



Introduction to Opioid Use Disorder

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Pop Quiz:

Which of These Drugs is an Opioid?

BUPRENORPHINE

PERCOCET

marijuana

hydrocodone

COCAINE

TRAMADOL

oxycodone

mushrooms

methamphetamine

methadone

alcohol

heroin

fentanyl





What are opioids?

“Opioid” refers to both “natural” and synthetic members of this drug class

“Natural”, referred to as “opiates”

- Derived from opium poppy
- Morphine, codeine, opium

Synthetic (partly or completely):

- Semisynthetic: heroin, hydrocodone, oxycodone
- Fully Synthetic: fentanyl, tramadol, methadone

Effects

All of these drugs have significant potential for causing “addiction”, or Opioid Use Disorder

They also share common effects, depending on dose:

- Pain relief (analgesia)
- Cough suppression
- Constipation
- Sedation (sleepiness)
- Respiratory suppression (slowed breathing)
- Respiratory arrest (stopping breathing)
- Death



DOSE EQUIVALENTS TO MORPHINE

• Morphine SA	30	mg
• Morphine LA	15	mg
• Hydromorphone	4	mg
• Oxycodone	20	mg
• Hydrocodone	30-40	mg
• Oxymorphone	10	mg
• Codeine	200	mg
• Methadone	?? 5	mg
• Fentanyl	0.1	mg
• Buprenorphine	0.4	mg
• Tramadol	400	mg
• Heroin (diacetyl-morphine)	2.5	mg



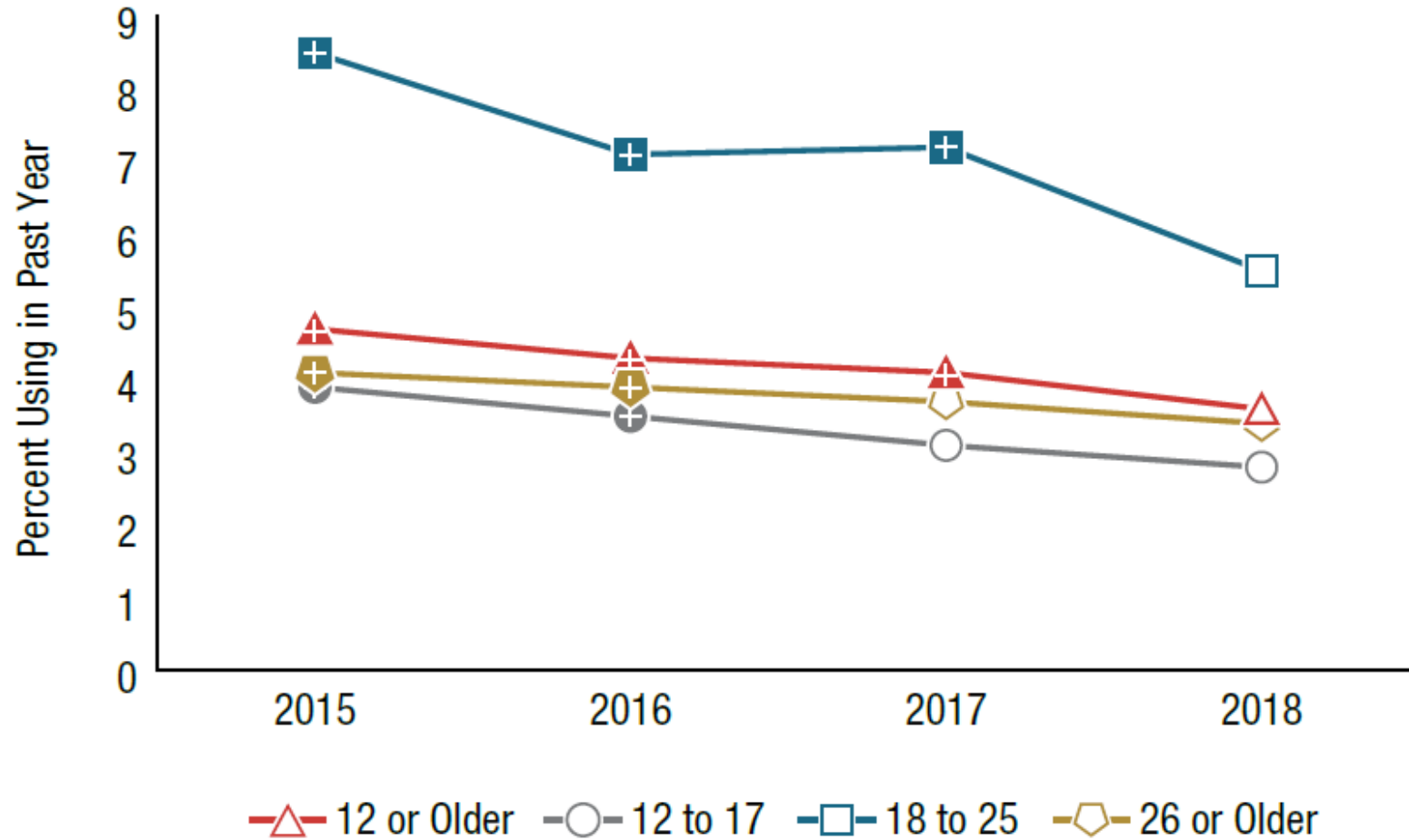
Why Have Opioids Become Such a Big Problem in the US?

- 1990s: New norm that all pain should be eliminated
 - pain as the “5th vital sign”
- Pharmaceutical company promotion
- Opioid over-prescribing
- Diversion, and widespread non-medical use of opioids, especially among youth
- Heroin widely available and less costly
- Limited access to medication treatment





Figure 21. Past Year Prescription Pain Reliever Misuse among People Aged 12 or Older: 2015-2018

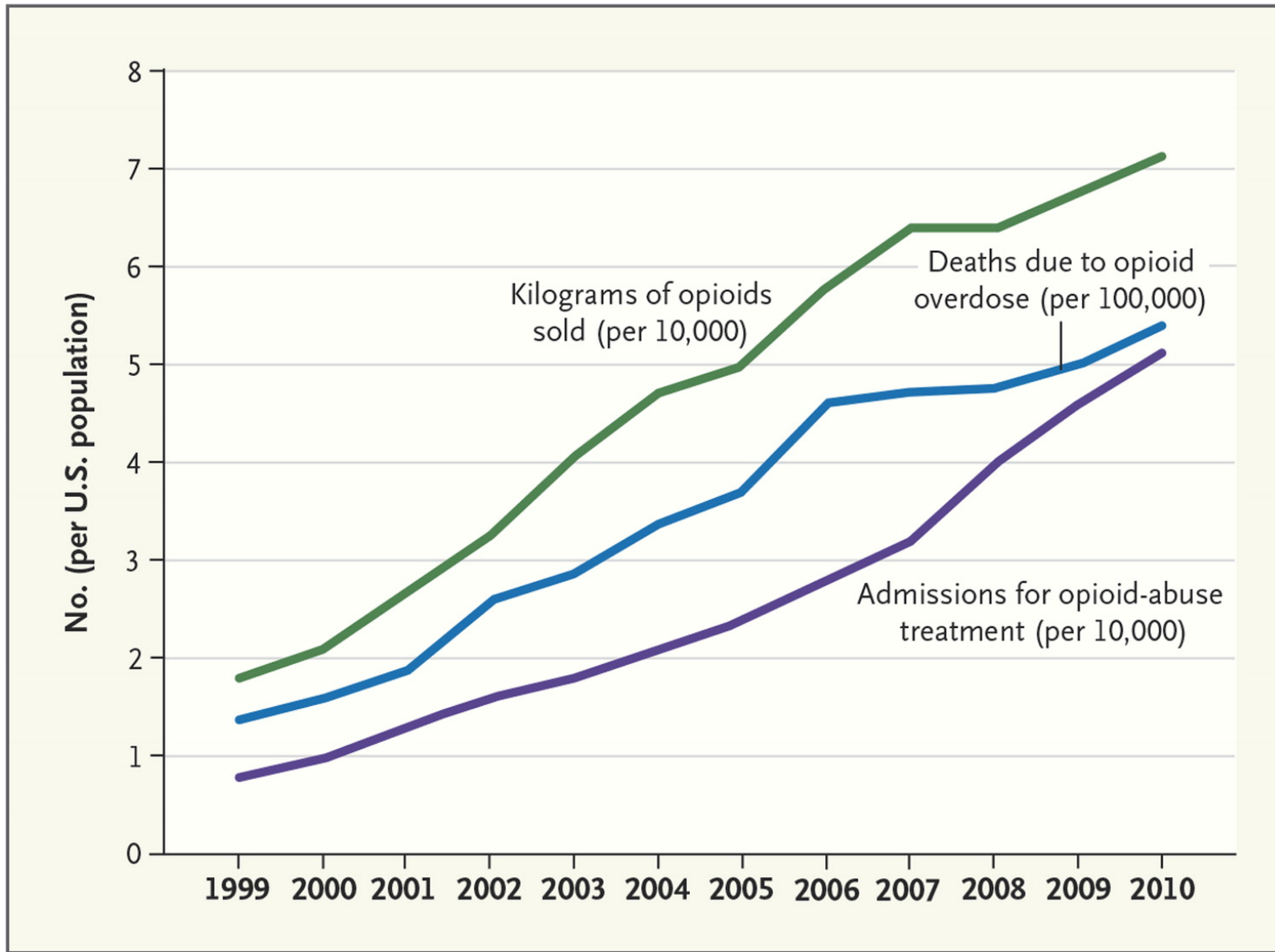


+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.



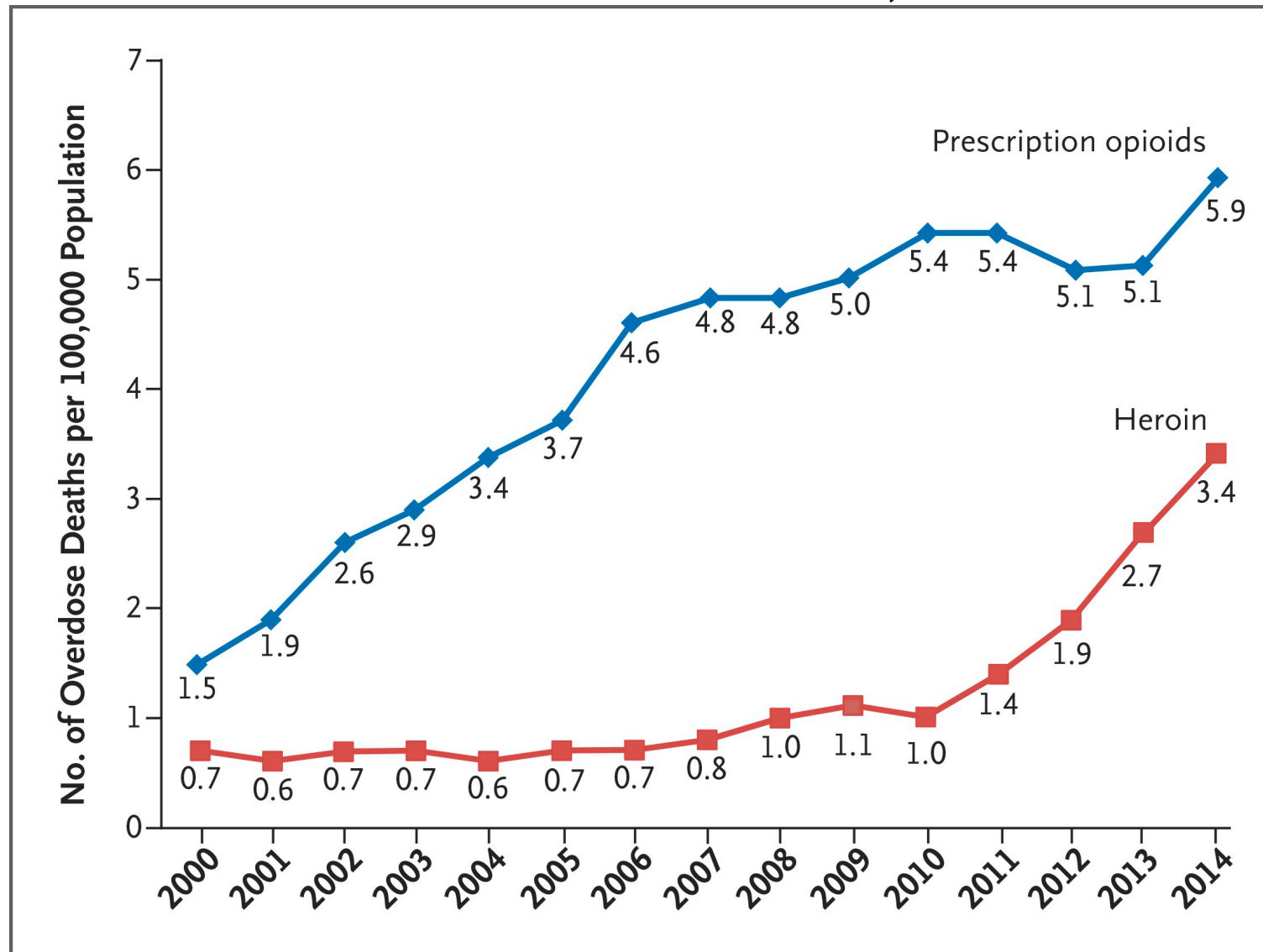


Opioid Sales, Admissions for Opioid-Abuse Treatment, and Deaths Due to Opioid Overdose in the United States 1999–2010

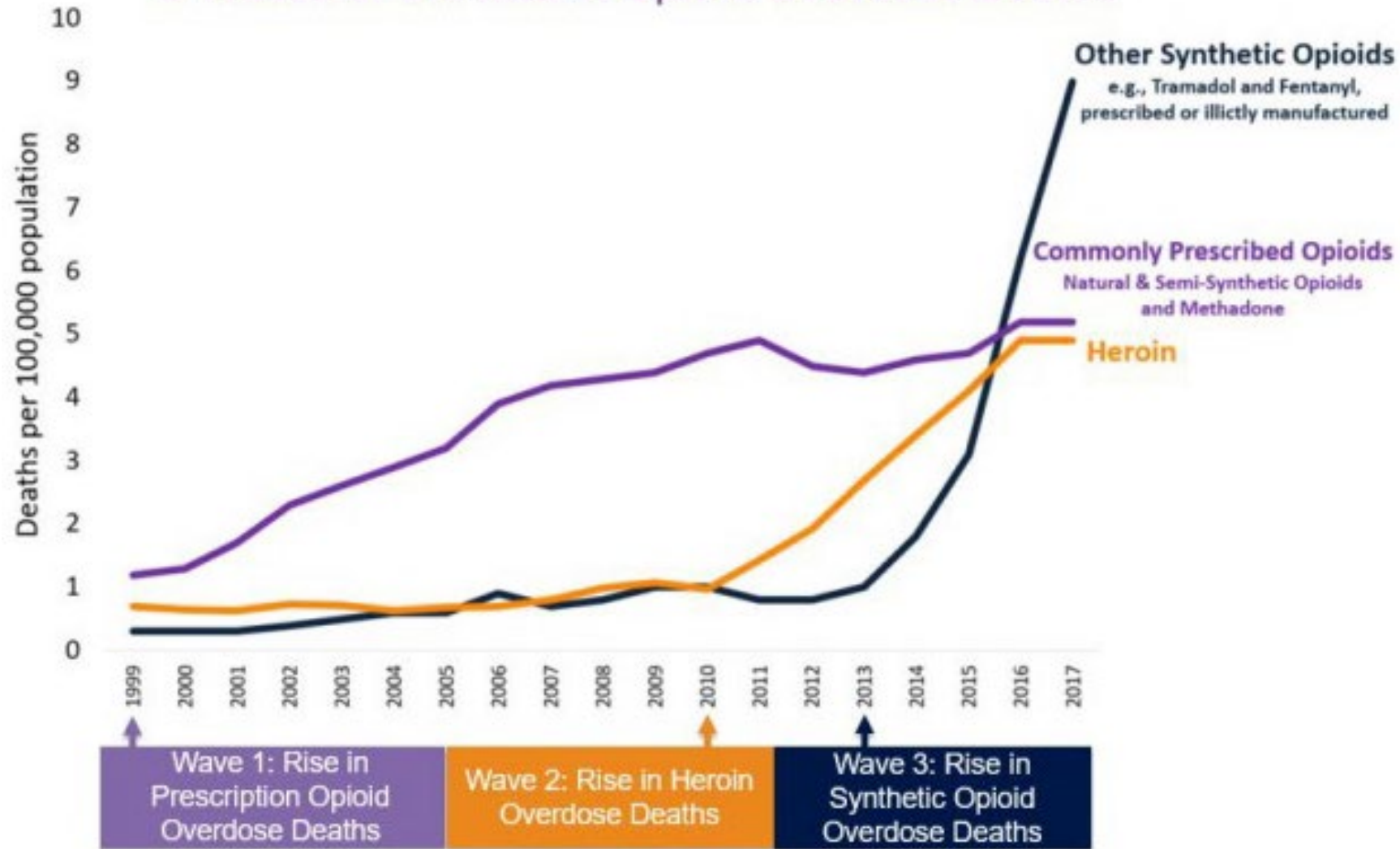




Age-Adjusted Overdose Death Rates Related to Prescription Opioids and Heroin in the United States, 2000–2014



3 Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.



There are **192**
drug overdose deaths
every day.

www.cdc.gov

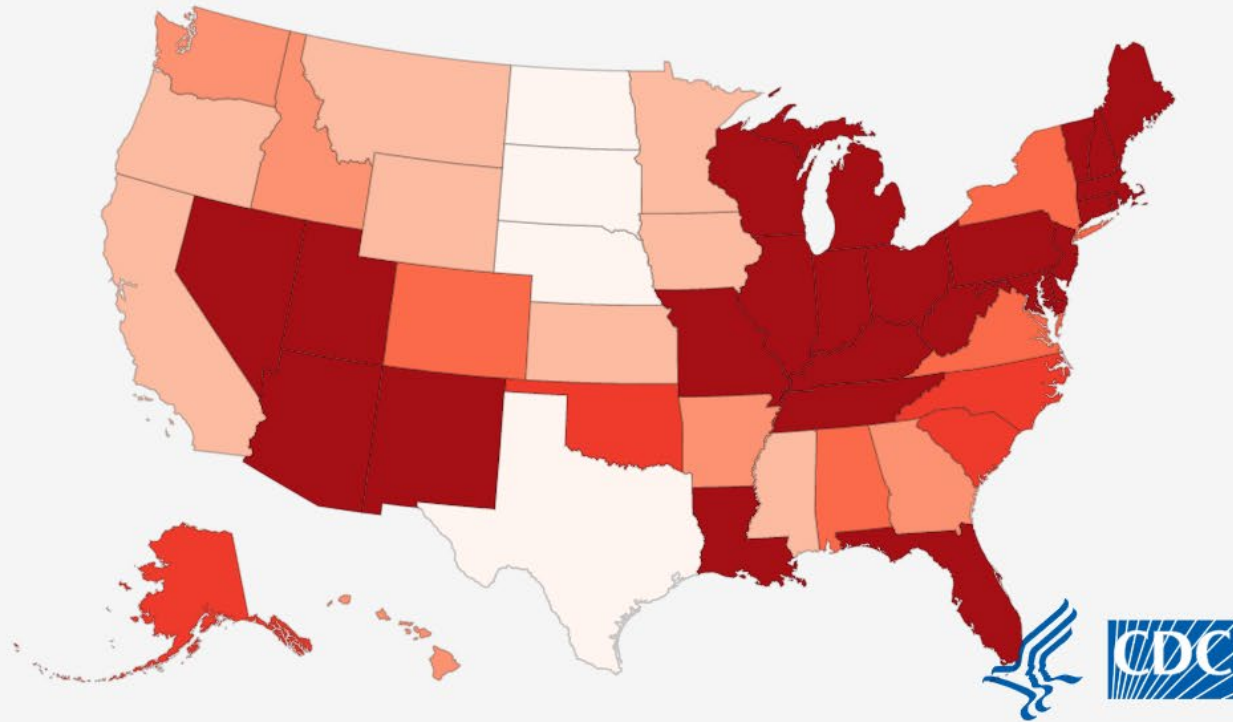


"Drug overdose deaths are the leading cause of injury death in the United States, ahead of motor vehicle deaths and firearms (deaths)," the Drug Enforcement Agency announced in November, 2015

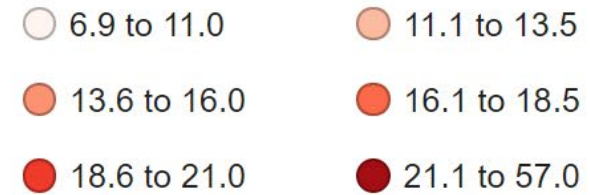
<http://www.cnsnews.com/news/article/susan-jones/dea-drug-overdoses-kill-more-americans-car-crashes-or-firearms>

<https://www.cdc.gov/drugoverdose/epidemic/>

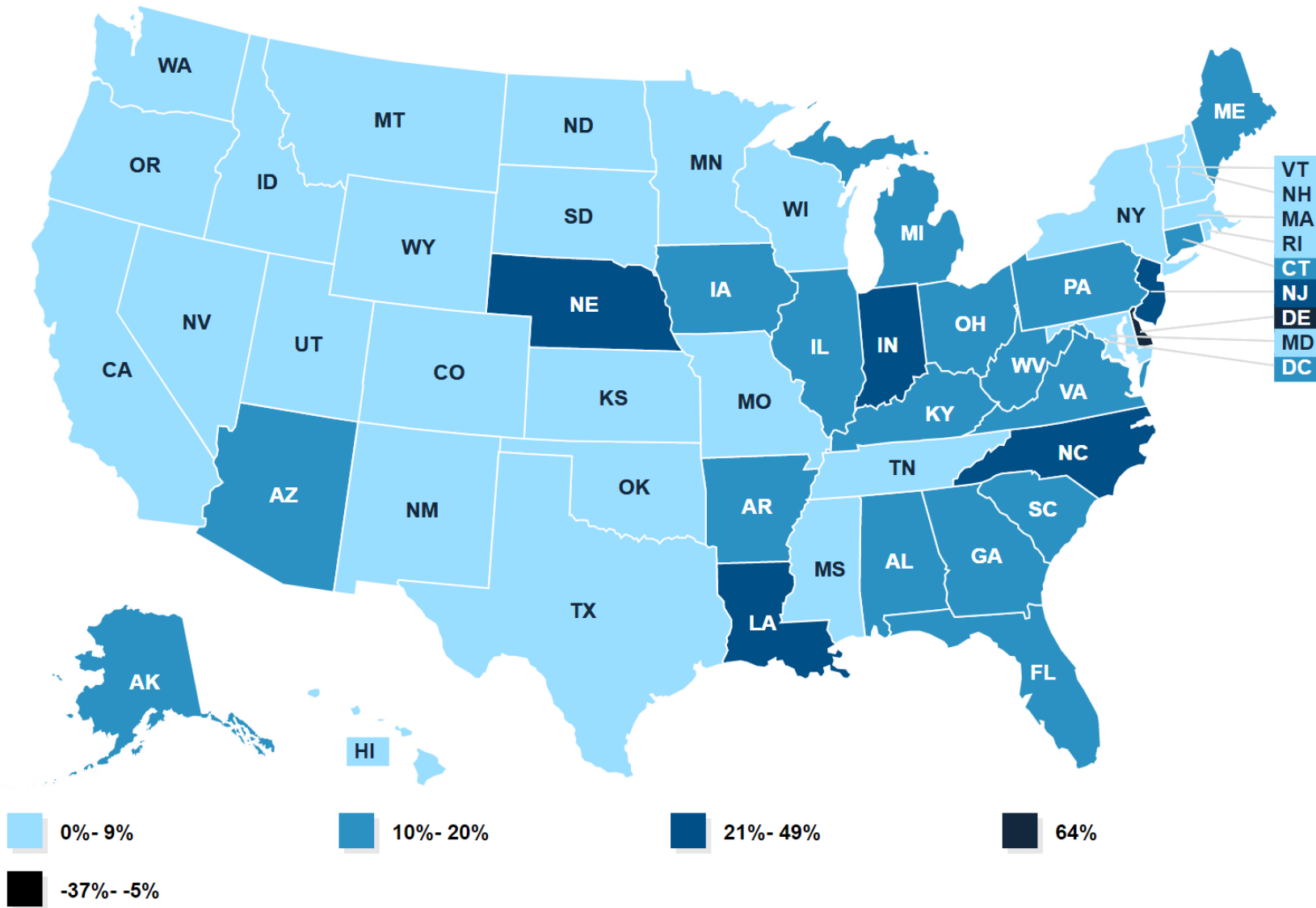
Number and age-adjusted rates of drug overdose deaths by state, US 2017



Legend



INDIANA- 1,236 deaths in 2015
- 1,852 deaths in 2017



Percent change in opioid overdose deaths from prior year: 2016-2017
Indiana – 49% increase; second highest percentage in the US for these years



Opioid Intoxication

What does someone look like when they are intoxicated with opioids?

- Drowsy, sedated (“nodding”)
- Speech and movement may be slowed
- May appear confused or incoherent
- May appear euphoric (“high”)
- Pupils are constricted (“pinpoint”)





Fentanyl

- A completely synthetic opioid, prescribed for severe pain
- Estimated to be 100x more potent than heroin
- Increasingly popular among drug manufacturers & dealers because easy to manufacture
- Often mixed with heroin or sold as heroin, so user is unaware
- Extremely deadly
- Epidemic rise in overdoses: for instance, now accounts for 2/3 of overdoses in Massachusetts *
- Difficult to reverse with naloxone because of potency



Lethal doses comparison





Predictors of overdose

- **Concurrent use of benzo (1.6)**
- **Concurrent use of antipsychotics (2.3)**
- **Chronic lung disease (1.7)**
- **Dose of opioids taken (4.0)**
- **Alcohol use (1.9)**
- **Mood disorders (1.8)**
- **History of heart disease (5.3)**
- **Prior overdose history (28.5)**





Physical dependence
on opioids

≠

Opioid use disorder
(opioid addiction)





BOTTOM LINE

**OPIOID USE DISORDER IS
A
FATAL DISEASE**





What is the Definition of Opioid Use Disorder?

(also known as opioid “addiction”)

According to the American Society of Addiction Medicine’s definition:

Addiction is a primary, chronic and relapsing brain disease characterized by an individual pathologically pursuing reward and/or relief by substance use and other behaviors



Reducing Stigma

- Individuals with substance use disorders (SUDs) are highly stigmatized
- Although addiction is a brain disease, people with SUDs are often regarded as simply needing more willpower, rather than treatment
- Language use perpetuates stigma in healthcare and in society at large
- Stigma prevents people from seeking care
- **What are some situations in which you see stigmatizing behavior or language related to SUDs?**
- Health care teams can send a powerful message by avoiding stigmatizing language and behavior





EDUCATE CLIENTS ON OVERDOSE RISK

- **Ask them if they have or know someone who has overdosed, stories are more powerful than statistics**
- **Empathy, don't judge, build the relationship and trust**
- **Discuss the risks**
- **Offer Naloxone at the first visit (it may be your only chance)**



Indiana Family & Social Services Administration Division of Mental Health and Addiction Adult Addiction Treatment Services

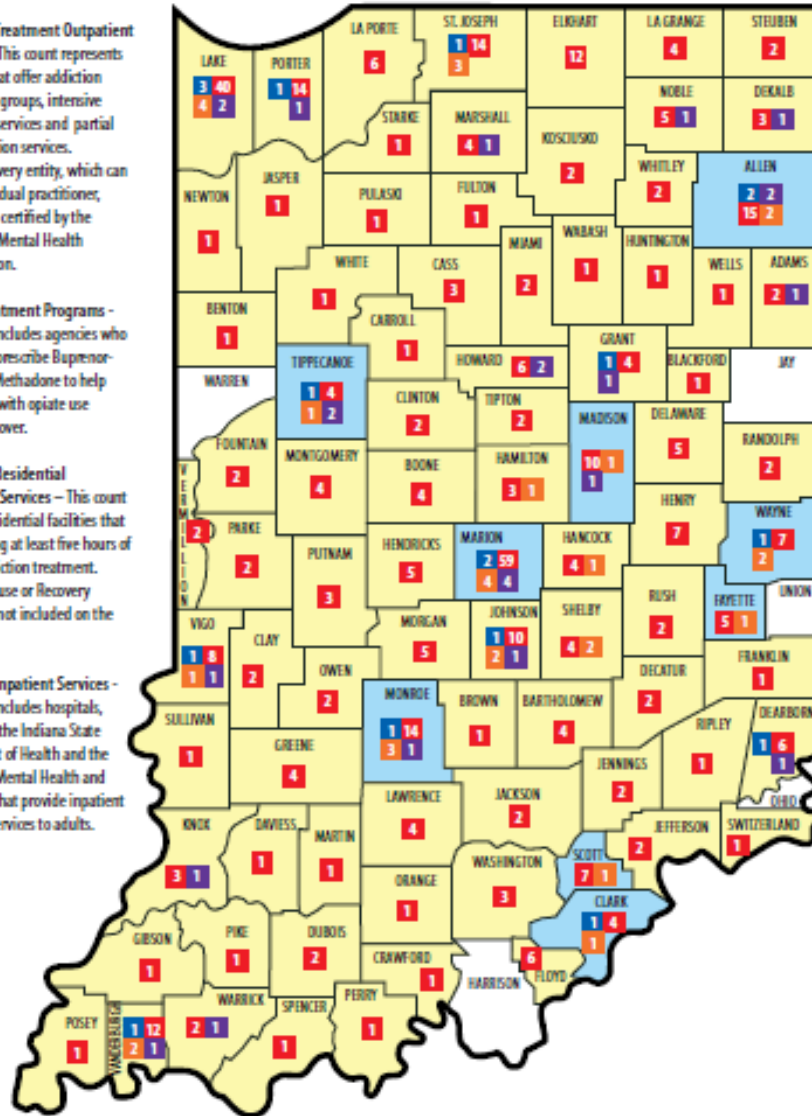
Counties with Syringe Exchanges in Blue

Addiction Treatment Outpatient Services – This count represents locations that offer addiction counseling, groups, intensive outpatient services and partial hospitalization services. Currently, every entity, which can be an individual practitioner, needs to be certified by the Division of Mental Health and Addiction.

Opioid Treatment Programs – This count includes agencies who are able to prescribe Buprenorphine and Methadone to help individuals with opiate use disorder recover.

Addiction Residential Treatment Services – This count includes residential facilities that are providing at least five hours of clinical addiction treatment. Halfway House or Recovery Houses are not included on the map.

Addiction Inpatient Services – This count includes hospitals, licensed by the Indiana State Department of Health and the Division of Mental Health and Addiction, that provide inpatient addiction services to adults.





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