

The Evolving Opioid Epidemic: Observing Changes in the Opioid Crisis through State-level Data

September 4, 2019 – 11:00 AM CDT

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Technical Items

- For those dialing in: Phones automatically muted
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Problems:

- Call Readytalk's help line: (800) 843-9166
- Ask for help using the chat feature

Download the slides at https://www.shadac.org/publications/evolving-opioid-epidemic-observing-changes-opioid-crisis-through-state-level-data

Webinar archive will be posted on SHADAC's website

E-mail notice will be sent to participants



Presenters



Robert Hest, MPP SHADAC Research Fellow



Colin Planalp, MPASHADAC Senior Research Fellow

State Health Compare Demo

Robert Hest, MPP

Research Fellow, SHADAC

SHADAC's State Health Compare

45+ State-level measures of:

- Health Insurance Coverage
- Cost of Care
- Health Behaviors
- Outcomes
- Access to Care
- Utilization of Care
- Quality of Care
- Public Health
- Social and Economic Factors

Health Insurance Coverage	Access to Care
Coverage Type	Adults with No Personal Doctor
Workers in Establishments that Offer Coverage	No Trouble Finding Doctor
Cost of Care - Dollars	Told that Provider Accepts Insurance
People with High Medical Care Cost Burden	Had Usual Source of Medical Care
Average Annual ESI Premium	Utilization of Care
Average Annual ESI Deductible	Had General Doctor or Provider Visit
Employee Contributions to Premiums	Had Emergency Department Visit
High-Deductible Health Plans	
_	Spent the Night in a Hospital
Costs of Potentially Preventable Hospitalizations	Quality of Care
Medicaid Expenses as Percent of State Budget	Adult Cancer Screenings
Cost of Care - Behavior Changes	Adult Potentially Preventable Hospitalizations
Adults Who Forgo Needed Medical Care	Child Potentially Preventable Hospitalizations
Made Changes to Medical Drugs	Child Vaccinations
Trouble Paying Medical Bills	
	Public Health
Health Behaviors	Weight Assessment in Schools
Adult Binge Drinking	School Nutrition Standards Stronger than USDA
Adult Obesity	Schools Required to Provide Physical Activity
Adult Smoking	Smoke Free Campuses
High School Obesity	Cigarette Tax Rates
High School Smoking	Public Health Funding
High School Physical Activity	Social and Economic Factors
Sales of Opioid Painkillers	Children Considered to be Poor
Opioid-Related and Other Drug Poisoning Deaths	Unemployment Rate
0.1	• •
Outcomes Chronic Disease Prevalence	Income Inequality Unaffordable Rents
	Onarrordable Rents
Activities Limited due to Health Difficulty Cancer Incidence	
Health Status	
Premature Death	
Adult Unhealthy Days	



SHADAC's State Health Compare



Access Policy-relevant breakdowns available for most measures



Generate tables, maps, bar charts, trends, and state rankings

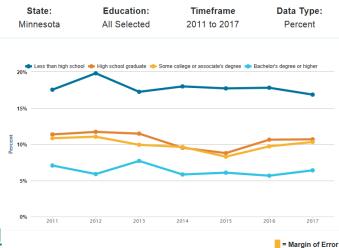


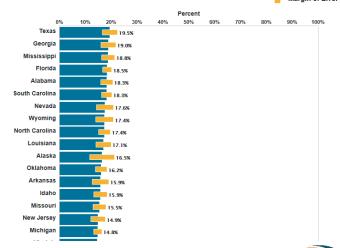
Margins of error in addition to point estimates allows for <u>significance testing</u>



Data can be downloaded in spreadsheet format

Percent of adults who could not get medical care when needed due to cost







16 Data Sources, including:

- American Community Survey (ACS)
- Current Population Survey (CPS)
- CDC WONDER Database
- U.S. Drug Enforcement Agency's Automated Reports and Consolidated Ordering System (ARCOS)
- Behavioral Risk Factor Surveillance System (BRFSS)
- National Health Interview Survey (NHIS)
- Other sources













Virtual Tour

statehealthcompare.shadac.org/

Observing Changes in the Opioid Crisis through State-level Data

Colin Planalp, MPA SHADAC Senior Research Fellow

History of the opioid crisis

2011 declaration of "epidemic"

 Increased attention since U.S. Centers for Disease Control and Prevention declared overdoses from prescription painkillers an "epidemic"

Efforts to intervene

States and federal governments have taken steps to intervene in the crisis

But the crisis has evolved...

- Growth in deaths from prescription opioids have slowed, but deaths from heroin and synthetic opioids have increased
- 80% of heroin users report earlier use of prescription opioids
- 75% report beginning with their own prescription, or that of a friend or family member

Background

What are opioids?

 A family of addictive drugs that act on the opioid receptors in pleasure centers of the brain

What are their effects?

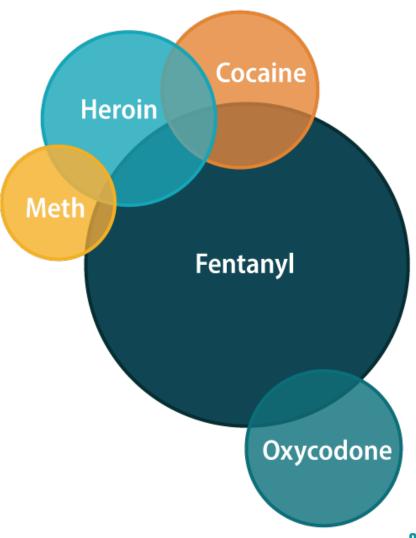
Can relieve pain and cause euphoria

Types of opioids:

- Natural opioids, derived from opium poppy (e.g., morphine)
- Semi-synthetic opioids, synthesized from natural opioids (e.g., oxycodone, heroin)
- Synthetic opioids, synthesized from non-opioid compounds to mimic opioid effects (e.g., fentanyl)

Emerging crisis of non-opioid overdoses

- Growing overdose death rates from non-opioids cocaine and methamphetamine
- Overdoses commonly involve both opioids and non-opioids

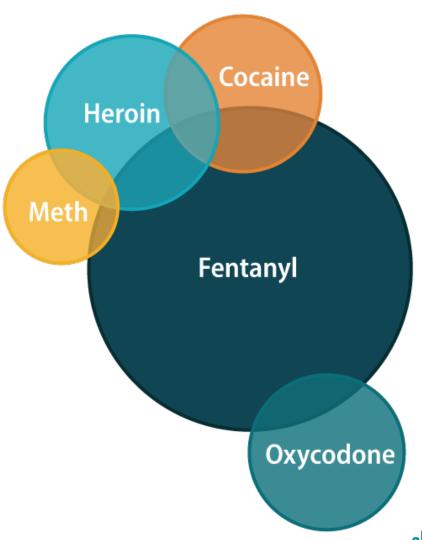


Emerging crisis of non-opioid overdoses

Cocaine overdose deaths overlapping with:

Fentanyl: 41 percent

Heroin: 34 percent



Emerging crisis of non-opioid overdoses

Cocaine overdose deaths overlapping with:

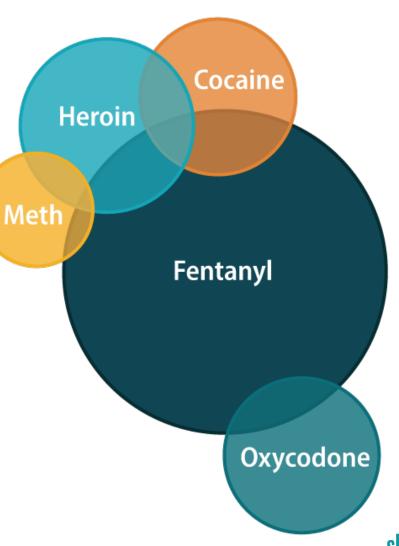
Fentanyl: 41 percent

Heroin: 34 percent

Methamphetamine overdose deaths overlapping with:

Heroin: 22 percent

Fentanyl: 11 percent

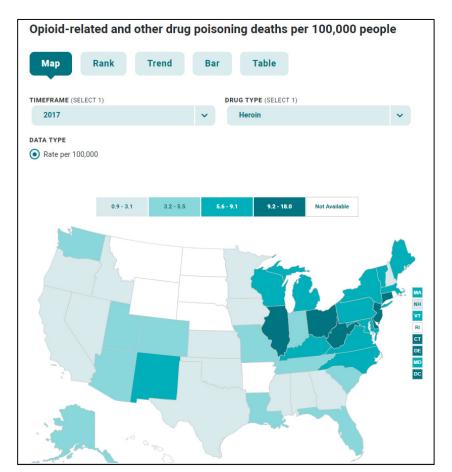


State Health Compare: Opioid overdose death rates data

Source

U.S. Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System (via WONDER tool)

States collect and report data to the CDC



State Health Compare: Opioid overdose death rates data

Categories of opioid overdoses*

- Natural and semi-synthetic opioids (i.e., prescription opioid painkillers, such as oxycodone and hydrocodone)
- Synthetic opioids (e.g., fentanyl)
- Heroin

Categories of non-opioid overdoses

- Cocaine
- Psychostimulants (e.g., methamphetamine, Ritalin, Adderall)

*Excludes some opioid types (e.g., methadone, opium, other or unspecified opioids)



State Health Compare: Opioid overdose death rates data

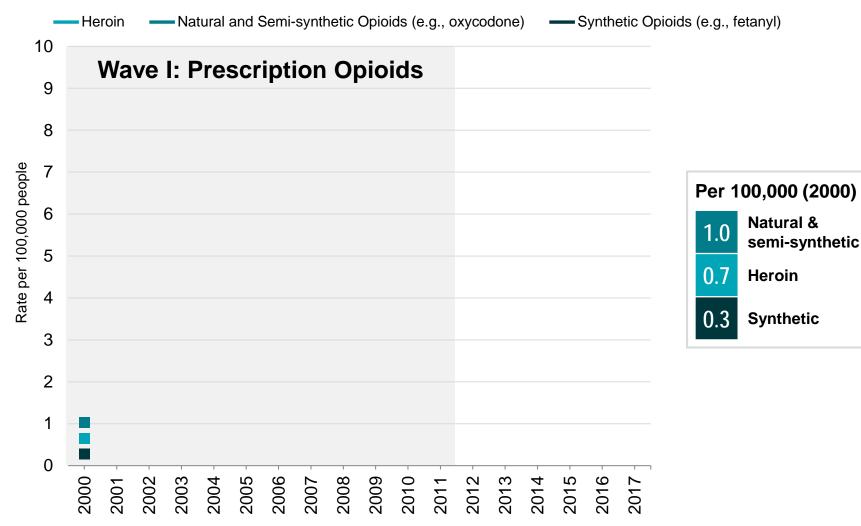
Limitations/considerations

- Categories not mutually exclusive
- Under-recording/-reporting of opioid deaths (e.g., Indiana)
- Suppression of small numbers (i.e., 20 or fewer deaths)

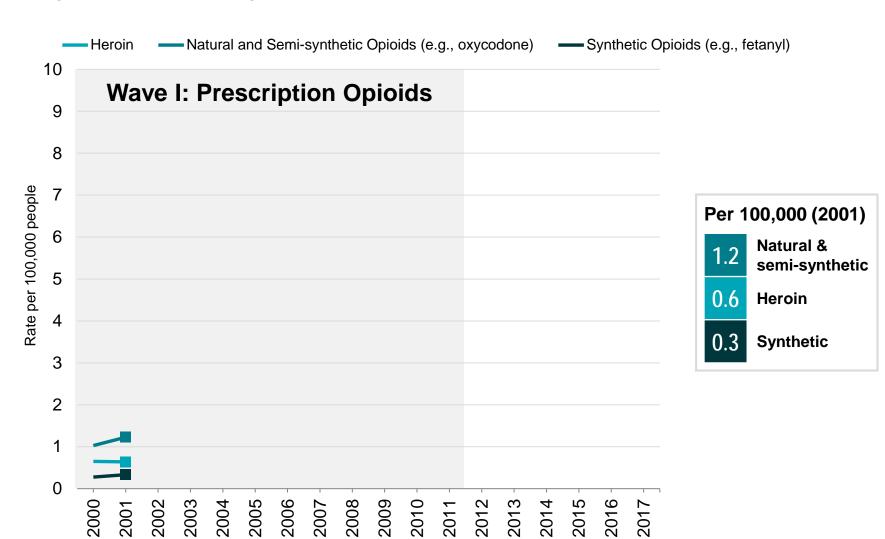
U.S. Trends

Natural and Semi-synthetic Opioid, Synthetic Opioid, and Heroin Overdose Deaths

U.S. Opioid Deaths per 100,000 People, by Opioid Type (2000)

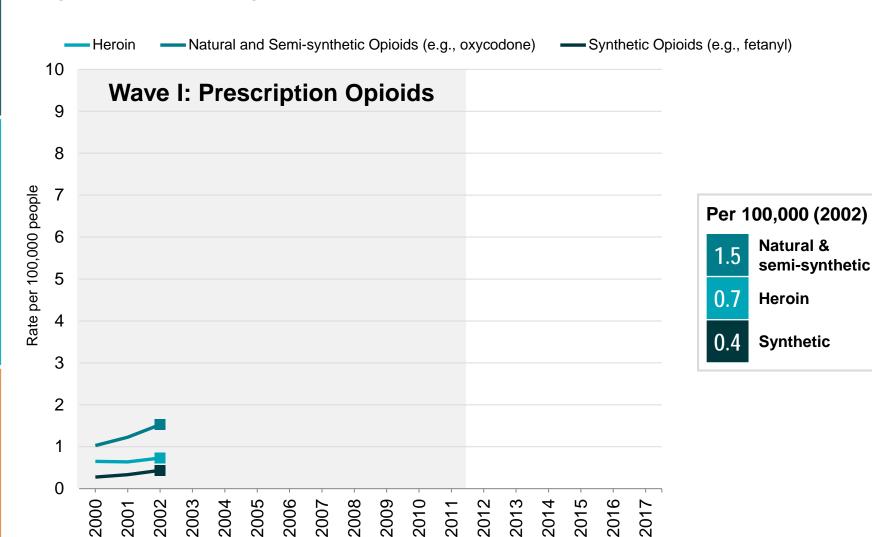


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2001)



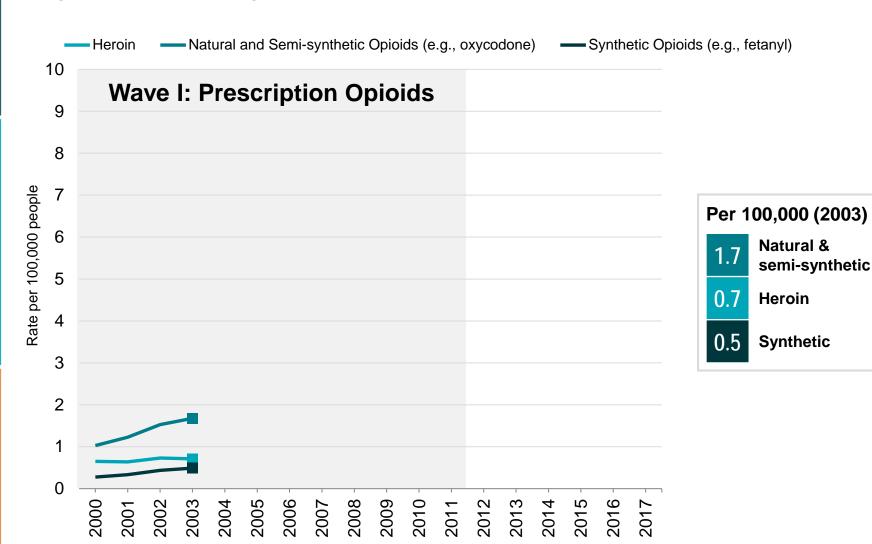


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2002)

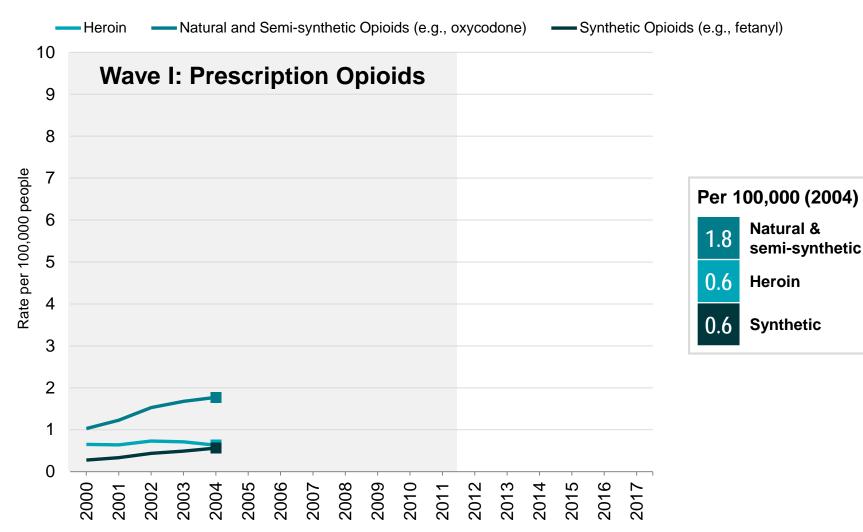




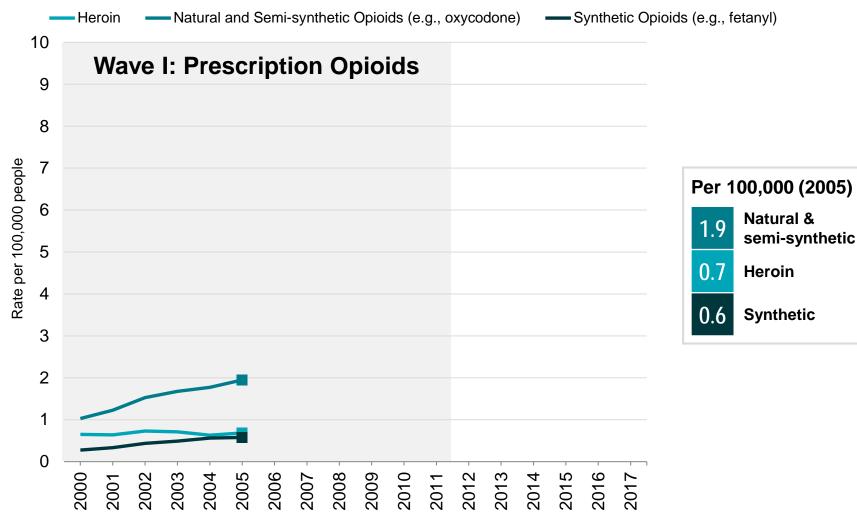
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2003)



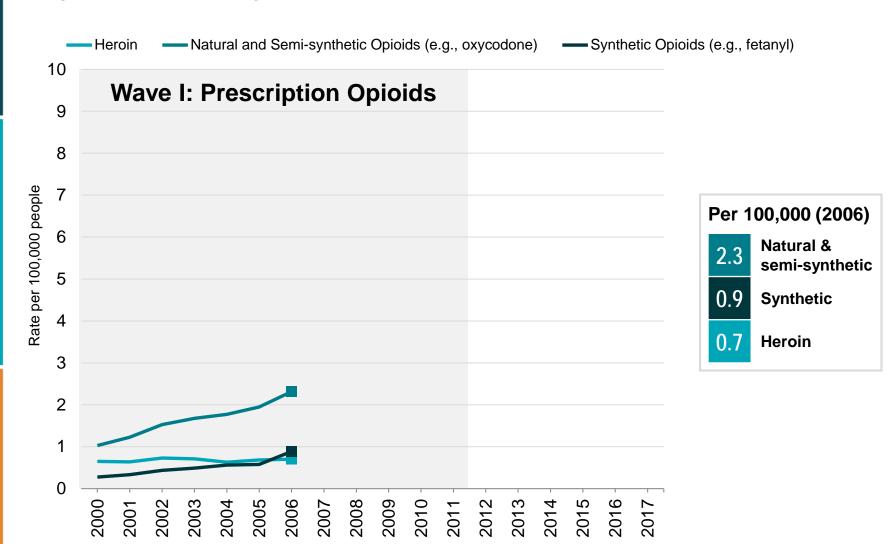
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2004)



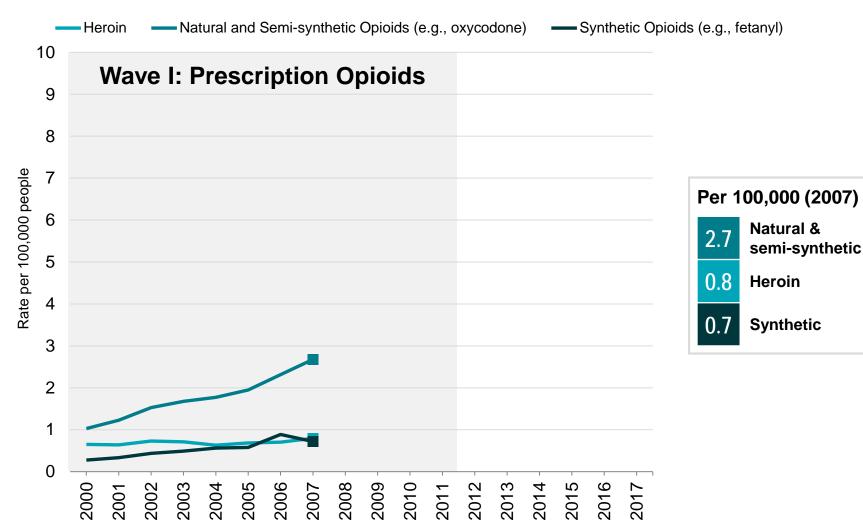
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2005)



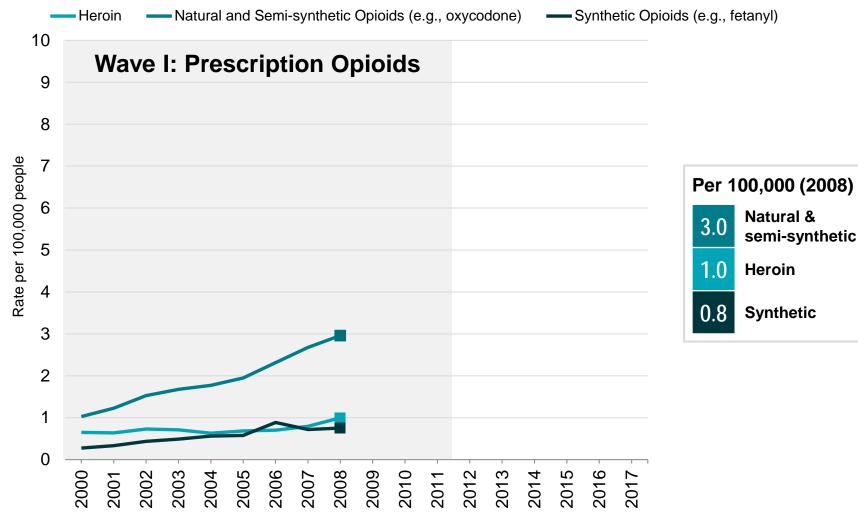
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2006)



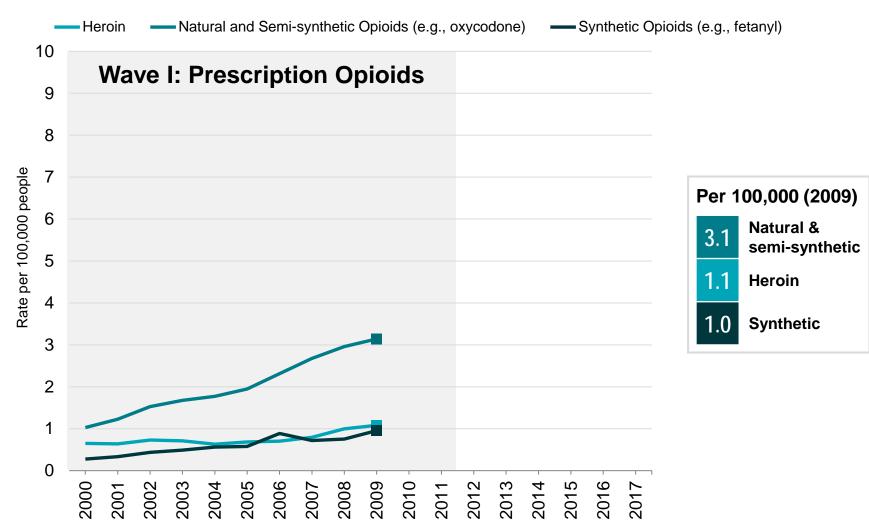
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2007)



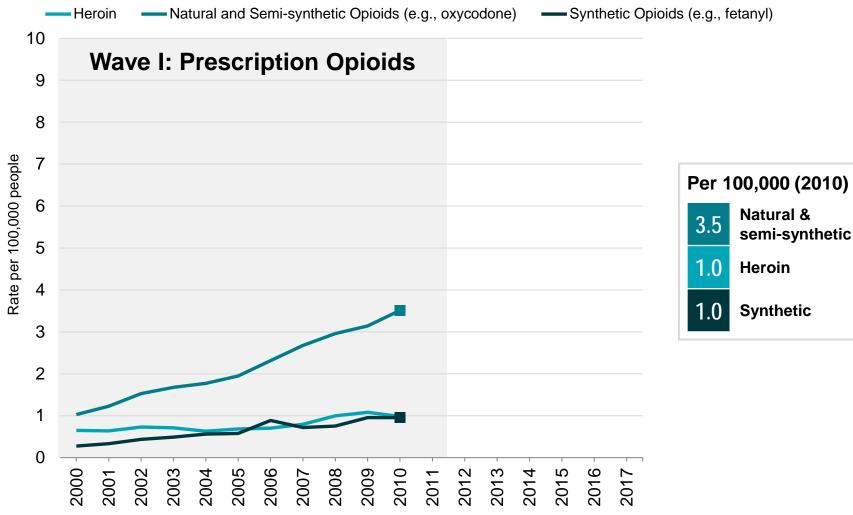
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2008)



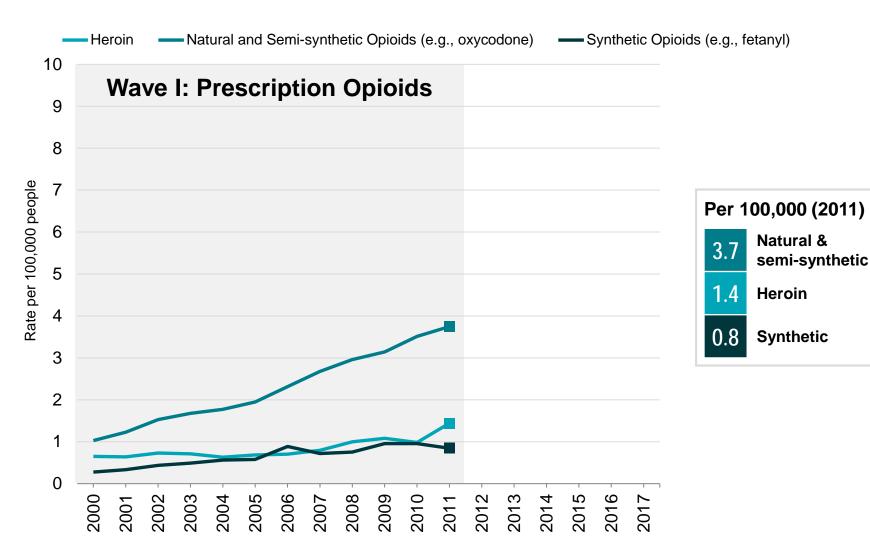
U.S. Opioid Deaths per 100,000 People, by Opioid Type (2009)



U.S. Opioid Deaths per 100,000 People, by Opioid Type (2010)

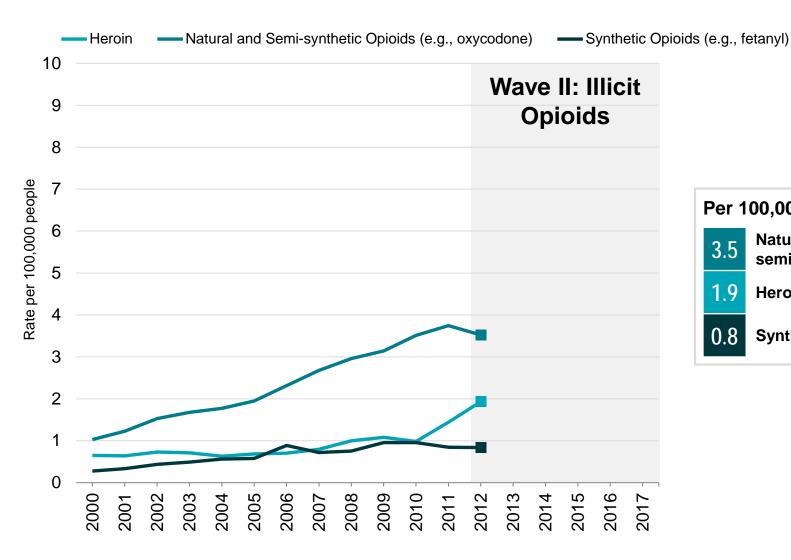


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2011)



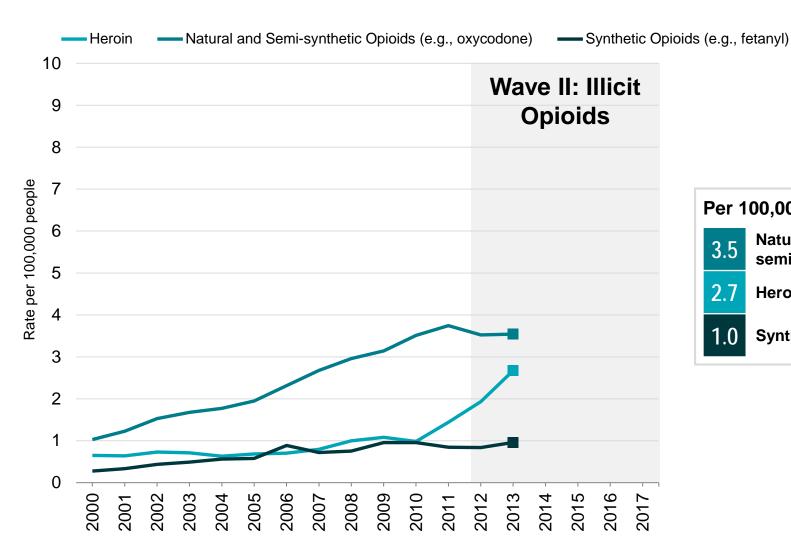


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2012)



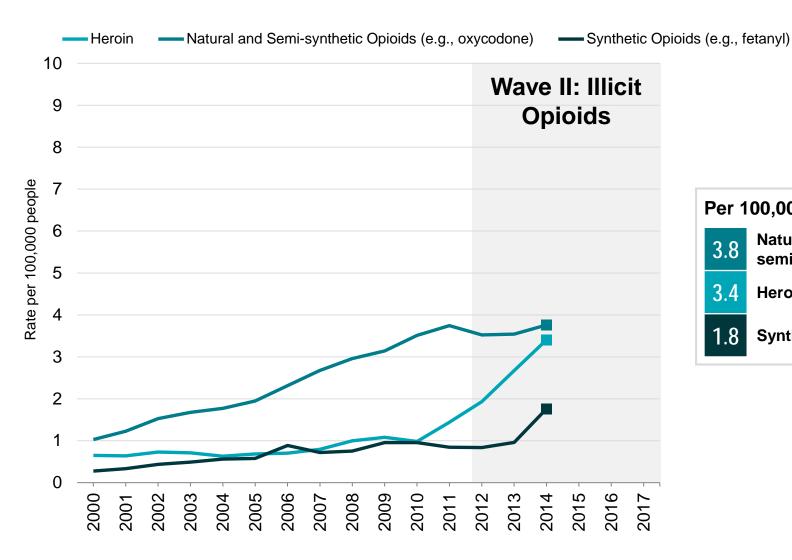


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2013)



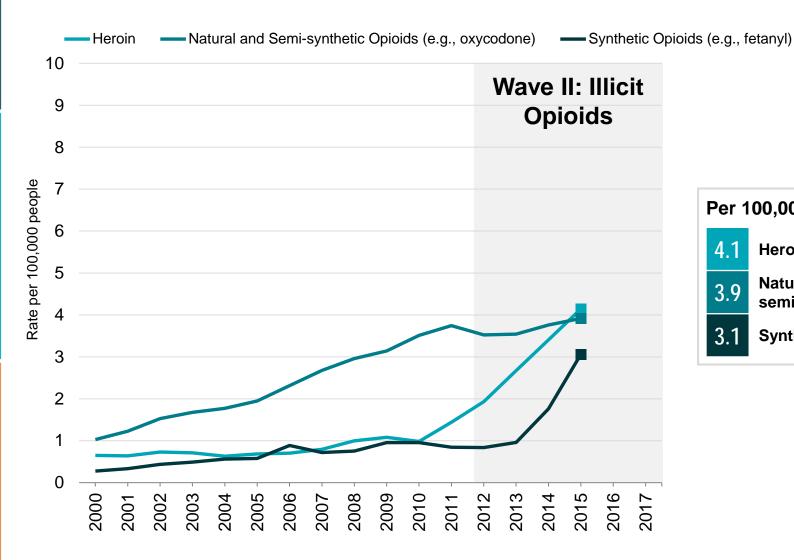


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2014)



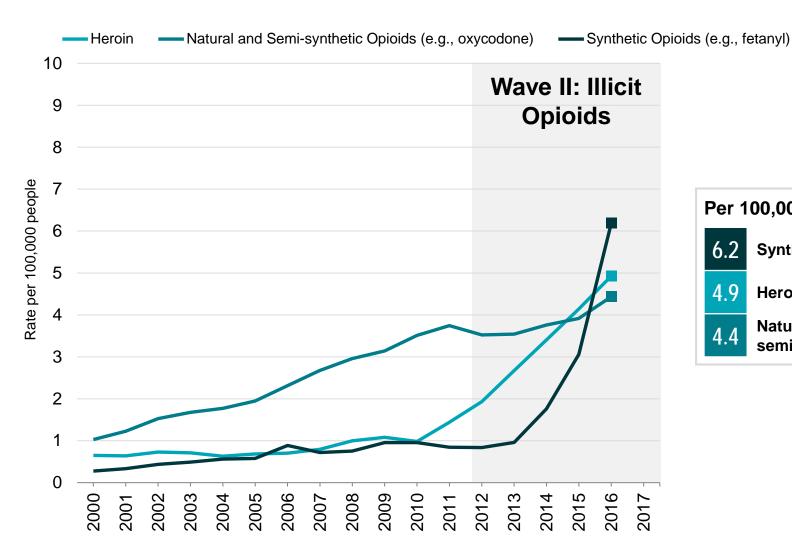


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2015)



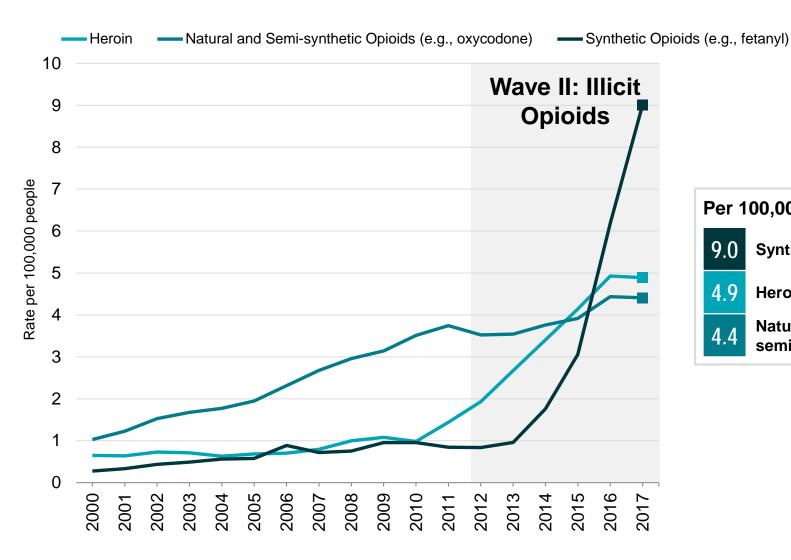


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2016)



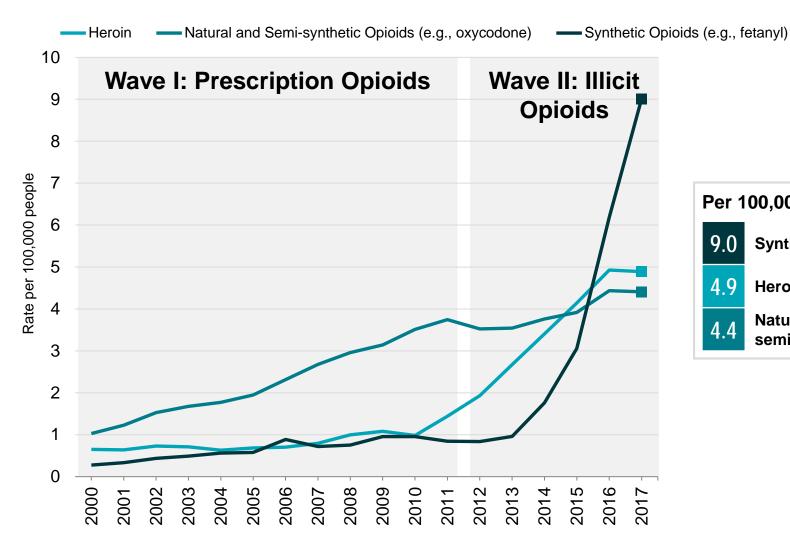


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2017)



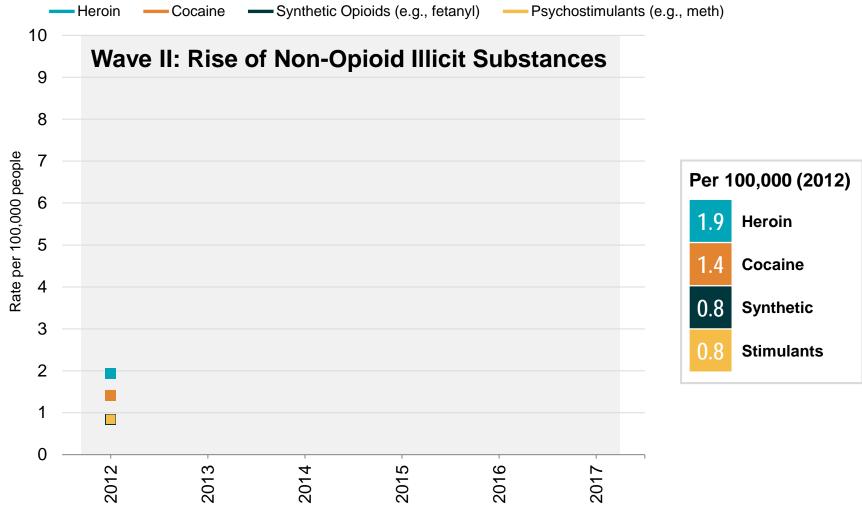


U.S. Opioid Deaths per 100,000 People, by Opioid Type (2017)

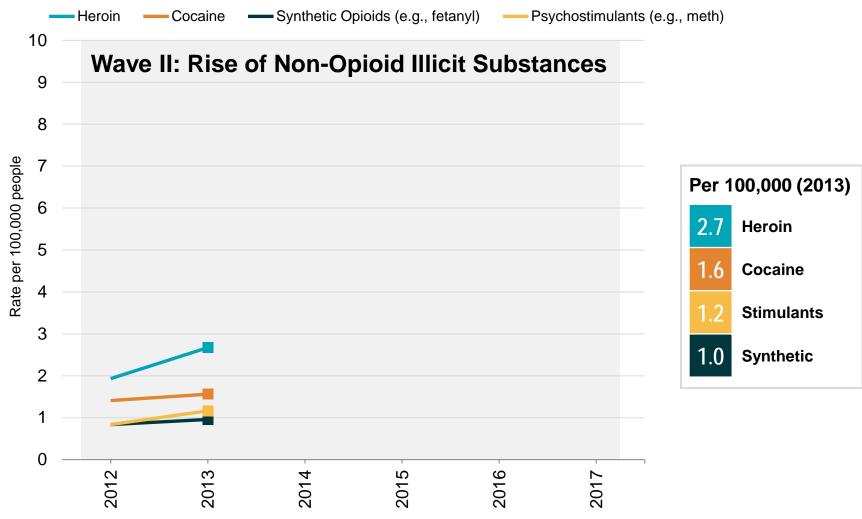




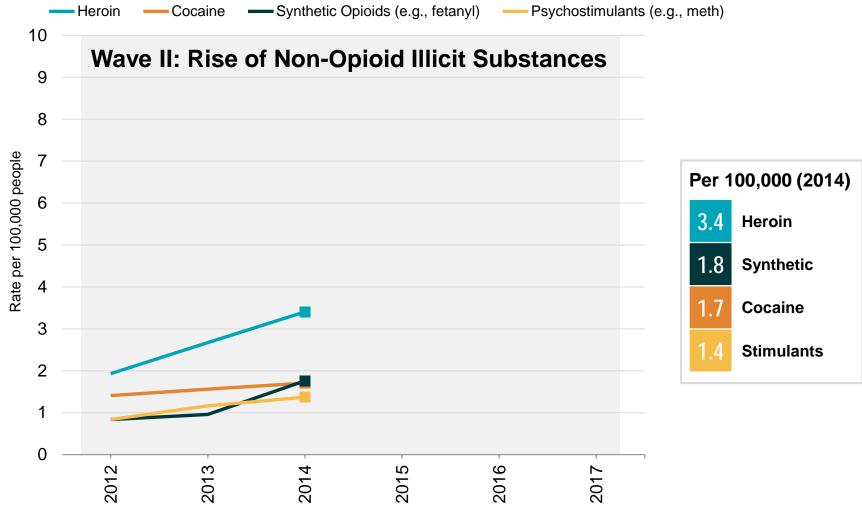
U.S. Overdose Deaths per 100,000 People, by Drug Type (2012)



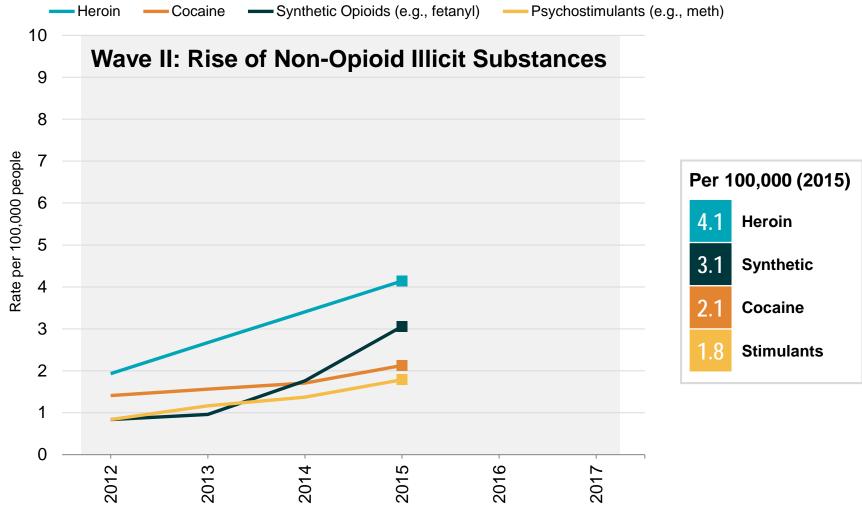
U.S. Overdose Deaths per 100,000 People, by Drug Type (2013)



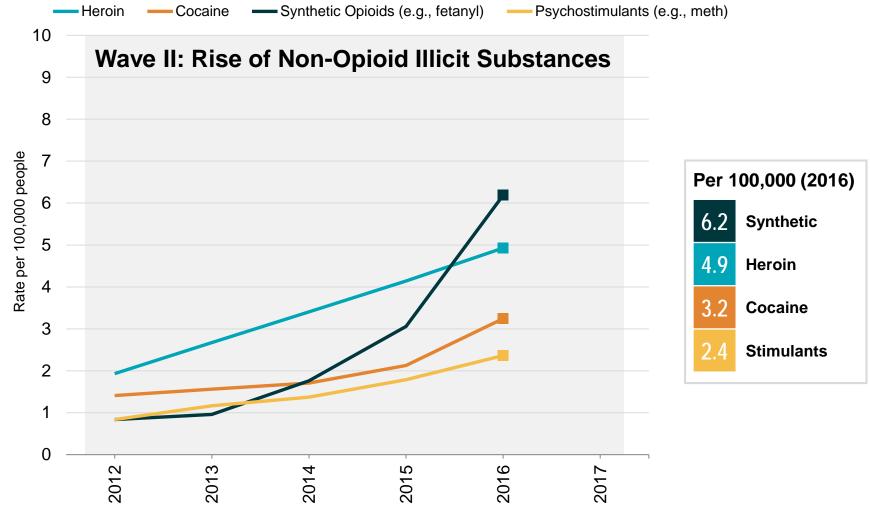
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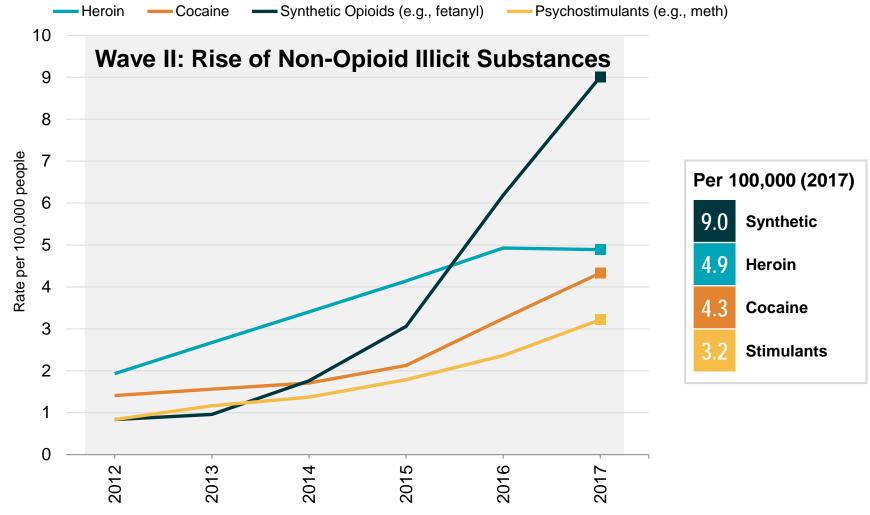
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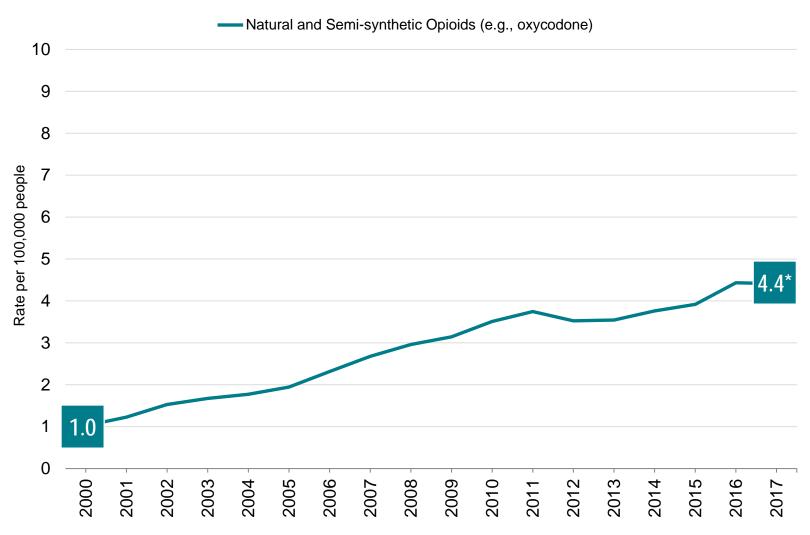
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U.S. Overdose Deaths per 100,000 People, by Drug Type (2017)



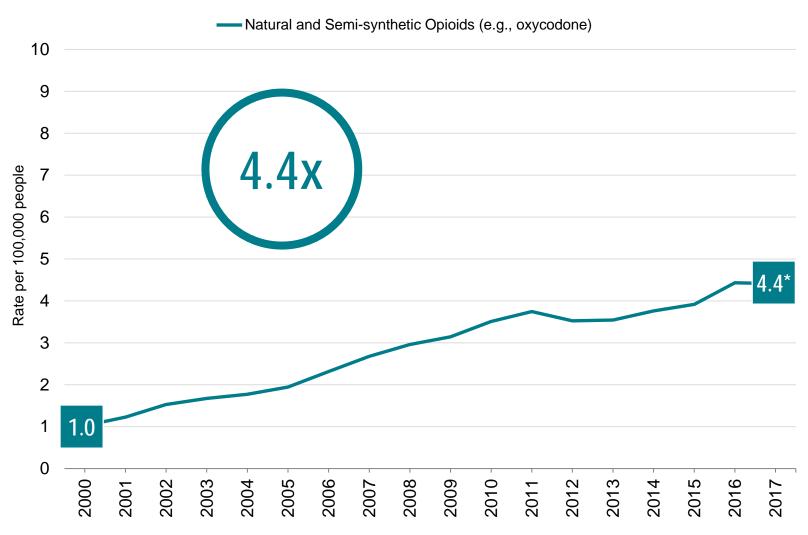
U.S. Opioid Deaths per 100,000 People, Natural and Semi-synthetic Opioids



^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



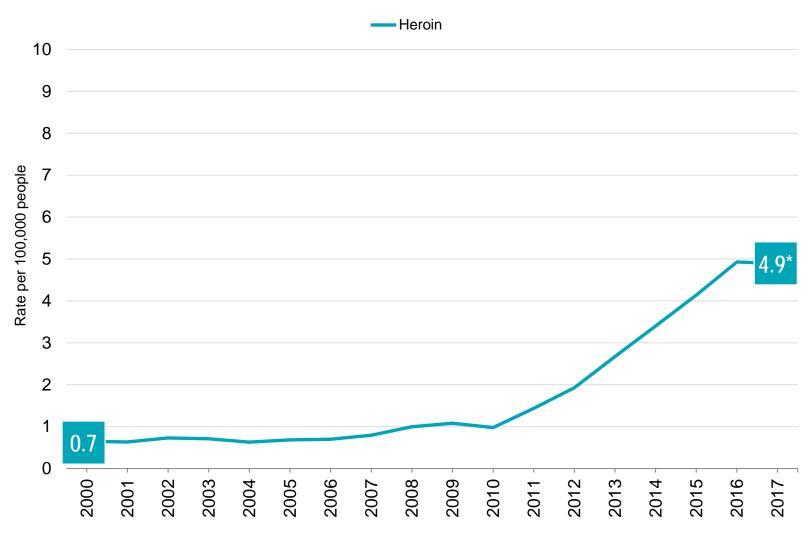
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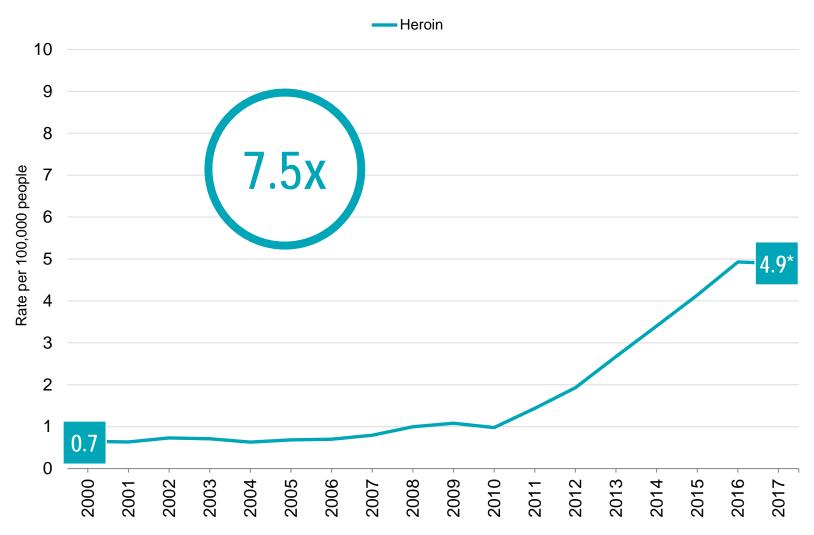
U.S. Opioid Deaths per 100,000 People, Heroin



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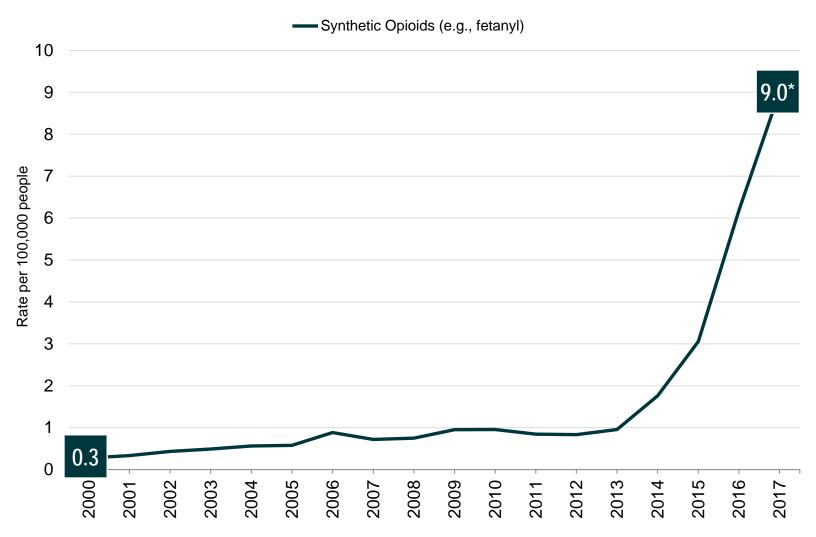
U.S. Opioid Deaths per 100,000 People, Heroin



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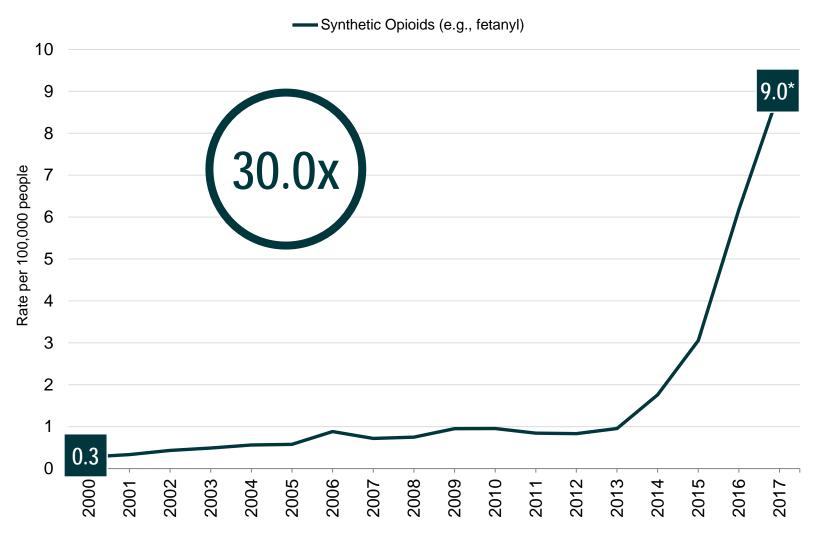
U.S. Opioid Deaths per 100,000 People, Synthetic Opioids



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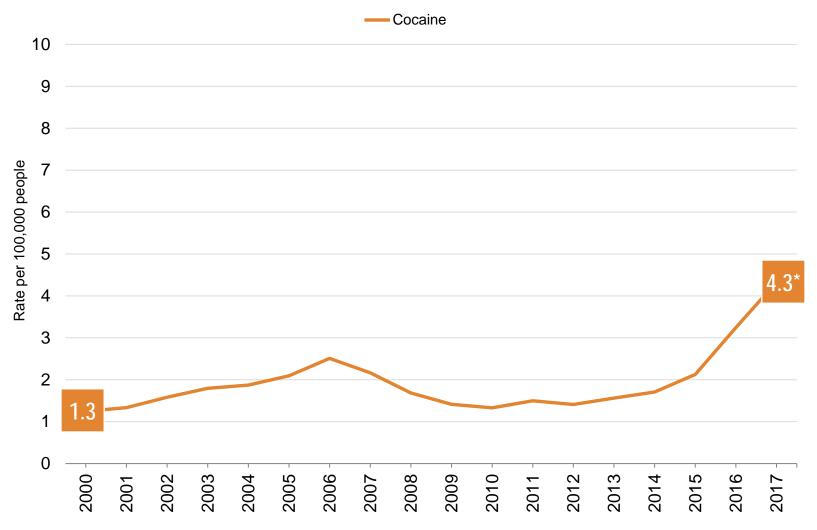
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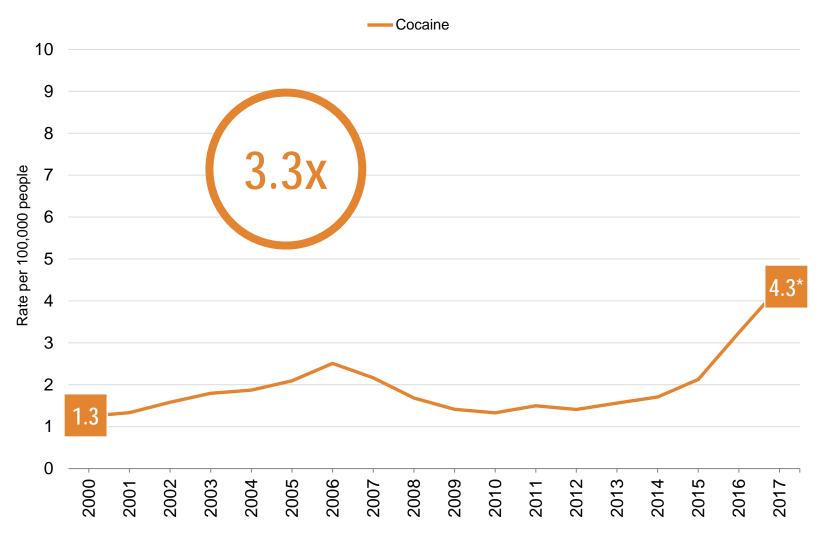
U.S. Opioid Deaths per 100,000 People, Cocaine



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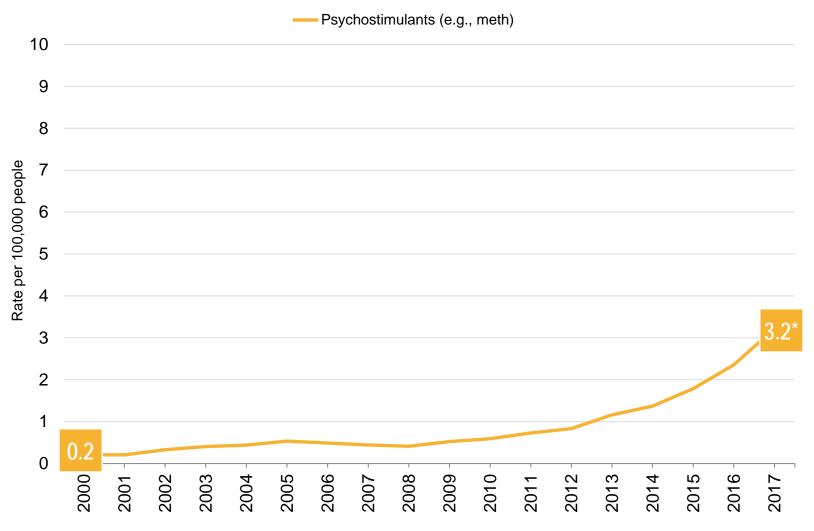
U.S. Opioid Deaths per 100,000 People, Cocaine

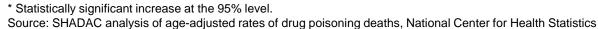


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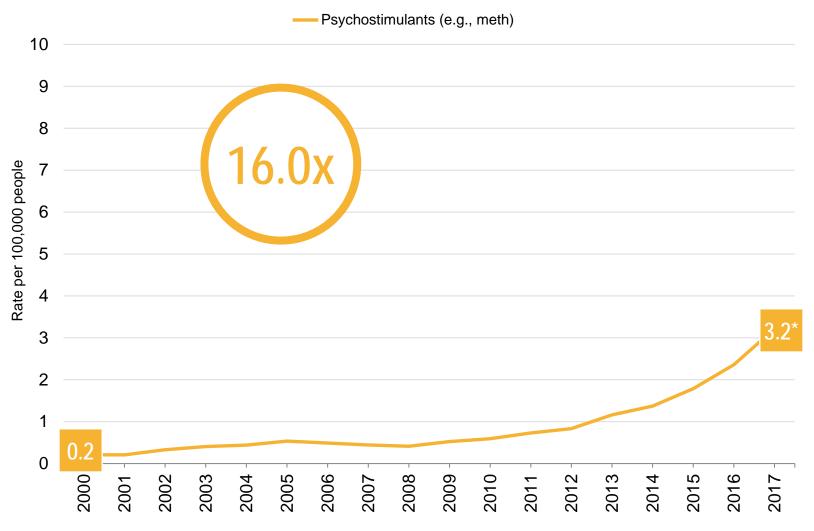
U.S. Opioid Deaths per 100,000 People, Psychostimulants







U.S. Opioid Deaths per 100,000 People, Psychostimulants



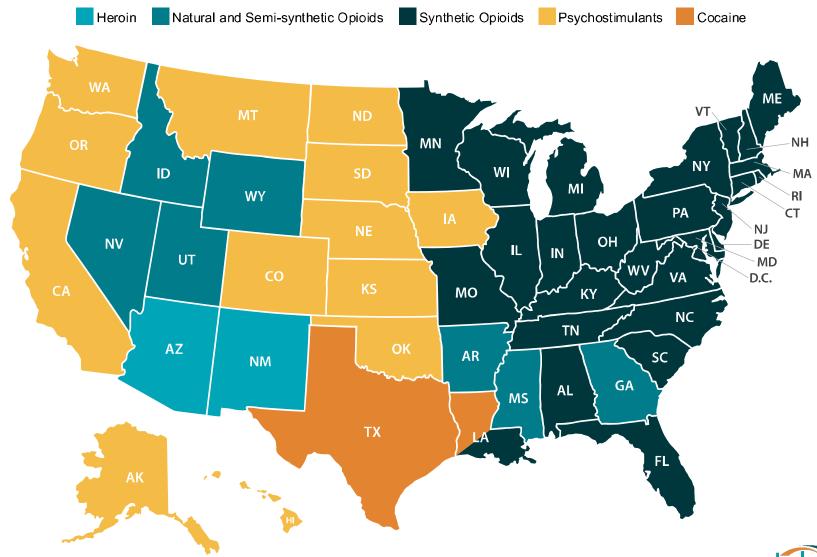
^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



State Trends and variation

Drug overdose deaths rates

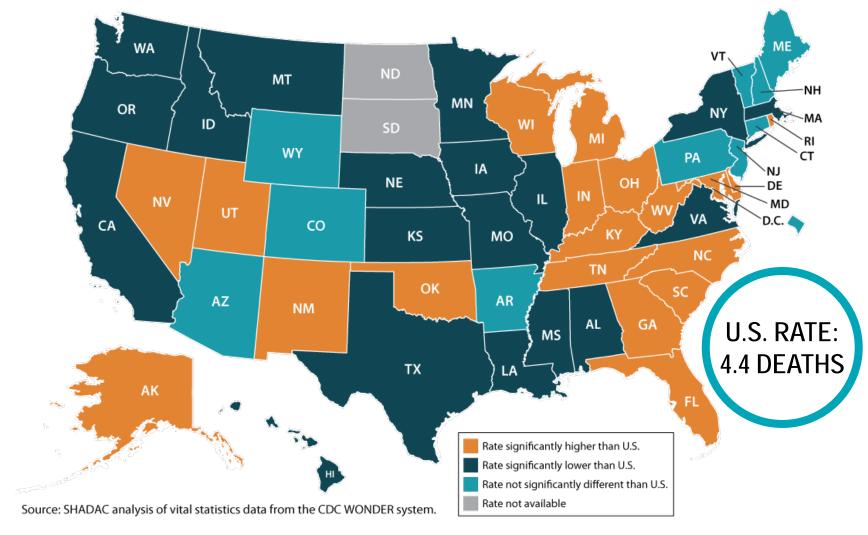
Highest Rate of Drug Overdose Death by Type, 2017



State Trends and variation

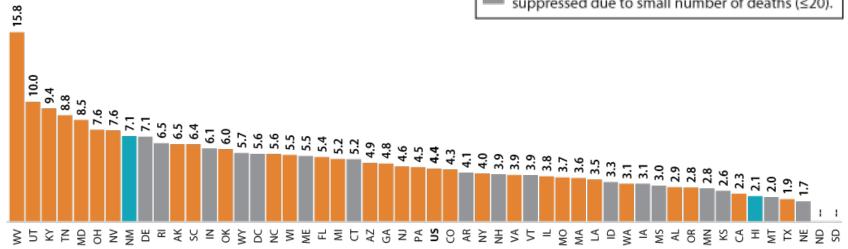
Natural and Semi-synthetic Opioid Overdose Deaths

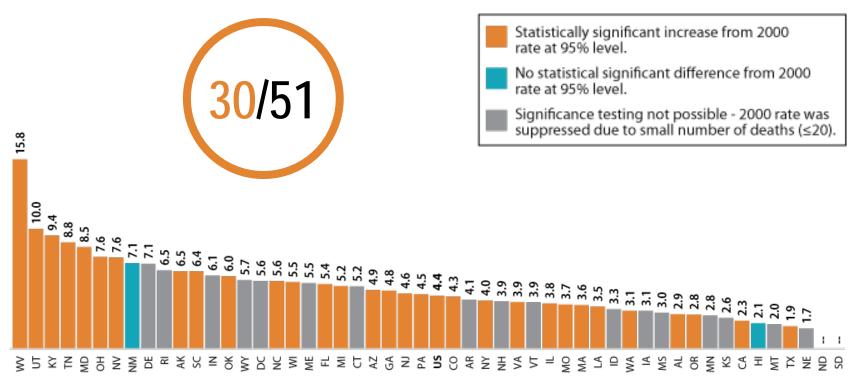
2017 Opioid Deaths per 100,000 People, Natural and Semi-synthetic Opioids

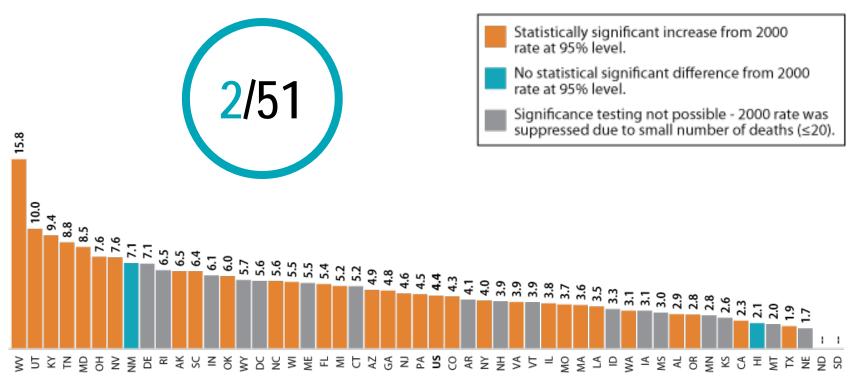


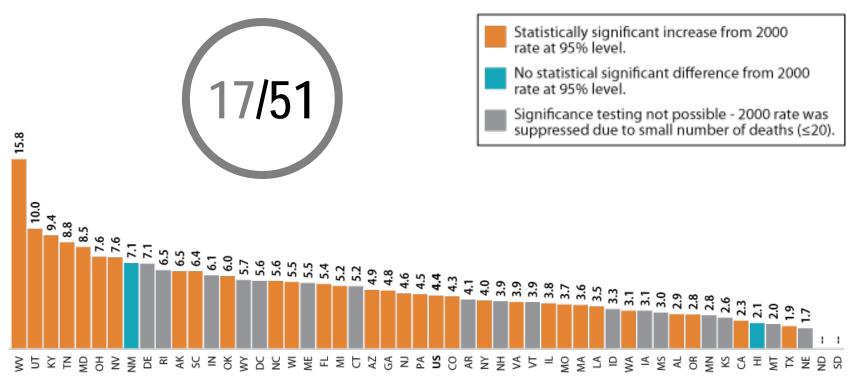


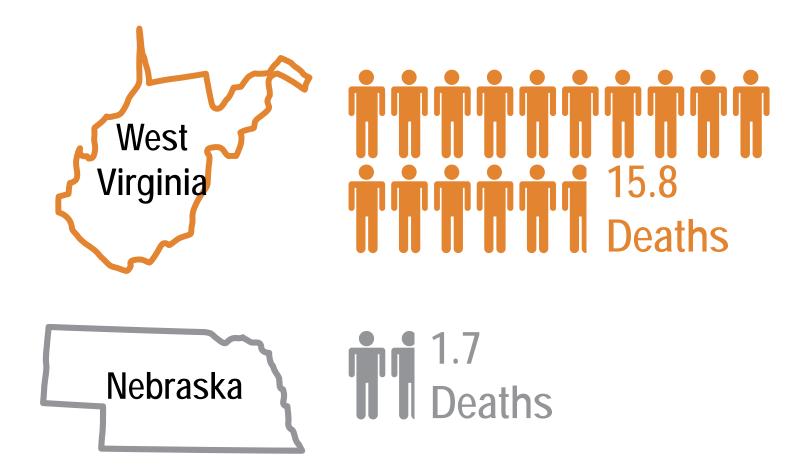
- No statistical significant difference from 2000 rate at 95% level.
- Significance testing not possible 2000 rate was suppressed due to small number of deaths (≤20).



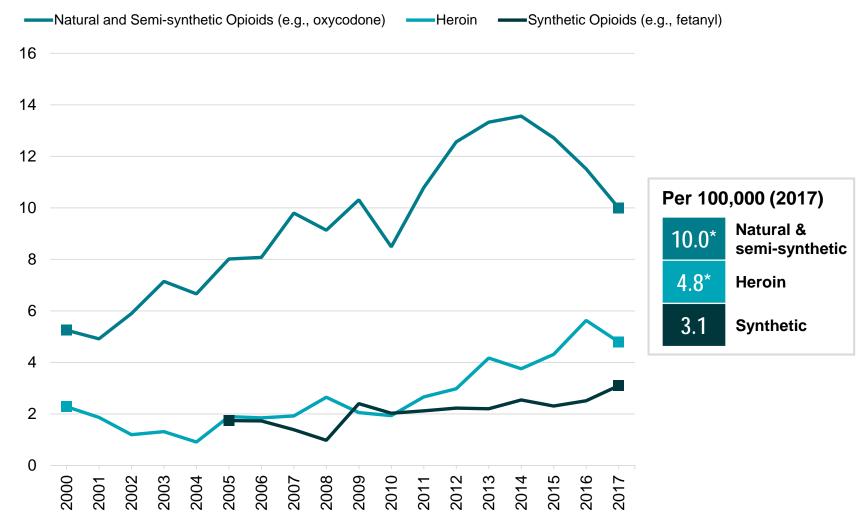








Utah Opioid Deaths per 100,000 People by Opioid Type, 2000-2017



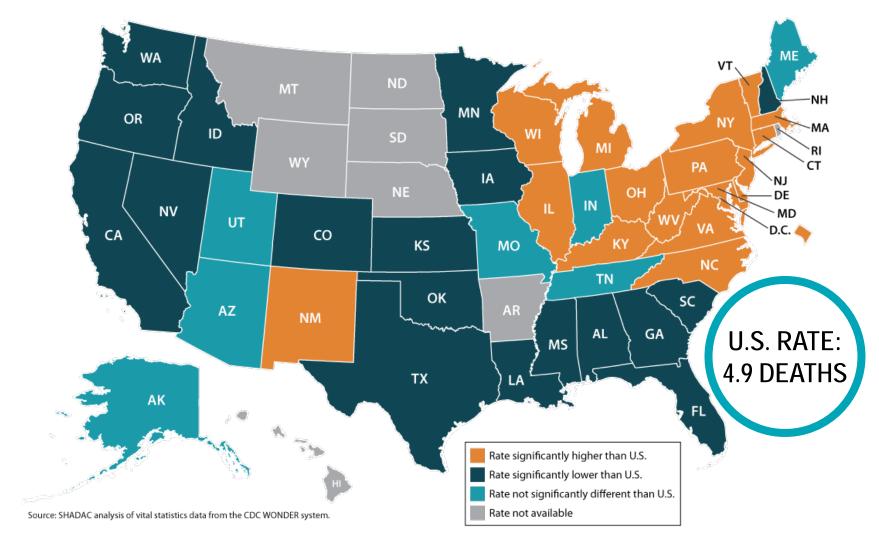
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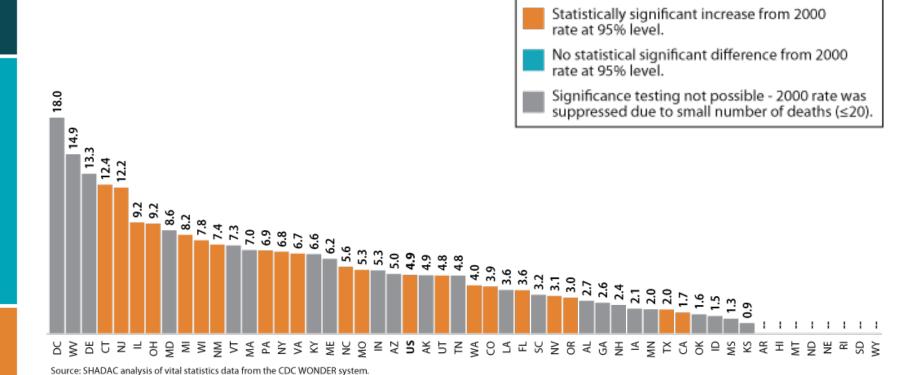
State Trends

Heroin Overdose Deaths

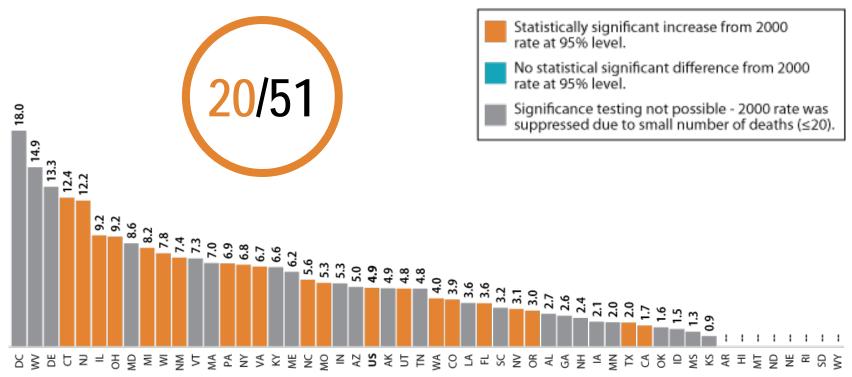
2017 Opioid Deaths per 100,000 People, Heroin



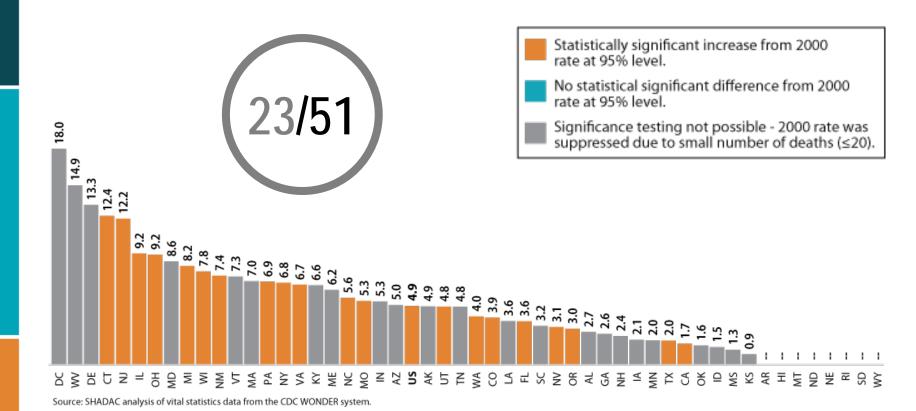
Heroin Deaths per 100,000 People, 2000-2017



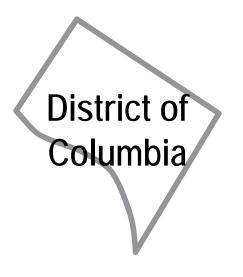
Heroin Deaths per 100,000 People, 2000-2017

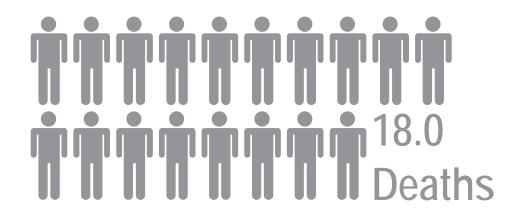


Heroin Deaths per 100,000 People, 2000-2017



Heroin Deaths per 100,000 People, 2017

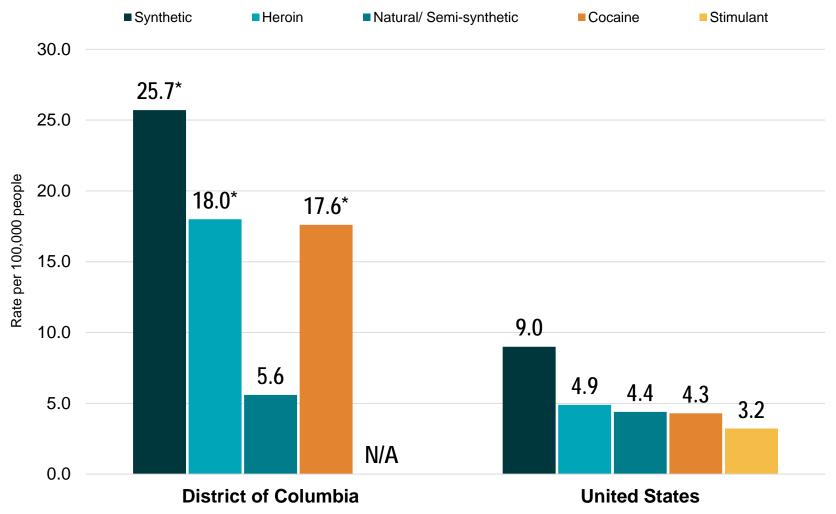




Kansas



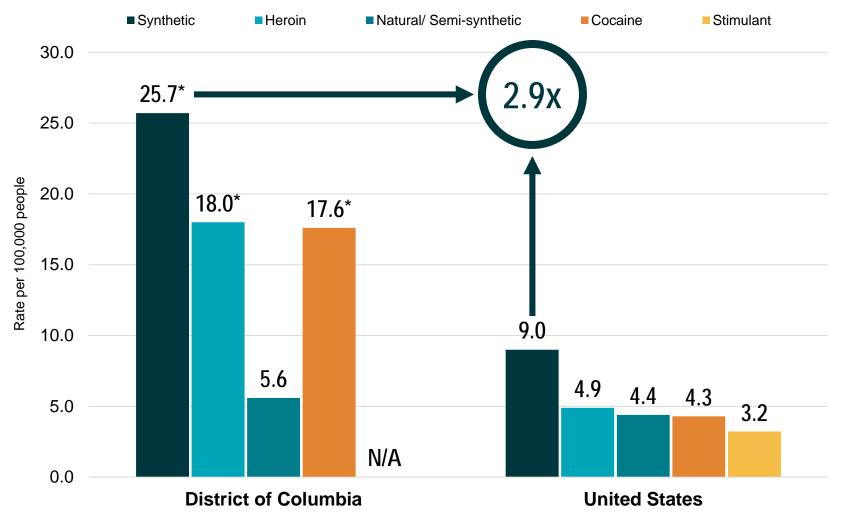
District of Columbia and U.S. Drug Deaths per 100,000 People by Drug Type, 2017



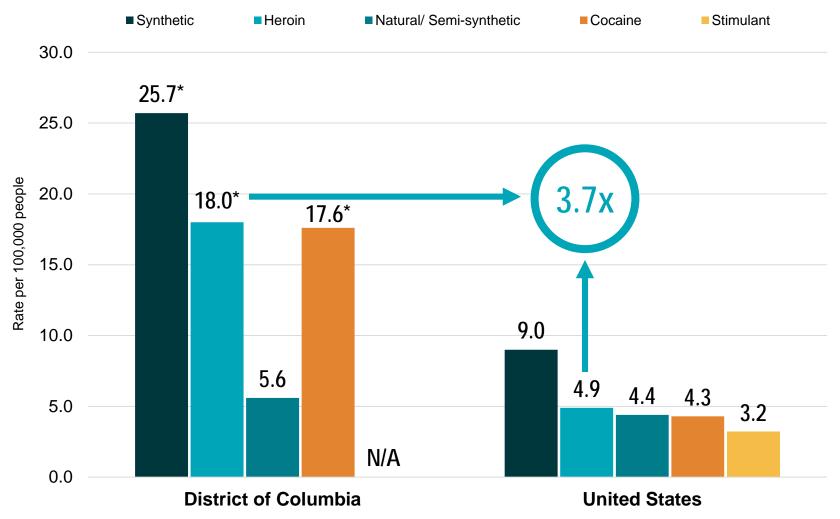
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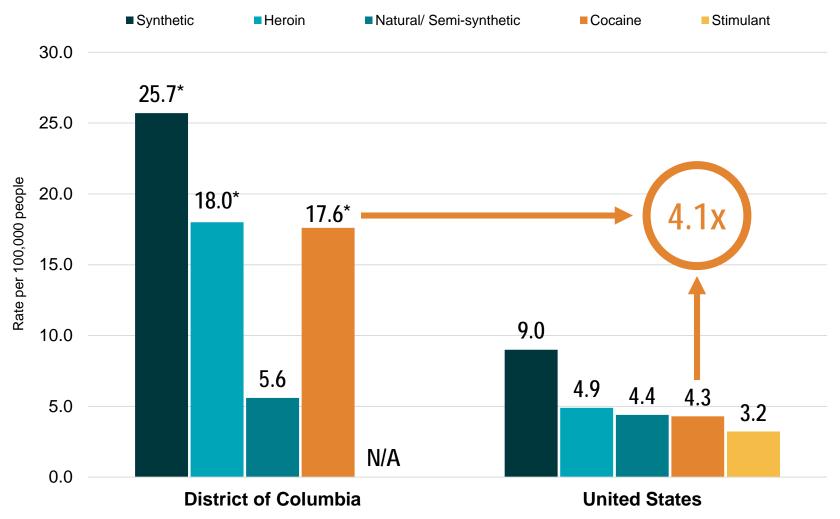
District of Columbia and U.S. Drug Deaths per 100,000 People by Drug Type, 2017



District of Columbia and U.S. Drug Deaths per 100,000 People by Drug Type, 2017



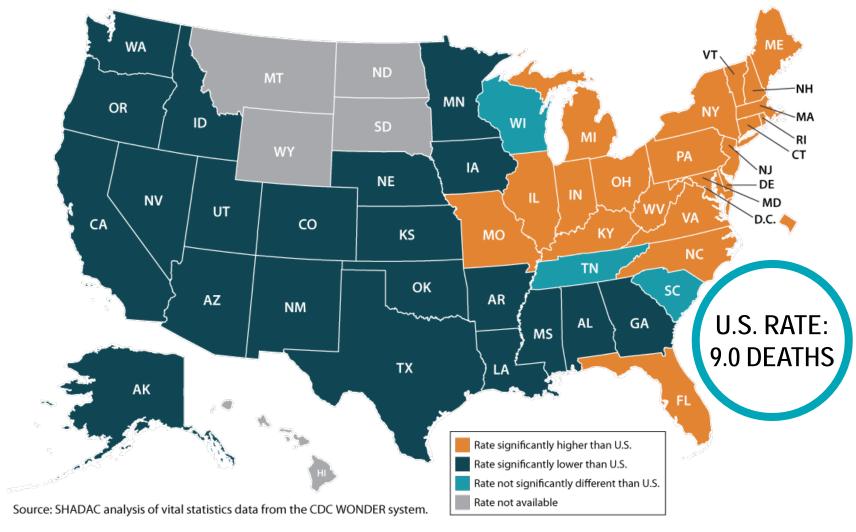
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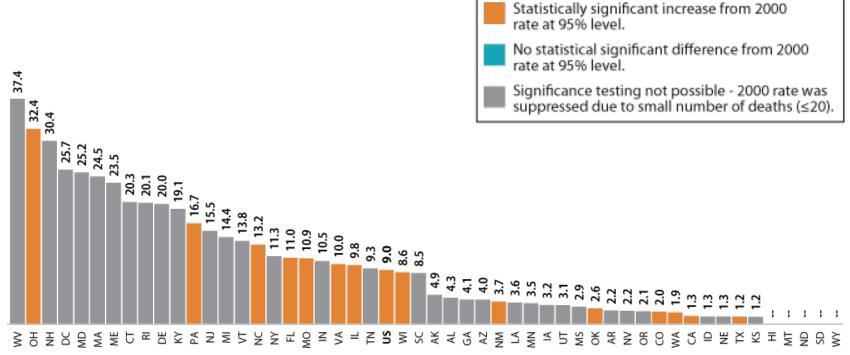
State Trends

Synthetic Opioid Overdose Deaths

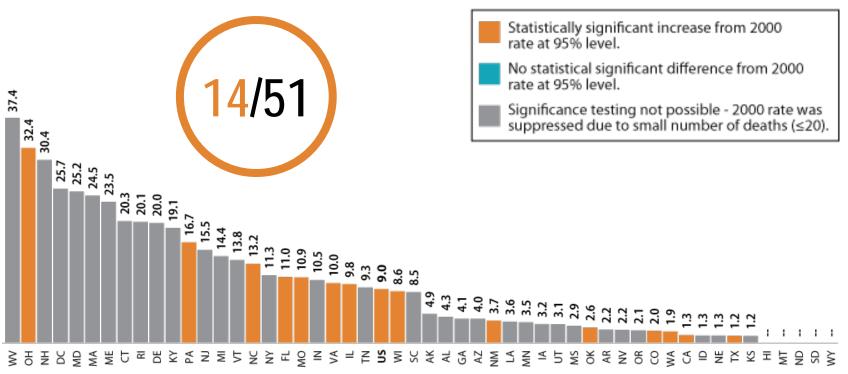
2017 Opioid Deaths per 100,000 People, Synthetic Opioids



Synthetic Opioid Deaths per 100,000 People, 2000-2017

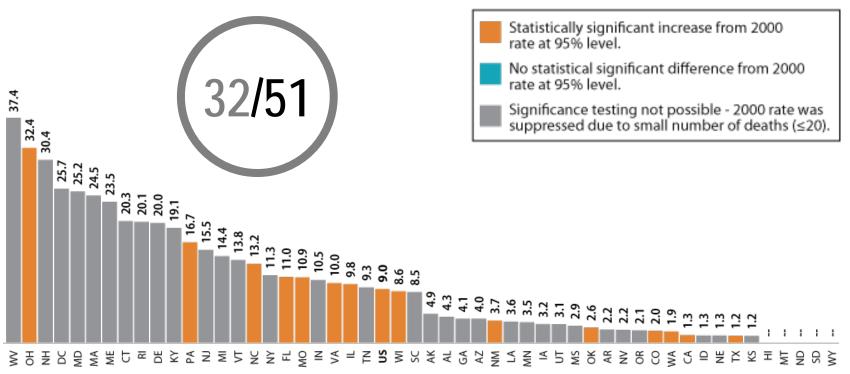


Synthetic Opioid Deaths per 100,000 People, 2000-2017



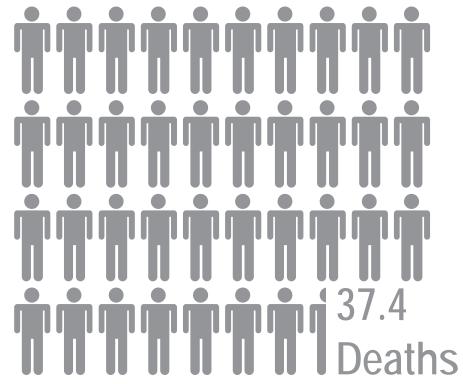
Source: SHADAC analysis of vital statistics data from the CDC WONDER system.

Synthetic Opioid Deaths per 100,000 People, 2000-2017



Synthetic Opioid Deaths per 100,000 People, 2017



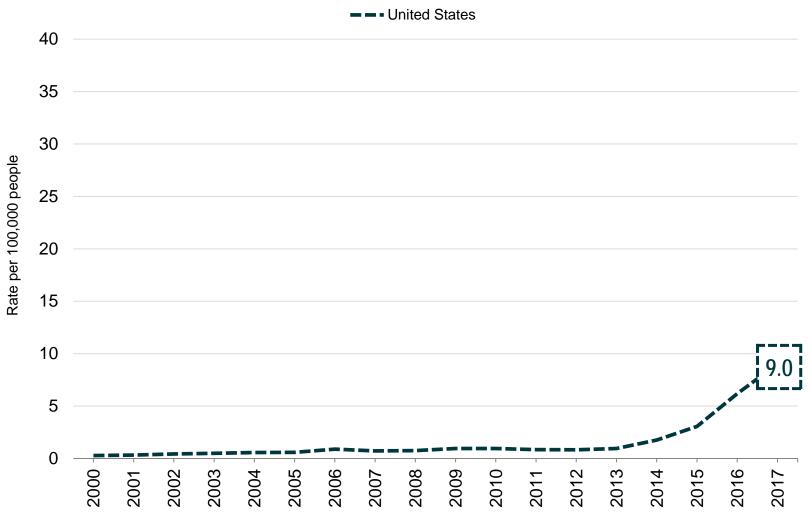


Kansas





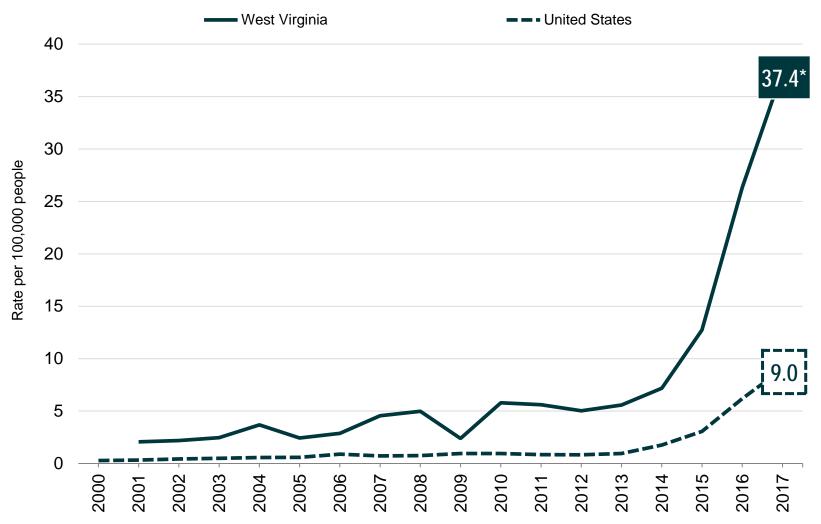
U.S. Synthetic Opioid Deaths per 100,000 People, 2000-2017



^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



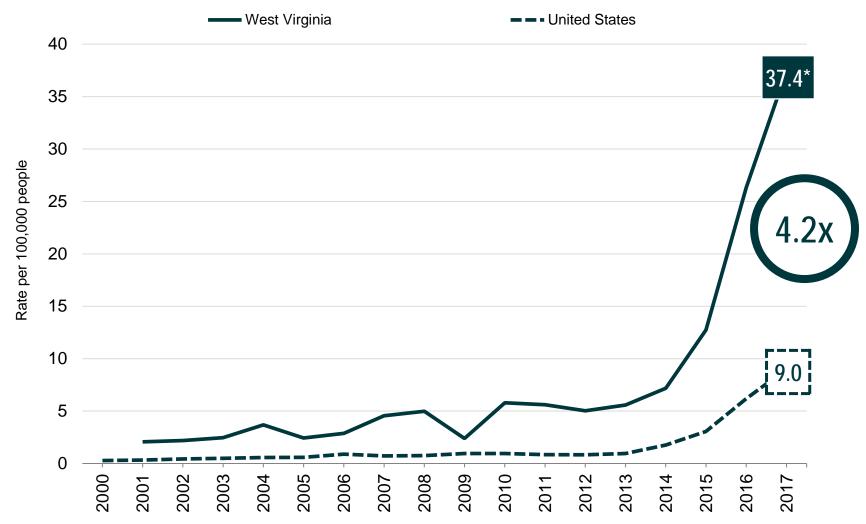
West Virginia and U.S. Synthetic Opioid Deaths per 100,000 People, 2000-2017



^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



West Virginia and U.S. Synthetic Opioid Deaths per 100,000 People, 2000-2017



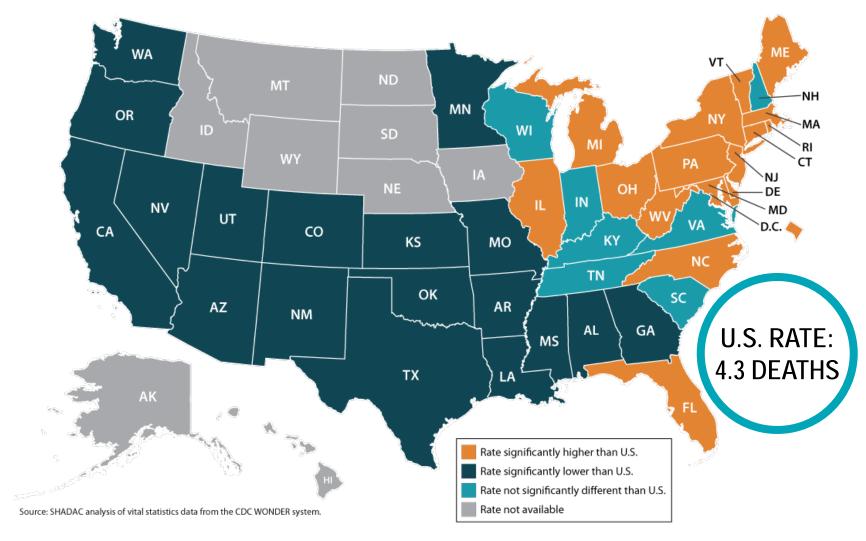
^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



State Trends

Cocaine Overdose Deaths

2017 Drug Deaths per 100,000 People, Cocaine







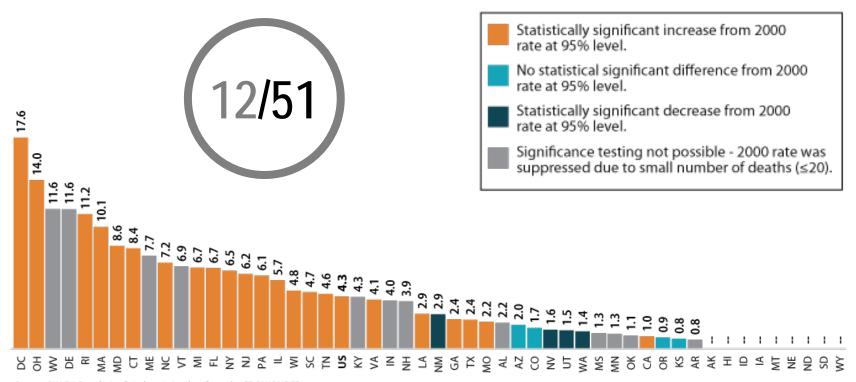




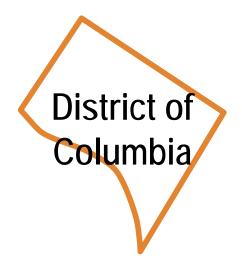










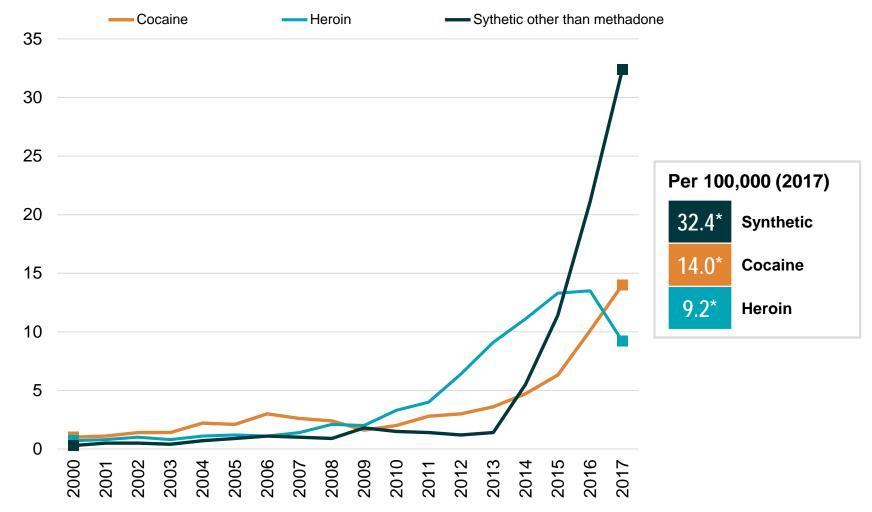








Ohio Drug Deaths per 100,000 People by Drug Type, 2000-2017



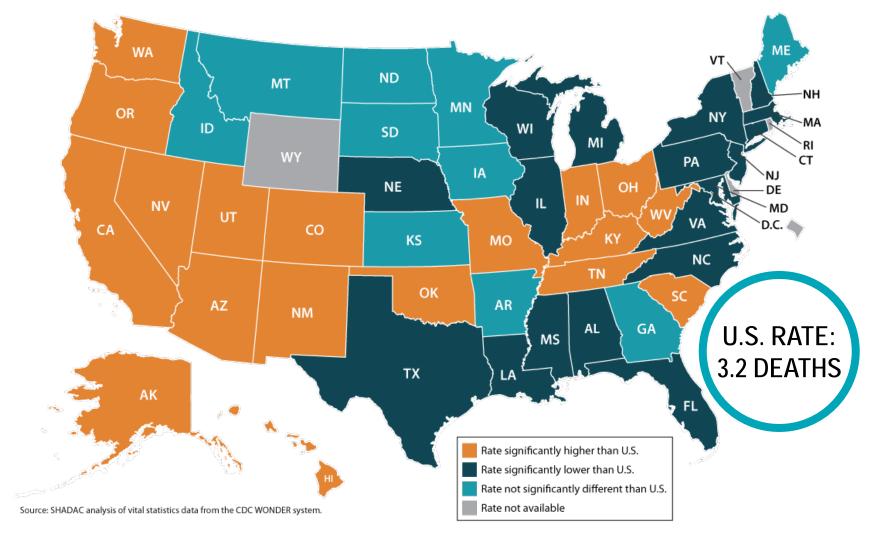
^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics



State Trends

Psychostimulant Overdose Deaths

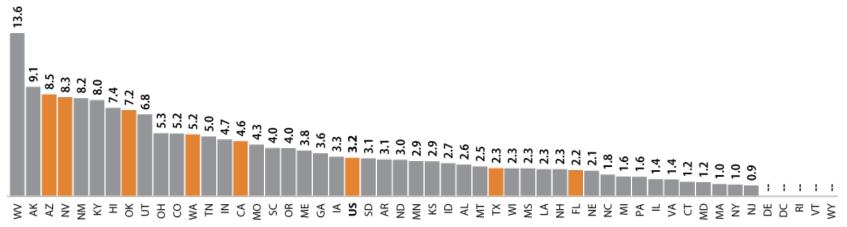
2017 Drug Deaths per 100,000 People, Psychostimulants



Psychostimulant Deaths per 100,000 People, 2000-2017

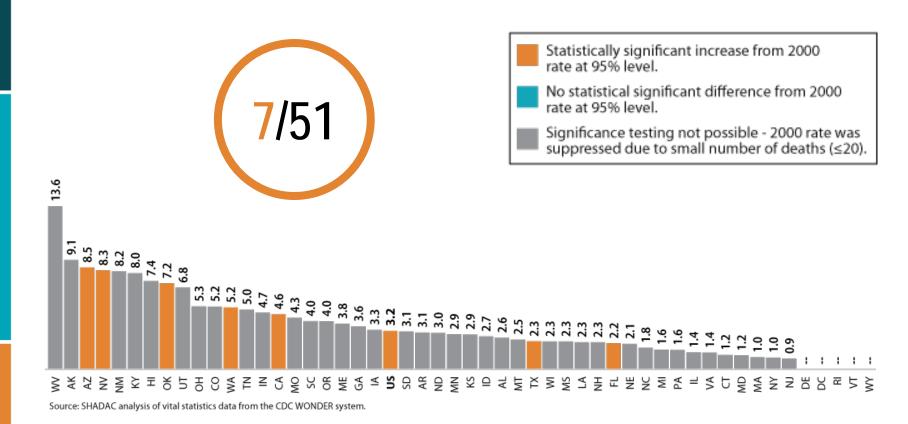


- No statistical significant difference from 2000 rate at 95% level.
- Significance testing not possible 2000 rate was suppressed due to small number of deaths (≤20).

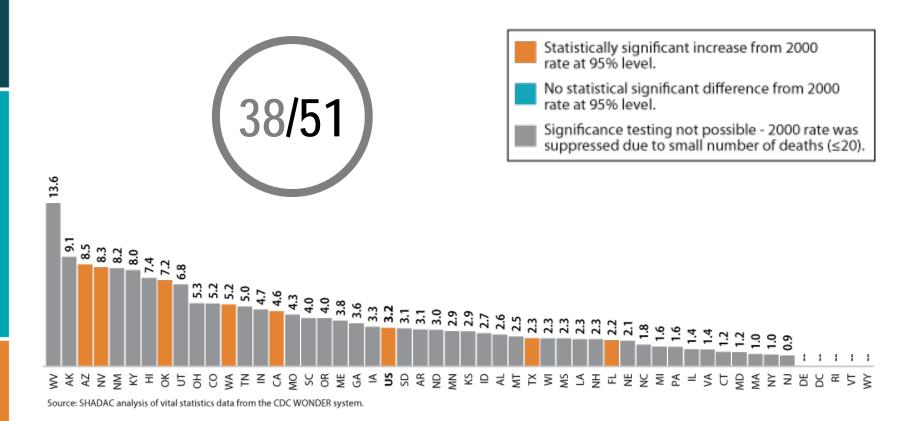


Source: SHADAC analysis of vital statistics data from the CDC WONDER system.

Psychostimulant Deaths per 100,000 People, 2000-2017



Psychostimulant Deaths per 100,000 People, 2000-2017



Psychostimulant Deaths per 100,000 People, 2017

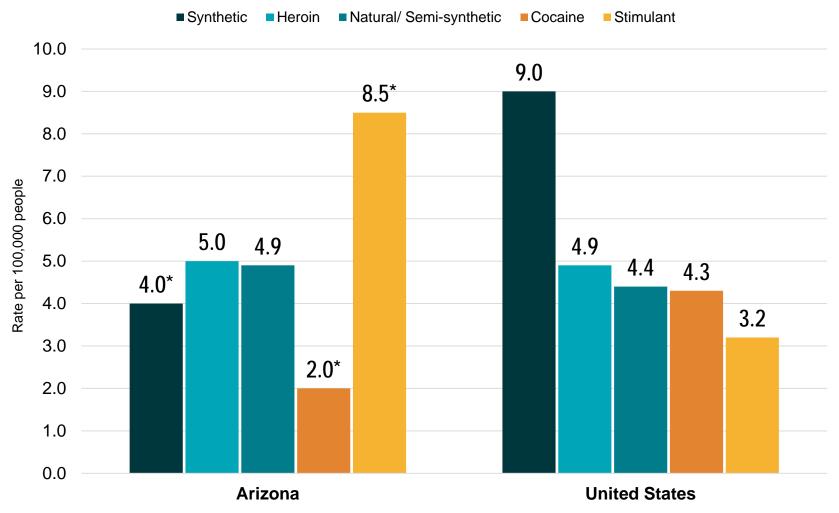






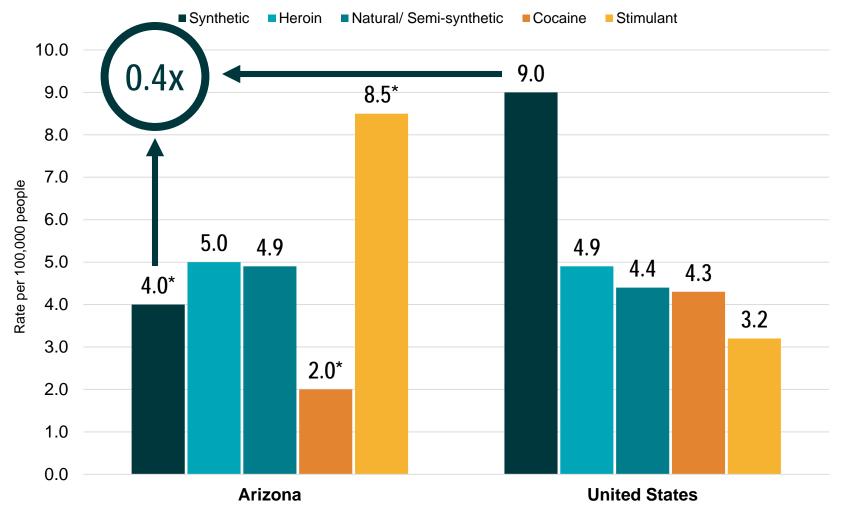






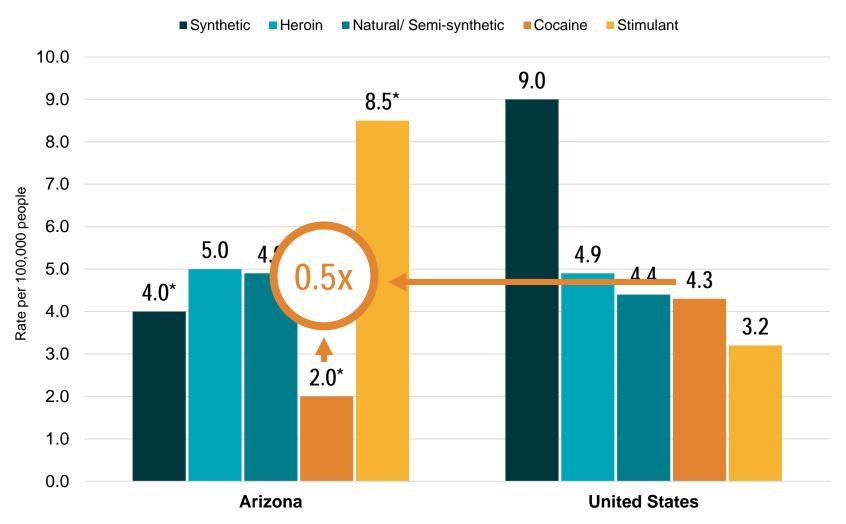
^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics

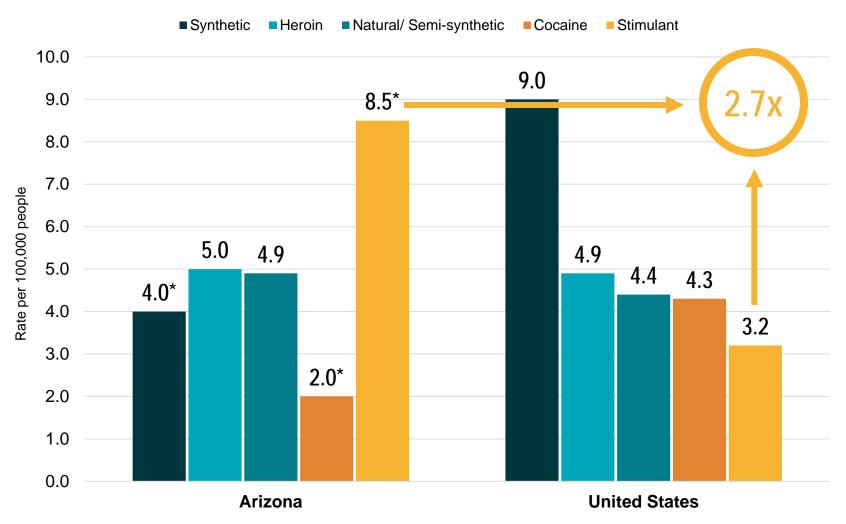




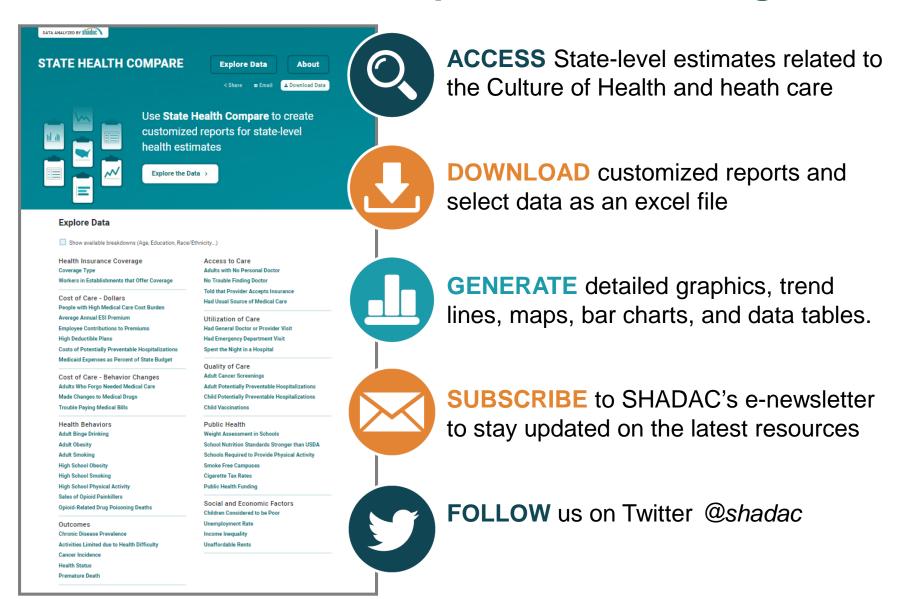
^{*} Statistically significant increase at the 95% level. Source: SHADAC analysis of age-adjusted rates of drug poisoning deaths, National Center for Health Statistics







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Questions for Presenters?



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Thank you

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