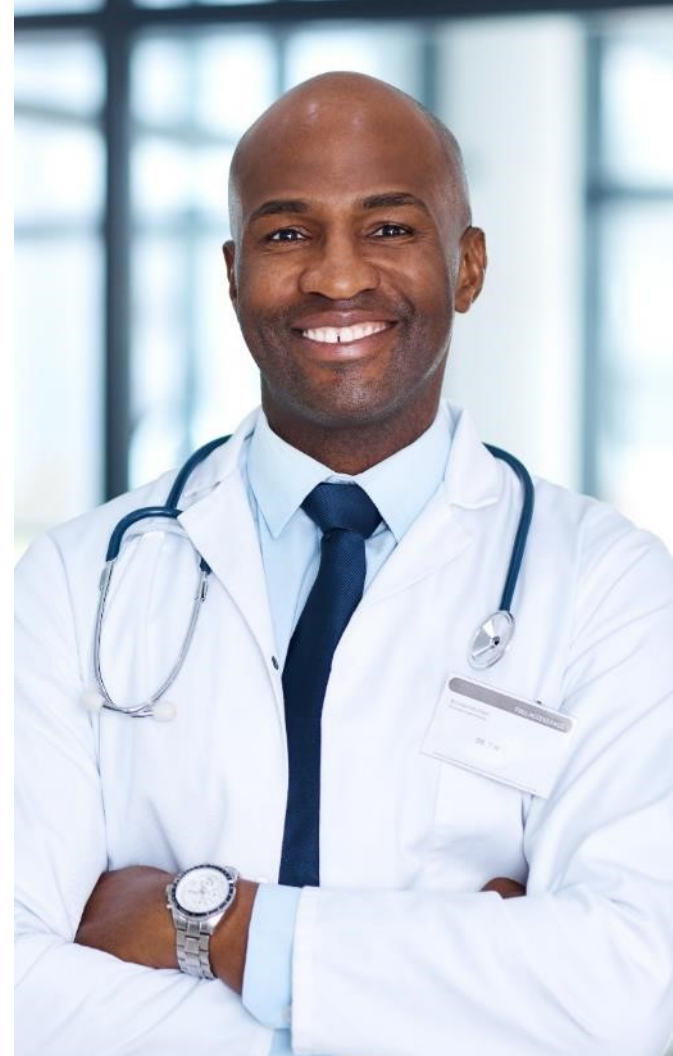
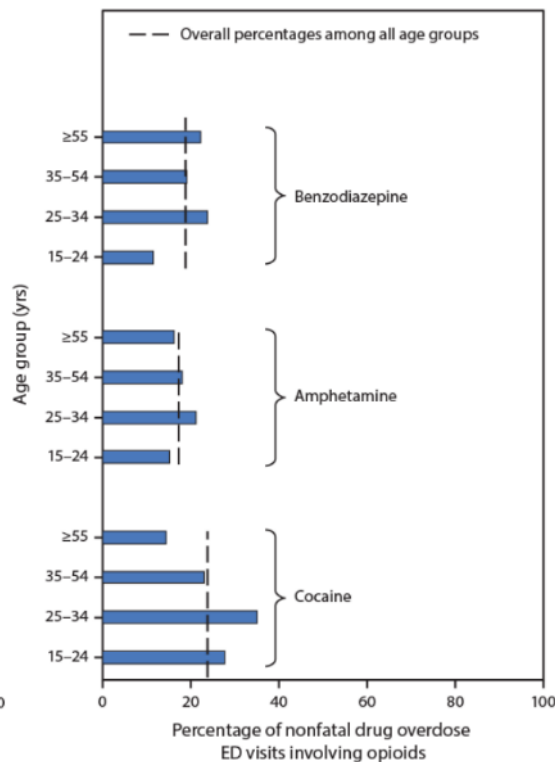
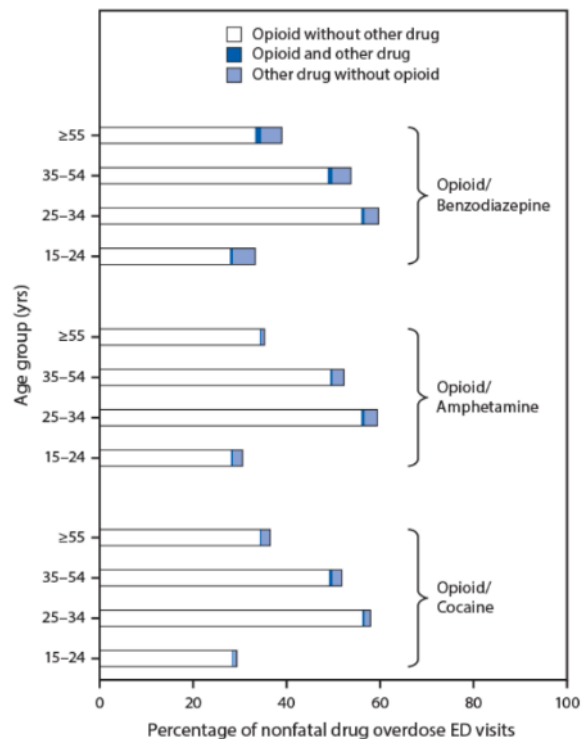
* IMFs include fentanyl and fentanyl analogs

More than 3 in 5 people who died from drug overdose had an identified opportunity for linkage to care or life-saving actions.

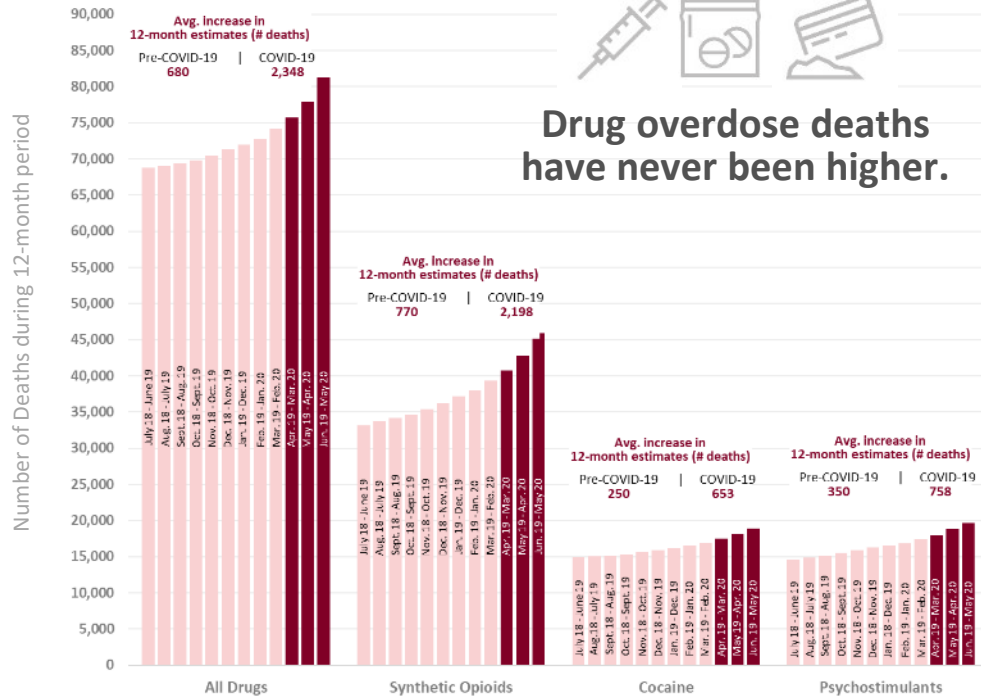
A growing proportion of ALL drug overdose deaths in the U.S. involve synthetic opioids since 2013



Nonfatal Drug and Polydrug Overdoses Treated in Emergency Departments — 29 States, 2018–2019



The Drug Overdose Epidemic Appears to Have Worsened During COVID-19 Pandemic – By Drug Class

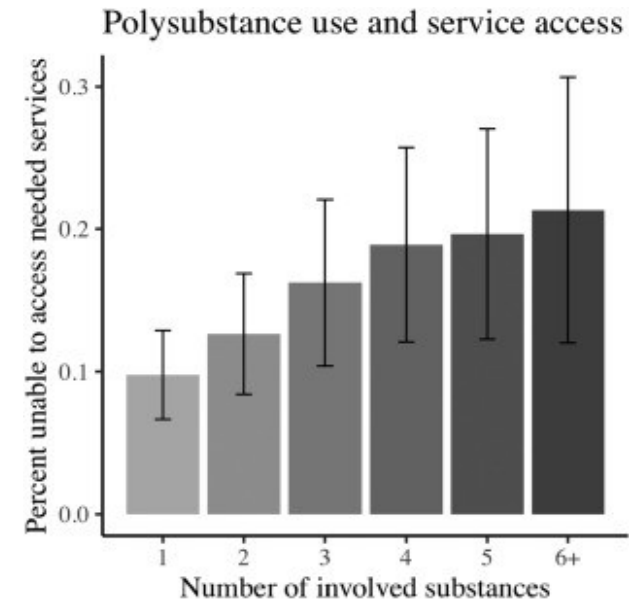


December 17, 2020

- Approximately 81,230 drug overdose deaths occurred in the United States in the 12-months ending in May 2020
- Increase began in 2019 and appears to have accelerated during the COVID-19 pandemic.
- Synthetic opioids are the primary driver - 12-month count of these deaths increased 38.4% ending in May 2020.
- Overdose deaths involving cocaine (26.5%) and psychostimulants (34.8%) also increased in the same period



Persons with poly-Substance Use Disorders report more inability accessing treatments during COVID-19

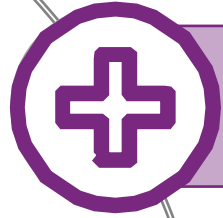




Key Take-Aways about Polysubstance Use in the U.S.

- Polysubstance use is not new and is common among persons struggling with use disorders.
- The pattern of substances used is changing.
- Some polysubstance use is occurring without user's knowledge of drug contamination.
- The proliferation of synthetic drugs - especially illicitly manufactured fentanyl and fentanyl analog - greatly elevates the overdose risk of polysubstance use.
- Persons struggling with multiple substance use disorders face greater challenges accessing treatment and recovery services – especially during COVID-19 pandemic.

Where do we go from here?



Expand the provision and use of naloxone and overdose prevention education



Expand access to and provision of treatment for substance use disorders



Intervene early with individuals at the highest risk for overdose



Improve detection of overdose outbreaks due to fentanyl, novel psychoactive substances (e.g., fentanyl analogs), or other drugs to facilitate an effective response

Learn from
the Past

Think of
the Future

QUESTIONS



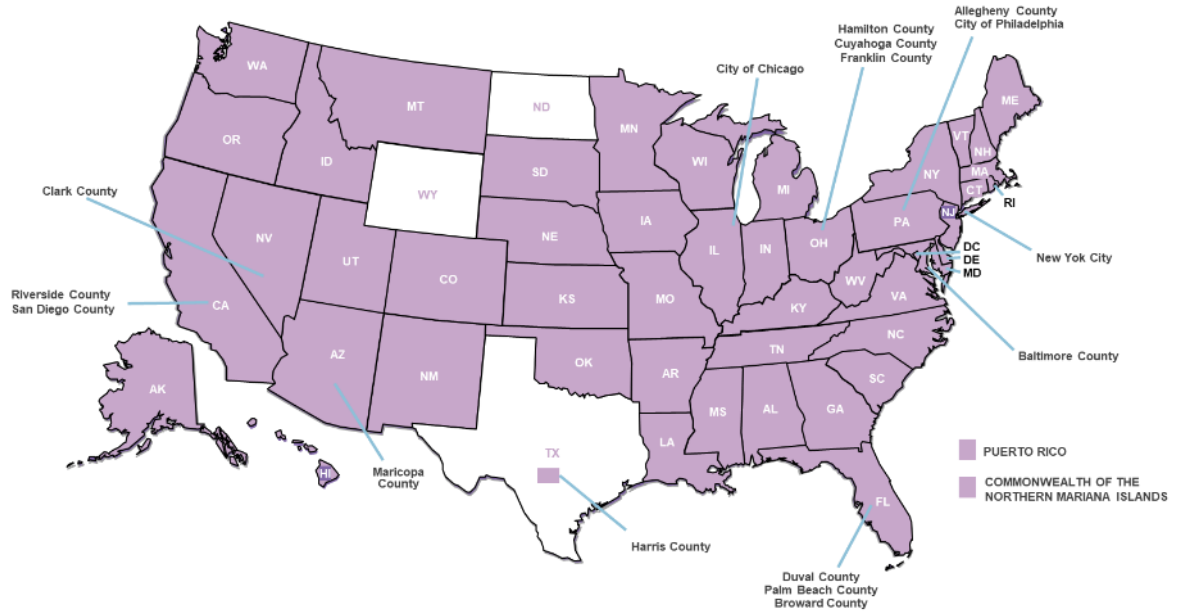
Back-Up Slides





Overdose Data to Action (OD2A)

- \$300M per year for 3 years
- Seamless integration of data and prevention programs
- 66 jurisdictions funded including 47 states, DC, 2 territories, and 16 hard hit cities and counties
- At least twenty percent of state funds go to the local level as well to spur innovation and multisector collaboration.



Surveillance



PDMPs



Health System



Public Safety



Linkage to Care



Empower
Consumers



Local Response



DOSE

Drug Overdose Surveillance and Epidemiology System

- **Faster Data:** Incentivize data submissions to as rapidly as every 2 weeks.
- **Greater Coverage:** ED data with greater coverage (>75% of visits).
- **Expanded Drugs:** Suspected all drug, opioid, heroin, stimulant overdoses required.
- **More Comprehensive Sources:** Leverage both syndromic data (24-48 hours) and hospital billing/claims data (3-4 weeks). Syndromic data from the National Syndromic Surveillance Program (NSSP) or local syndromic system.

**OD2A
Morbidity**

Getting more timely, comprehensive, localized, and actionable data



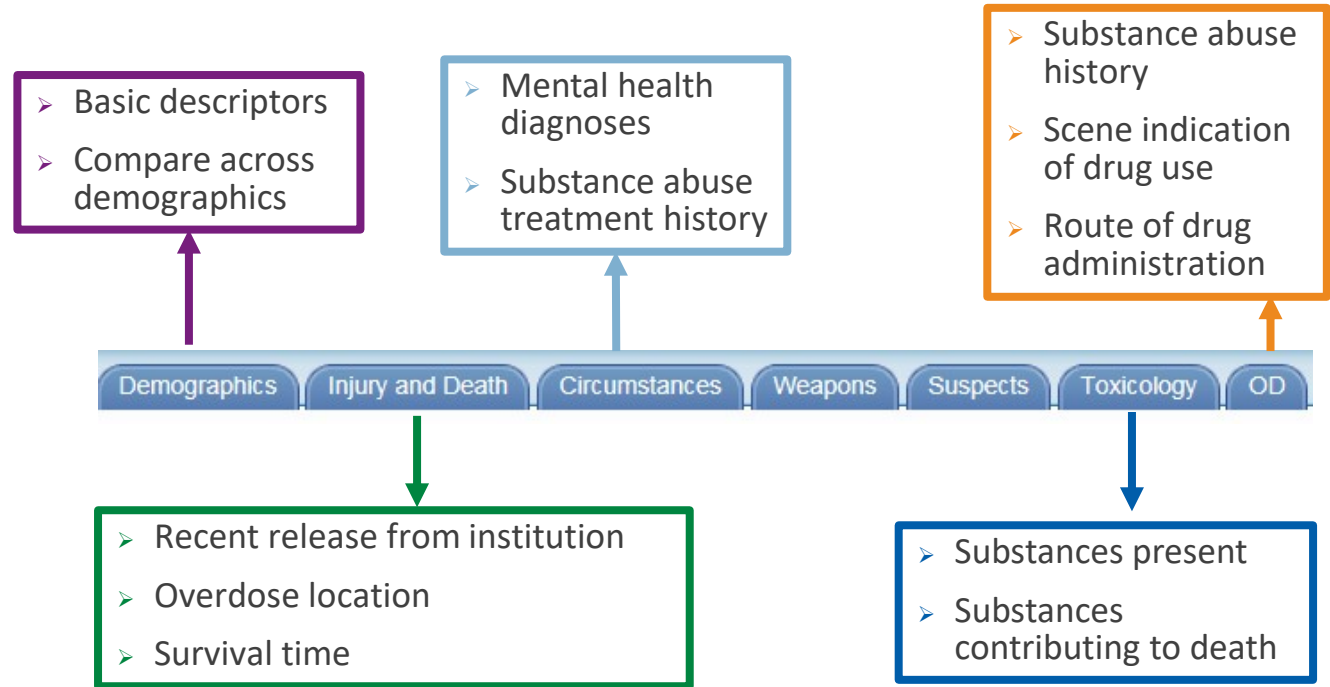
SUDORS

State Unintentional Drug Overdose Reporting System

- **More Comprehensive:** Detailed information about deaths and their circumstances from death certificates, medical examiner/coroner reports, & toxicology results.
- **Expanded Drugs:** All drug overdose deaths. Not just opioid involved.
- **Faster Data:** Incentivize data submissions to as rapidly as 6-11 months after death.
- **Increased Capacity:** More funding to ME/Cs
- **Early Signal:** Preliminary counts of opioid-involved deaths from clinical and scene evidence one month after death (OPTIONAL)

**OD2A
Mortality**

More detailed data informs future prevention activities



**OD2A
Mortality**

Getting more timely, comprehensive, localized, and actionable data

CDC supports innovation in local surveillance

- **Funding and flexibility for state and local public health departments to:**
 - Address key local surveillance needs
 - Provide insight on critical CDC data gaps
- **66 recipients propose >175 surveillance projects**
 - Vast majority of recipients' fund ≥ 2 projects with \$400,000
 - Report preliminary aggregate data to CDC by summer 2021

7 CDC priorities

- 1) Surveillance of linkage to care
- 2) Surveillance of persons using and misusing opioids
- 3) Track public health risk of illicit opioid drug supply
- 4) Link overdose data form different sources within the same jurisdiction
- 5) Link PDMP data for different sources within the same jurisdiction
- 6) Innovative drug overdose morbidity/mortality data
- 7) Other critical local surveillance

**OD2A
Innovative**

Getting more timely, comprehensive, localized, and actionable data

Leveraging Other Investments

- Ensure labs able to test for as many fentanyl analogs in current use as possible.
- Provide accurate measurement of known fentanyl analogs that allows for comparability across labs.
- Increase lab throughput given demand.
- Readily add new analogs to testing protocols/methods as they appear in the US.

Opioid Certified Reference Material (CRM) Kit

- Manufactured and distributed by [Cerilliant Corporation](#)
- Includes 1 milligram each of 22 opioids and their matched, stable isotopes (carbon-13; nitrogen-15)
- Addresses 99.5% of DEA fentanyl/fentanyl-related cases in the DEA 2018 Q1 Report
- Improves confirmation of mass spectrometry methods analysis
- Includes unprecedented isotopically-labeled internal standards

Fentanyl Analog Screening (FAS) Kit

- Manufactured and distributed by [Cayman Chemical](#)
- Includes 200 micrograms each of 212 synthetic opioid analytical reference materials, including 190 fentanyl analogs
- Provides largest collection of available fentanyl analog reference materials
- Improves immunoassay and mass spectrometry screening methods
- Includes structural variability for fentanyl analog cross-reactivity and method validation