



# Opioid & Substance Data among American Indian & Alaska Native People

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didg<sup>w</sup>álic Immersion Training, November 9, 2022



**NORTHWEST PORTLAND AREA  
INDIAN HEALTH BOARD**  
*Indian Leadership for Indian Health*

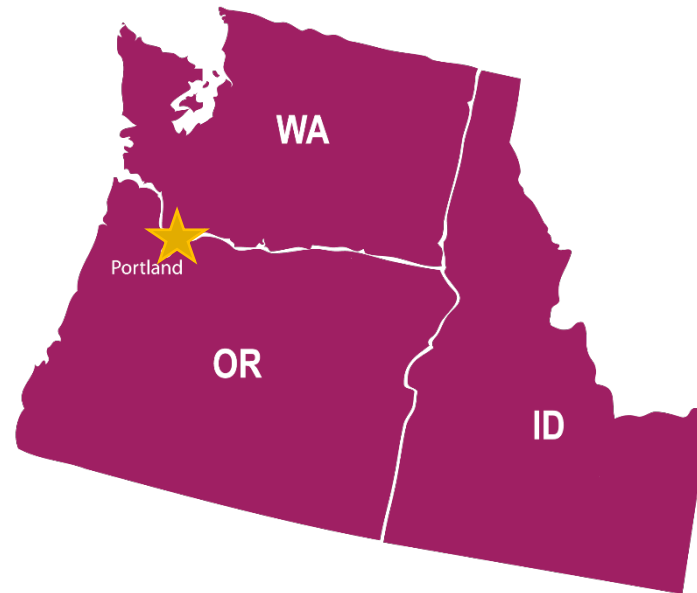
# Who am I & where do I work?



**Heidi Lovejoy, MSc**  
Substance Use Epidemiologist

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- **Northwest Tribal Epidemiology Center (NWTEC)**  
Housed within the Northwest Portland Area Indian Health Board (NPAIHB)
- Our organization serves the **43 federally recognized tribes** in a three state region: Washington, Oregon, and Idaho (~300,000 AI/AN)



- If you are in the NW region, contact me for data assistance!
- If you're located outside the NW, contact your EpiCenter!  
<https://tribalepicenters.org/>



# Tribal Public Health Infrastructure Grant (TEC-PHI)

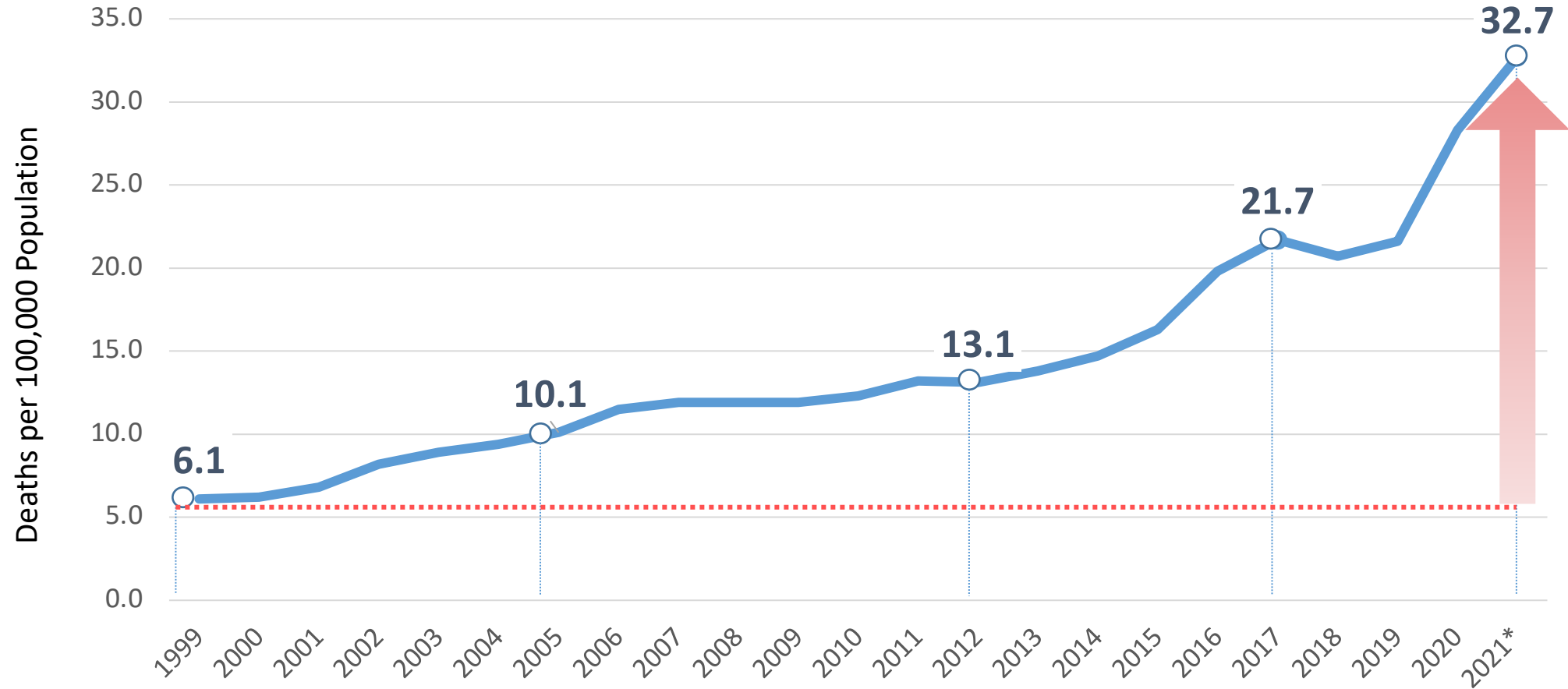
- Grant from the Centers for Disease Control (CDC) to Tribal Epidemiology Centers
- Specific section on **opioid & substance data** capacity building
  - Produce opioid/substance data reports for AI/AN
    - Available online: <http://www.npaihb.org/idea-nw/>
  - Assist NW tribes with opioid/substance data needs
    - Contact me! [hlovejoy@NPAIHB.org](mailto:hlovejoy@NPAIHB.org)
  - Gain access to additional opioid/substance state & federal data sources
  - Work with partners to address racial misclassification in data systems



# National Drug Overdose Deaths: Trend Since 1999



5.4 times  
higher



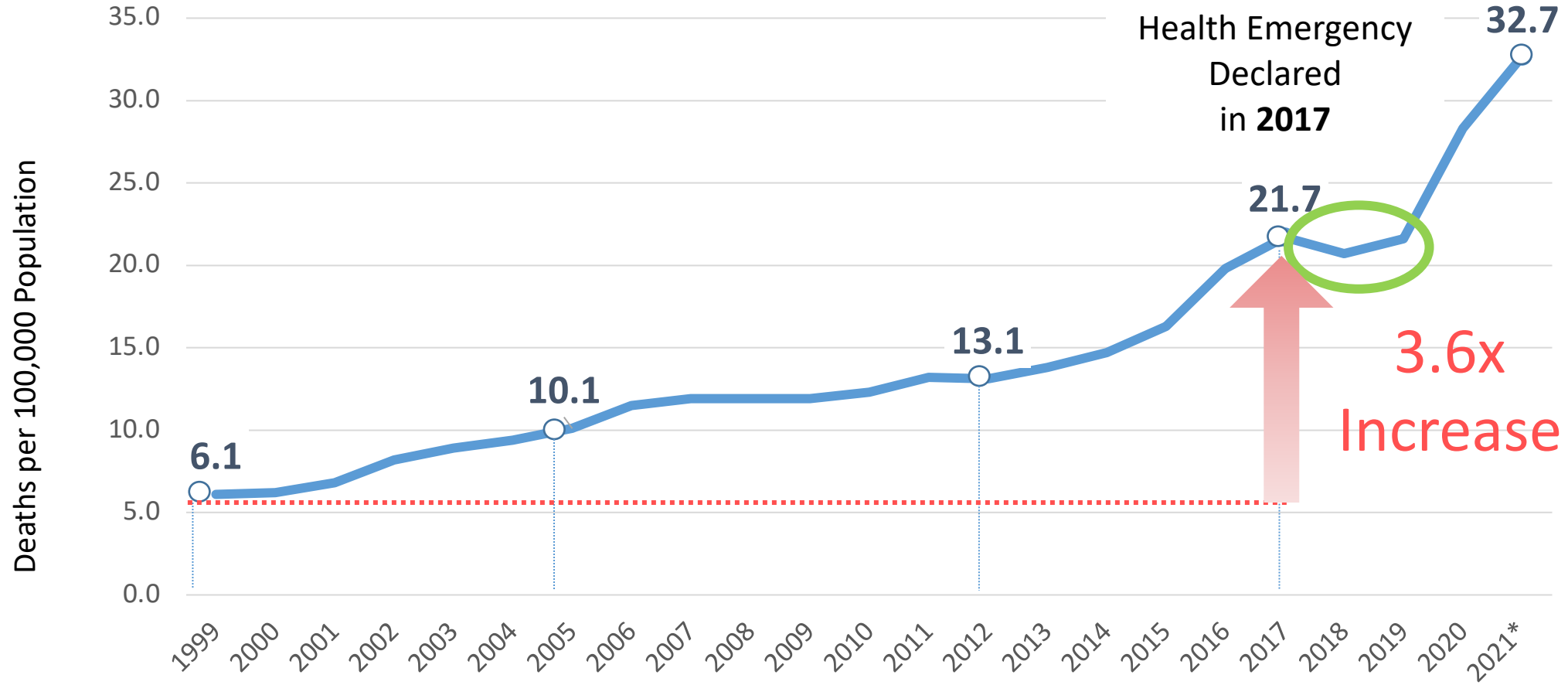
\*Data for 2021 is preliminary



# National Drug Overdose Deaths: Trend Since 1999



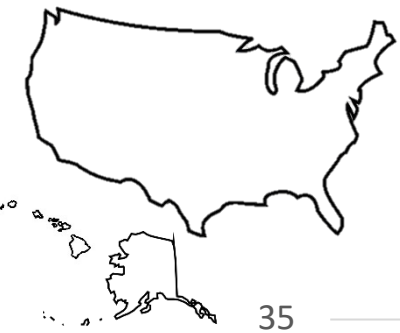
National Public Health Emergency Declared in 2017



\*Data for 2021 is preliminary



# National Drug Overdose Deaths: Trend Since 1999



**2020**

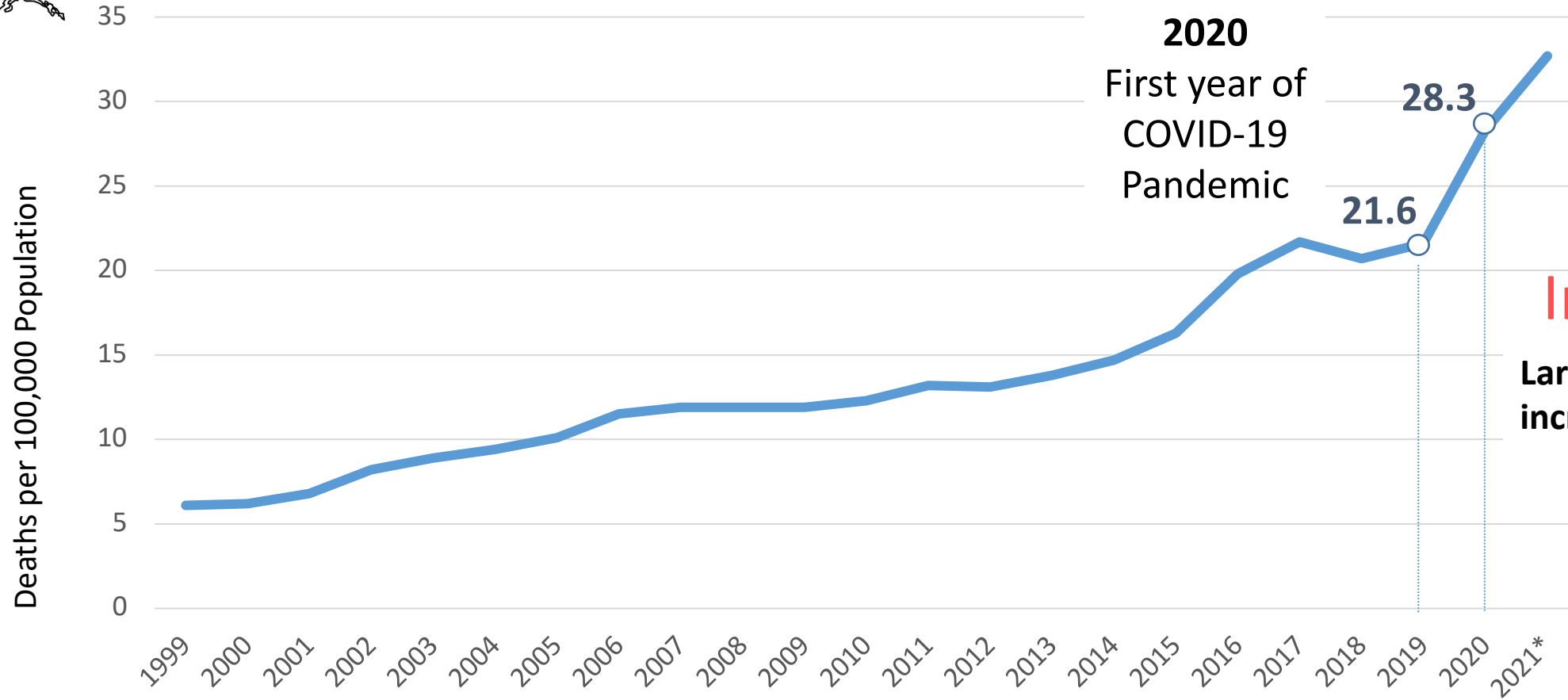
First year of  
COVID-19  
Pandemic



**1.3x**

**Increase**

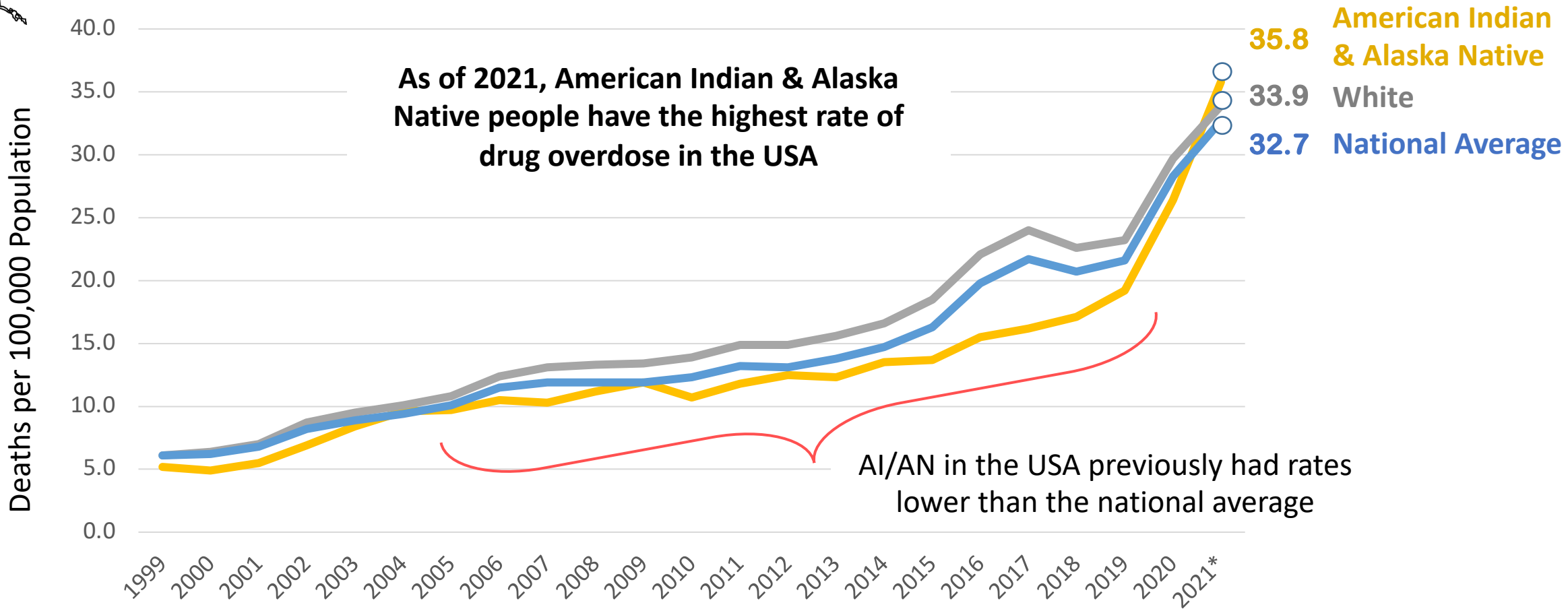
**Largest single year  
increase on record**



\*Data for 2021 is preliminary



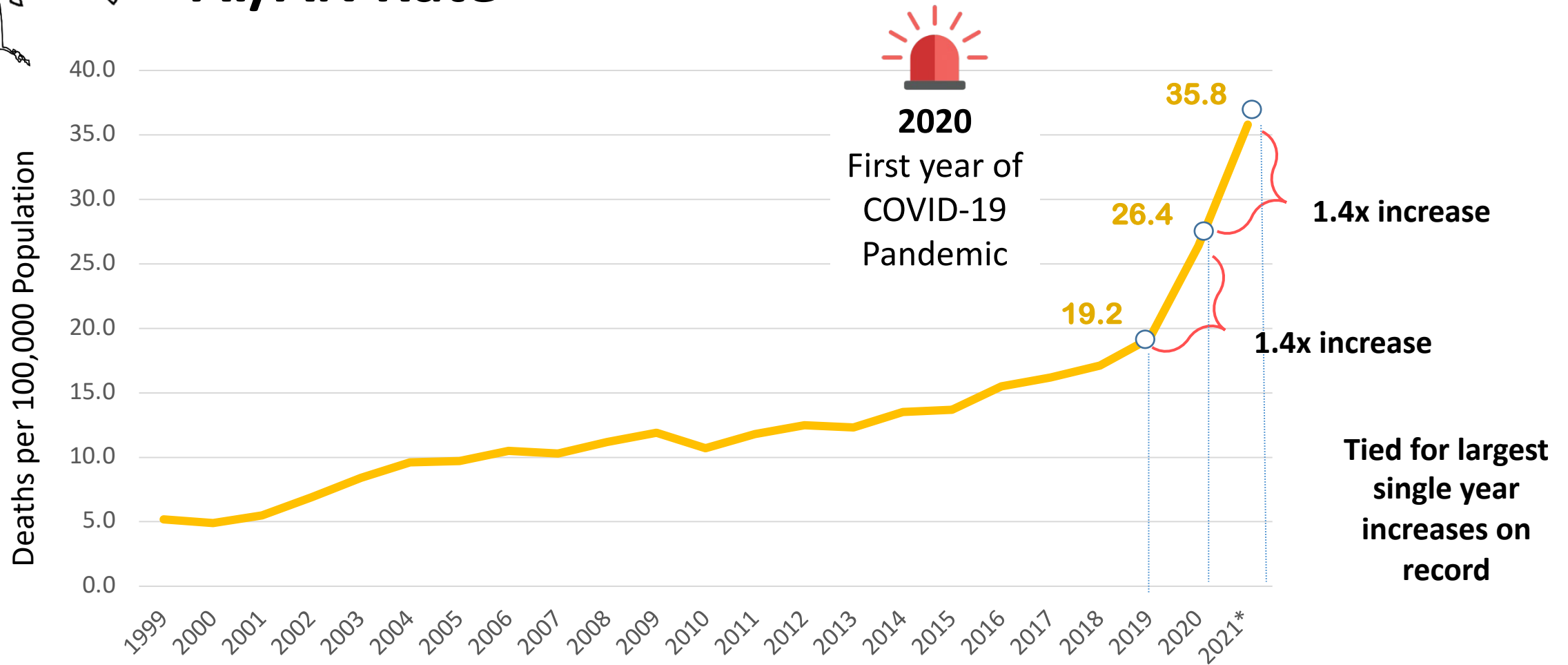
# National Drug Overdose Deaths: By Race



\*Data for 2021 is preliminary



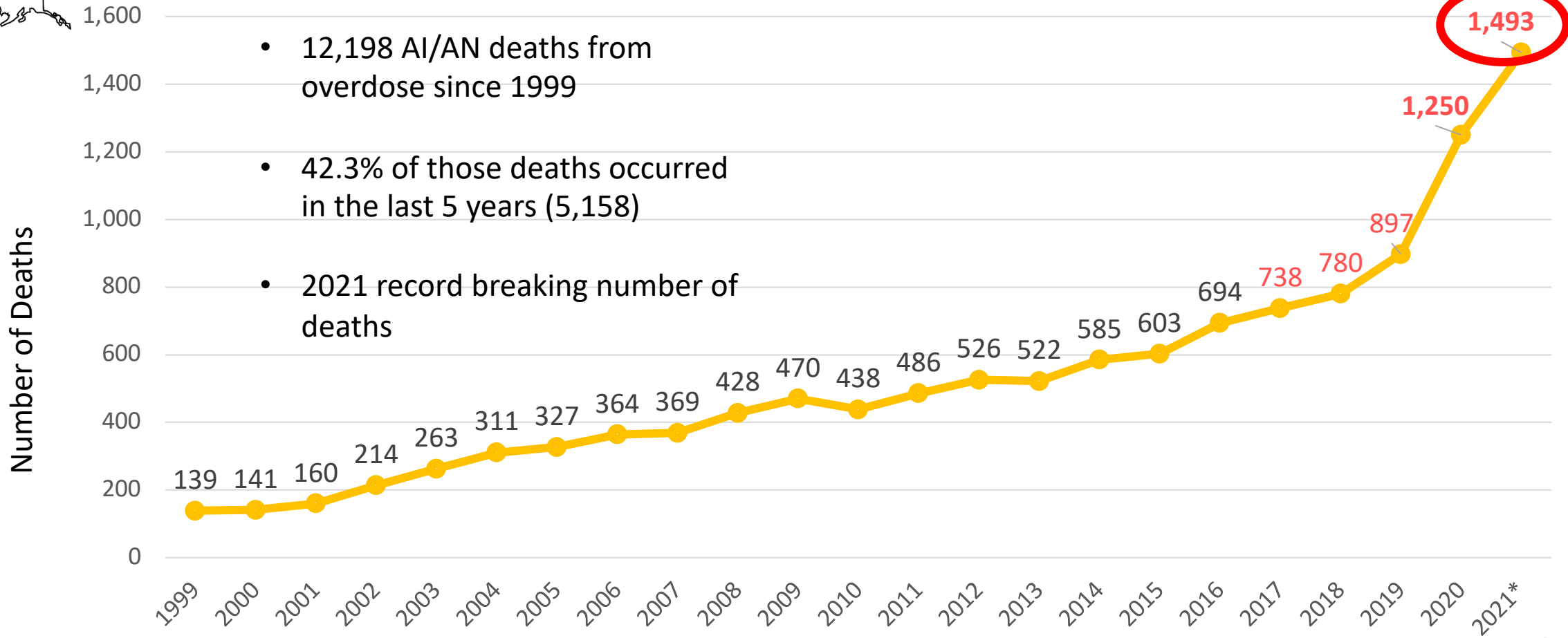
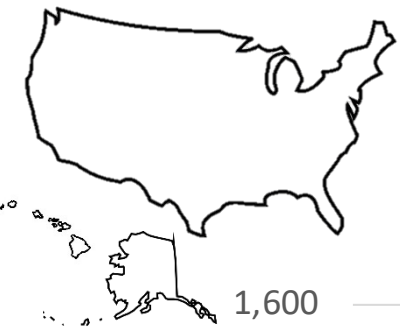
# National Drug Overdose Deaths: AI/AN Rate



\*Data for 2021 is preliminary



# National Drug Overdose Deaths: AI/AN Number of Deaths



- 12,198 AI/AN deaths from overdose since 1999
- 42.3% of those deaths occurred in the last 5 years (5,158)
- 2021 record breaking number of deaths

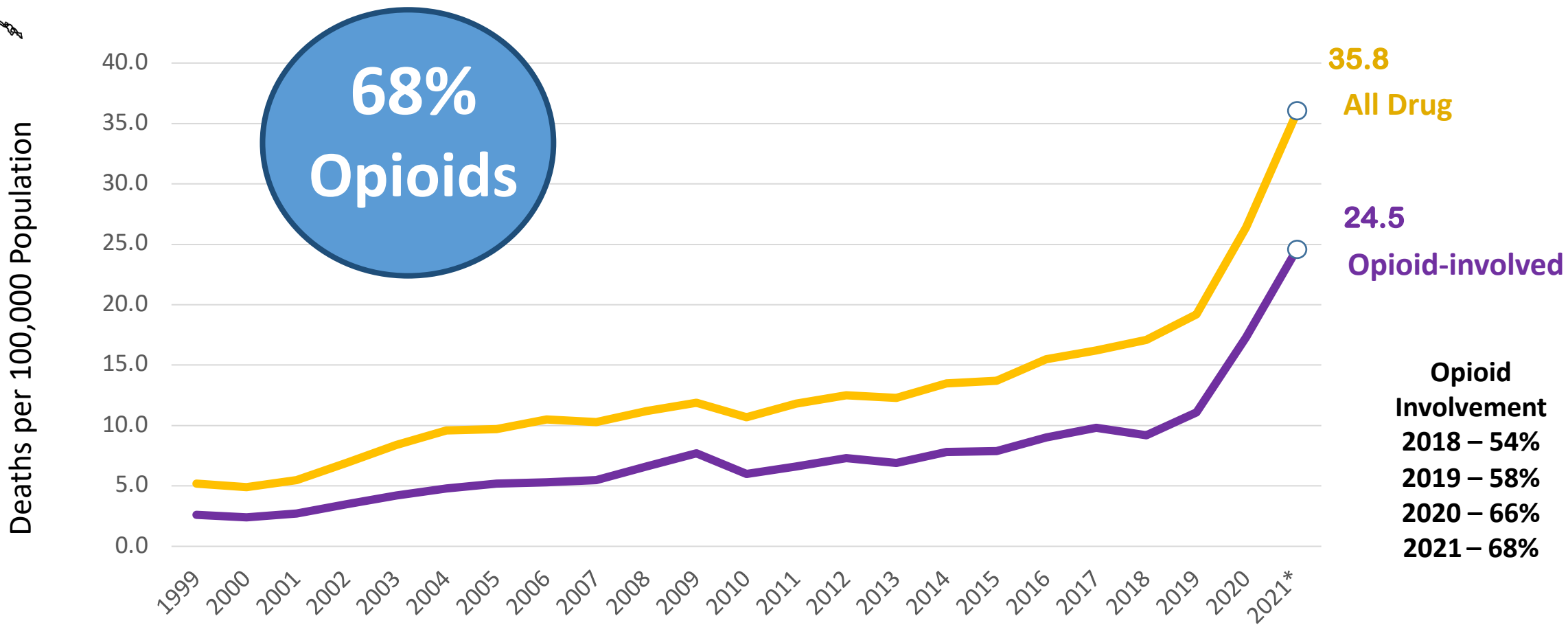
\*Data for 2021 is preliminary



# What Drugs are Involved?



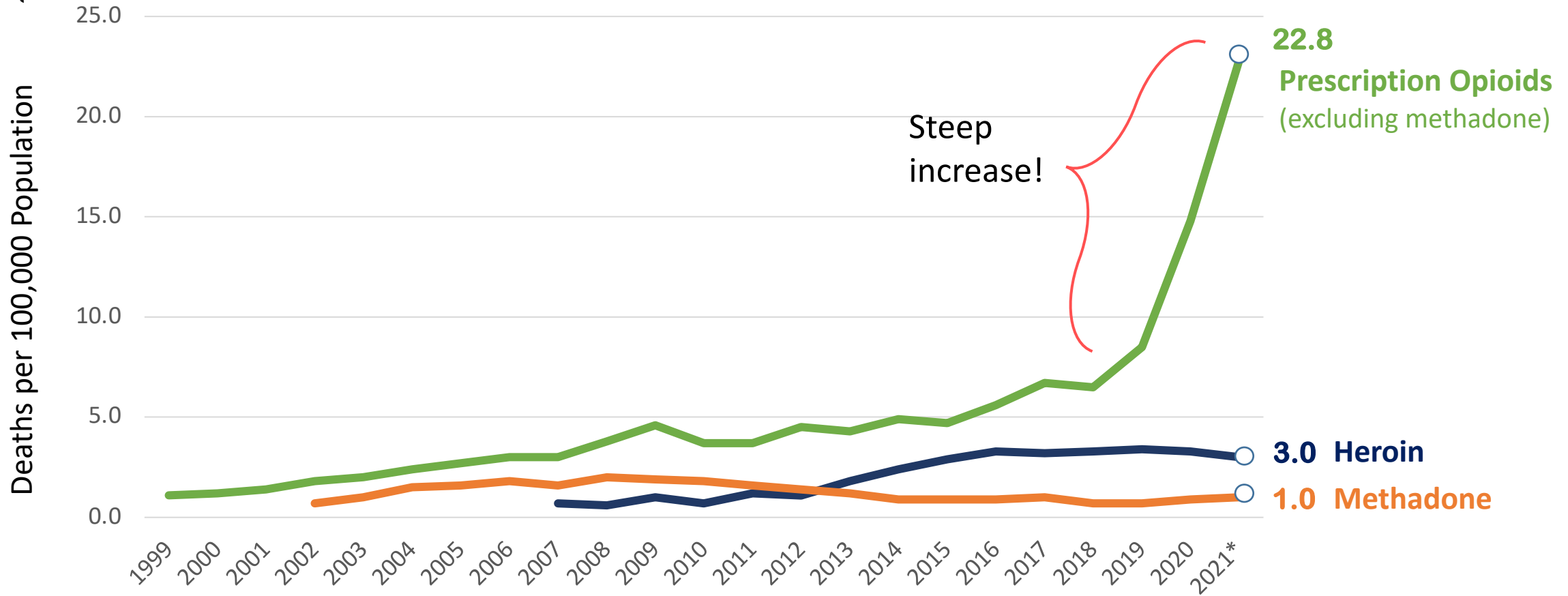
# National AI/AN Drug Overdose Deaths: Which Drugs?



\*Data for 2021 is preliminary



# National AI/AN Drug Overdose Deaths: Which Opioids?



\*Data for 2021 is preliminary





# National **AI/AN** Drug Overdose Deaths: Prescription Opioids

Prescription opioids are typically prescribed for pain relief.

Examples include:

- Fentanyl
- Morphine
- Codeine
- Oxycodone (OxyContin, Percocet)
- Hydrocodone (Vicodin)
- Hydromorphone (Dilaudid)
- Oxymorphone (Opana)

The NIH National Institute on Drug Abuse reports that **fentanyl** now makes up most of this category of drugs<sup>1</sup>

Note: The individual **may or may not have had a valid prescription** for the drug. It could have been obtained illegally.

1. <https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates>





# National **AI/AN** Drug Overdose Deaths: Fentanyl

- Fentanyl is 50-100 times stronger than morphine
- Originally developed for cancer patients (pain)
- Manufactured as a pharmaceutical, but increasingly manufactured illegally
- Illegally manufactured to look like other opioid pills or added to other drugs, often unknown to the person consuming it

## DEA Warns of Brightly-Colored Fentanyl Used to Target Young Americans



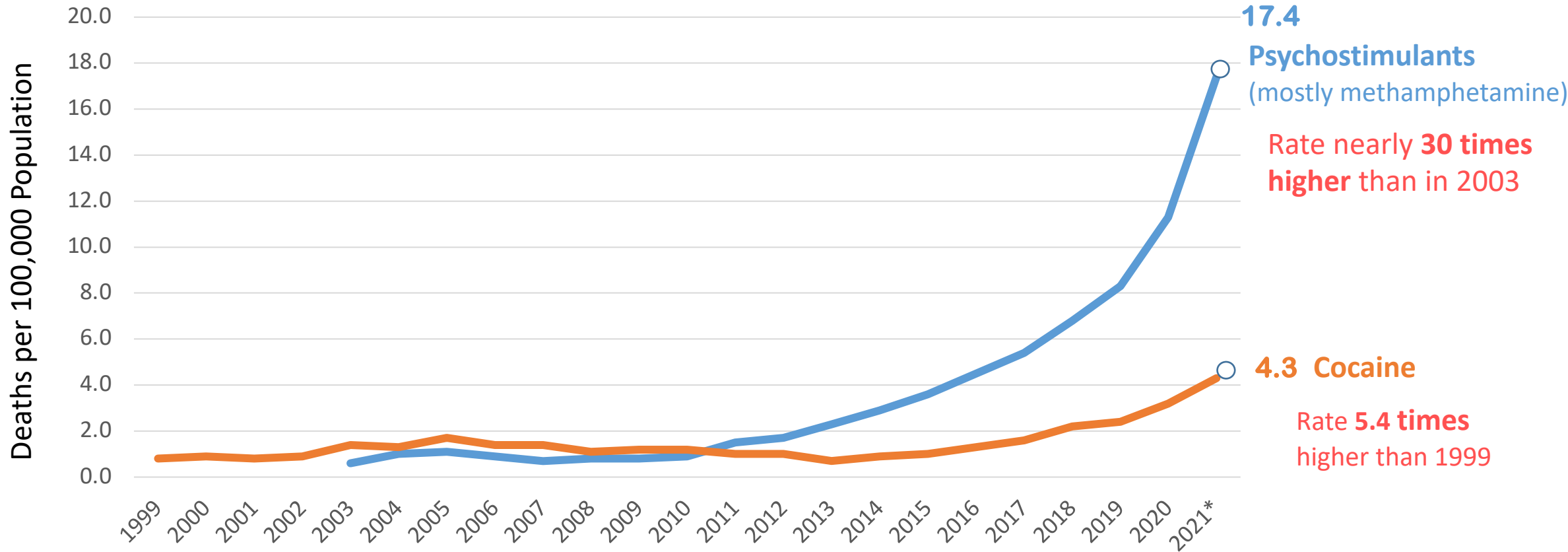
Since August 2022, DEA/police have seized “rainbow fentanyl” in 26 states

1. <https://www.dea.gov/factsheets/fentanyl>
2. <https://www.dea.gov/press-releases/2022/08/30/dea-warns-brightly-colored-fentanyl-used-target-young-americans>



# National AI/AN Drug Overdose Deaths: Other Drugs?

Cannabis, LSD, hallucinogens - numbers too small to calculate reliable rates




**17.4**  
**Psychostimulants**  
(mostly methamphetamine)  
Rate nearly **30 times**  
higher than in 2003

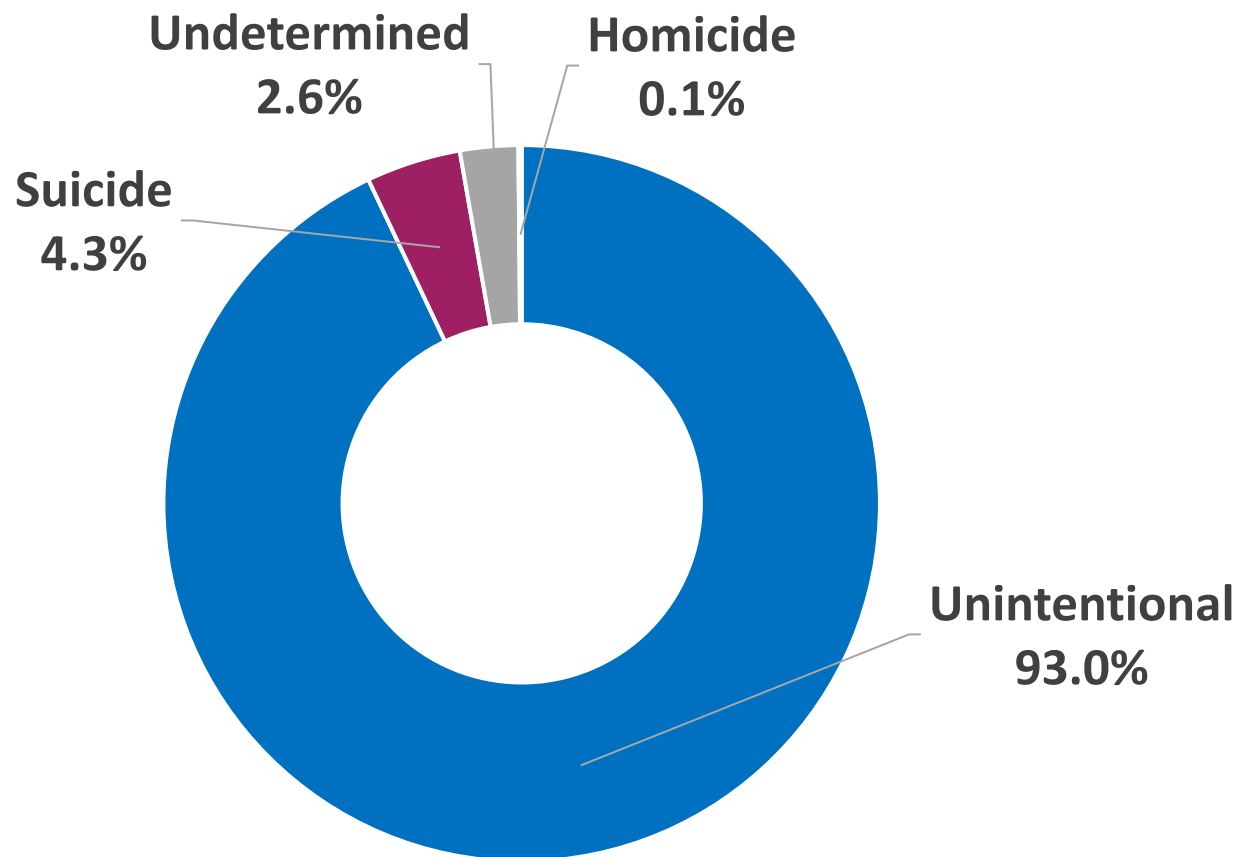
**4.3** **Cocaine**  
Rate **5.4 times**  
higher than 1999

\*Data for 2021 is preliminary





# National **AI/AN** Drug Overdose Deaths: Overdose Intent, 2018-2021\*



- **Most AI/AN overdose deaths were unintentional (accidental).**
- 4.3% of overdose deaths were intentional (suicide)
- In some cases, the intent could not be determined
- There were very few homicide overdose deaths

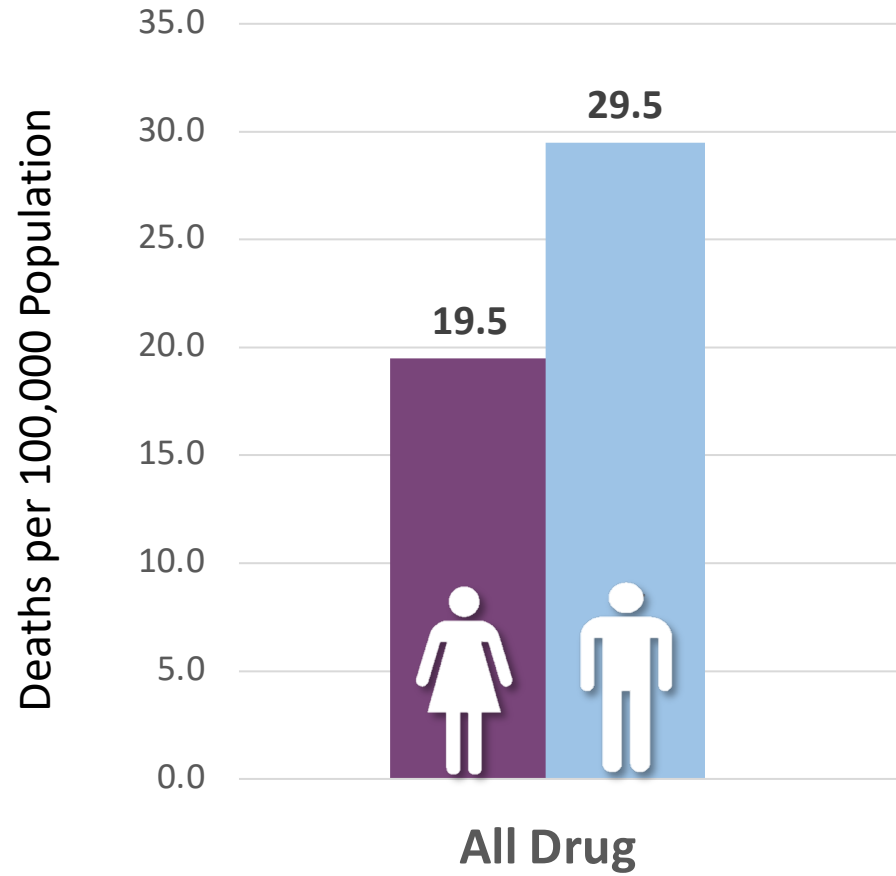
\*Data for 2021 is preliminary



# National AI/AN Drug Overdose Deaths: By Sex, 2018-2021\*



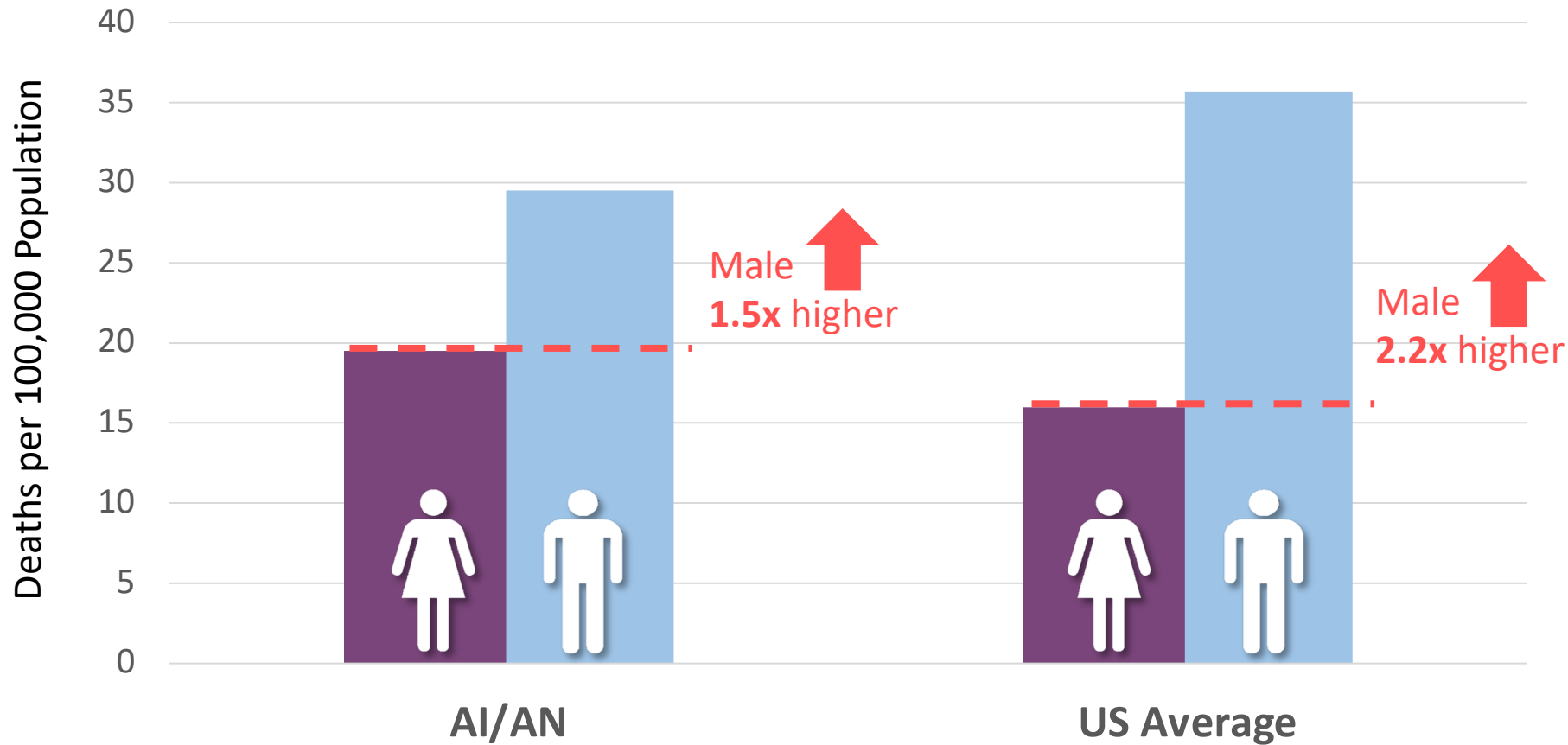
Overdose rates are about  
**1.5 times higher among  
males** in all drug categories



\*Data for 2021 is preliminary



# National Drug Overdose Deaths: By Sex & Race, All Drugs, 2018-2021\*



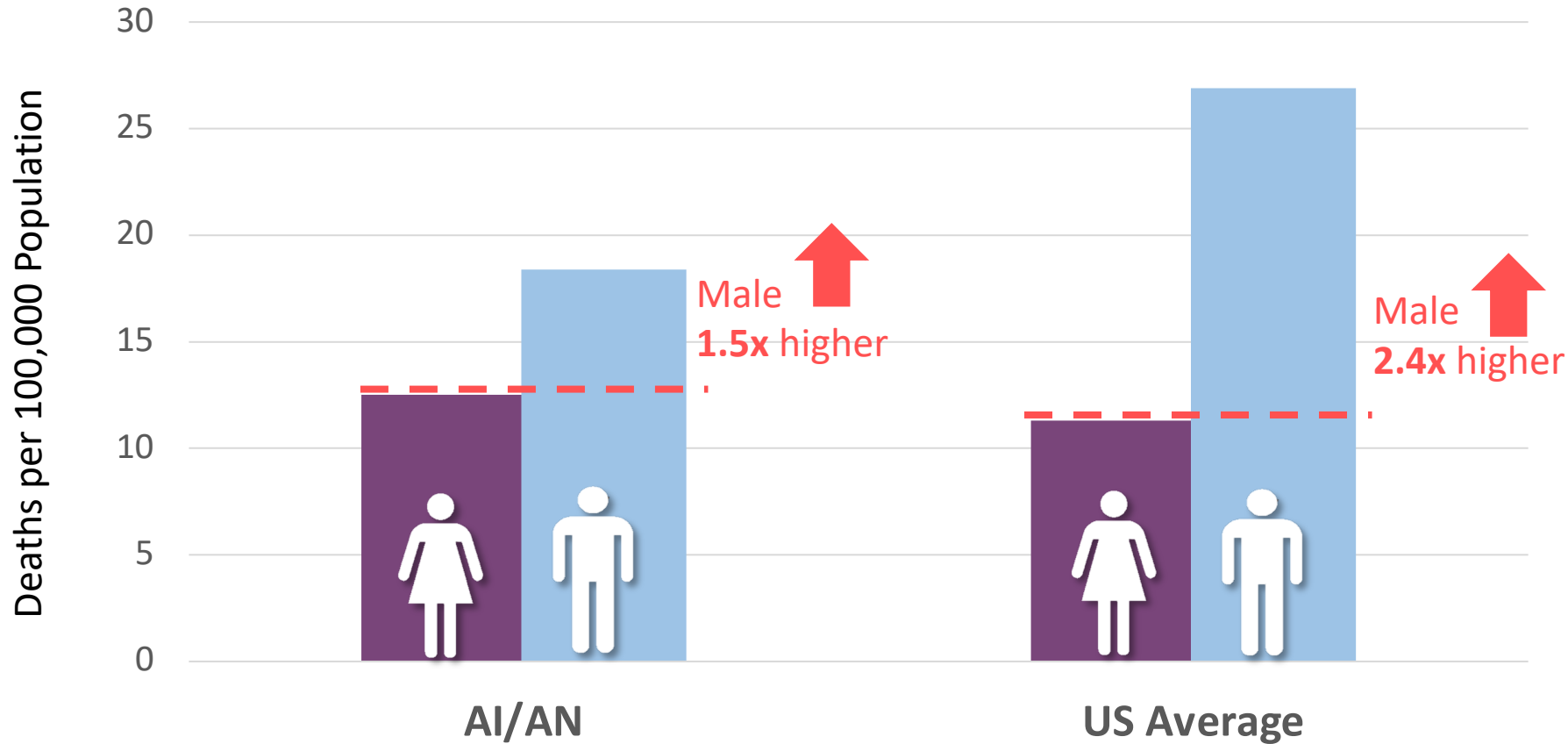
All Drugs:

- Less difference in rates between AI/AN males and females compared to US average
- Female AI/AN rate 1.2x higher than US female average
- Male AI/AN rate 17.4% lower than US male average

\*Data for 2021 is preliminary



# National Drug Overdose Deaths: By Sex & Race, **Opioids**, 2018-2021\*



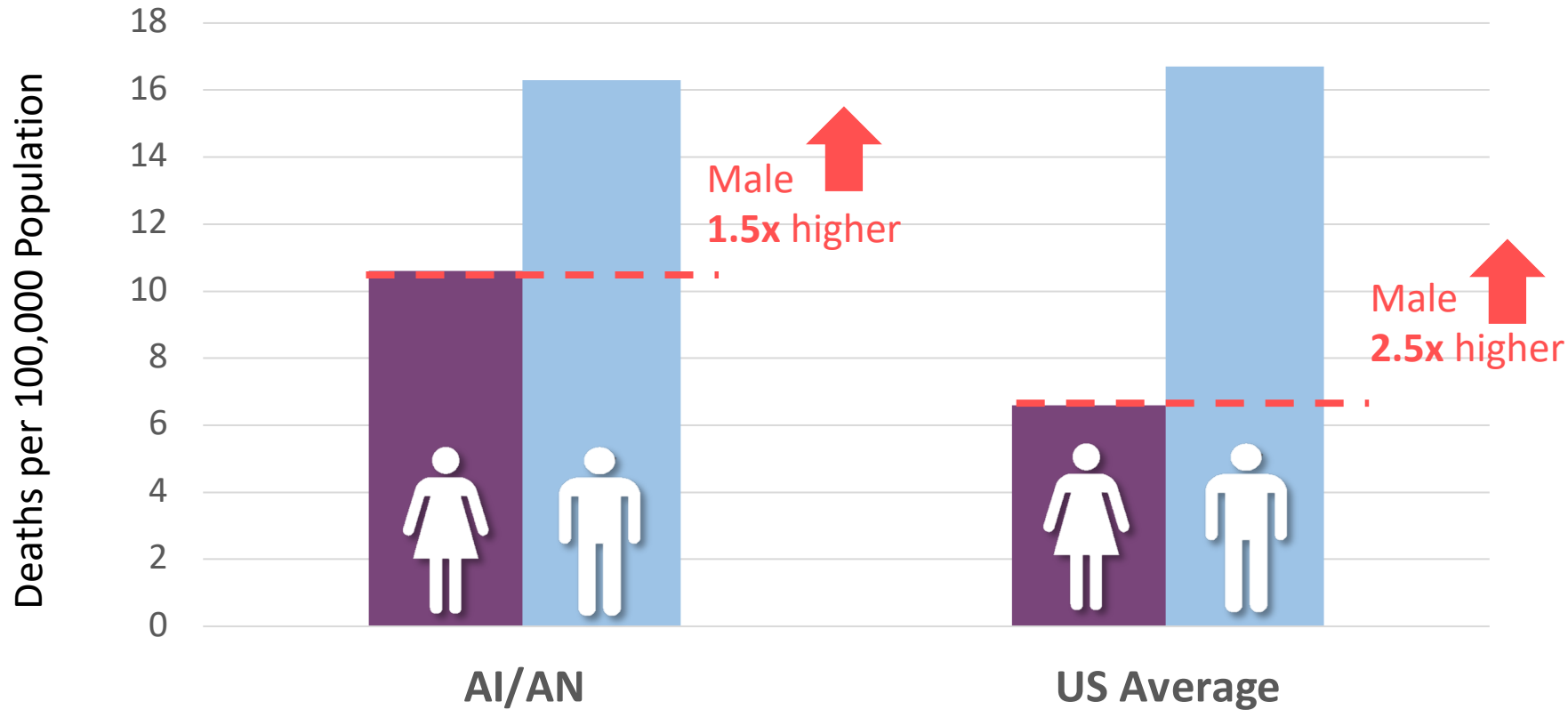
## Opioids:

- Less difference in rates between AI/AN males and females compared to US average
- Female AI/AN rate 1.1x higher than US female average (about the same)
- **Male AI/AN rate 31.6% lower than US male average**

\*Data for 2021 is preliminary



# National Drug Overdose Deaths: By Sex & Race, **Stimulants**, 2018-2021\*



## Stimulants:

- Less difference in rates between AI/AN males and females compared to US average
- **Female AI/AN rate 1.6x higher** than US female average
- Male AI/AN rate 2.4% lower than US male average (about the same)

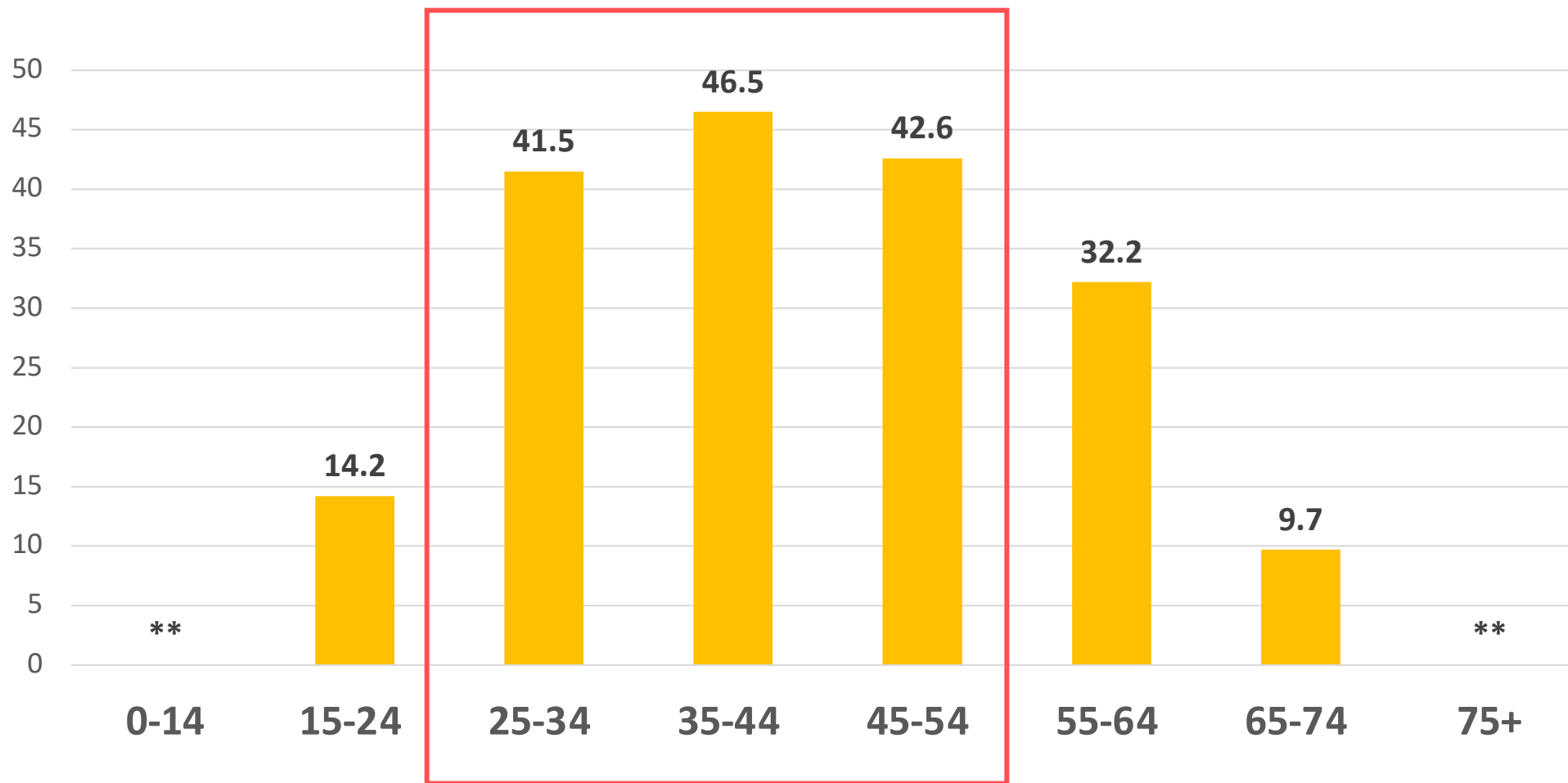
\*Data for 2021 is preliminary



# National AI/AN Drug Overdose Deaths: By Age, 2018-2021\*



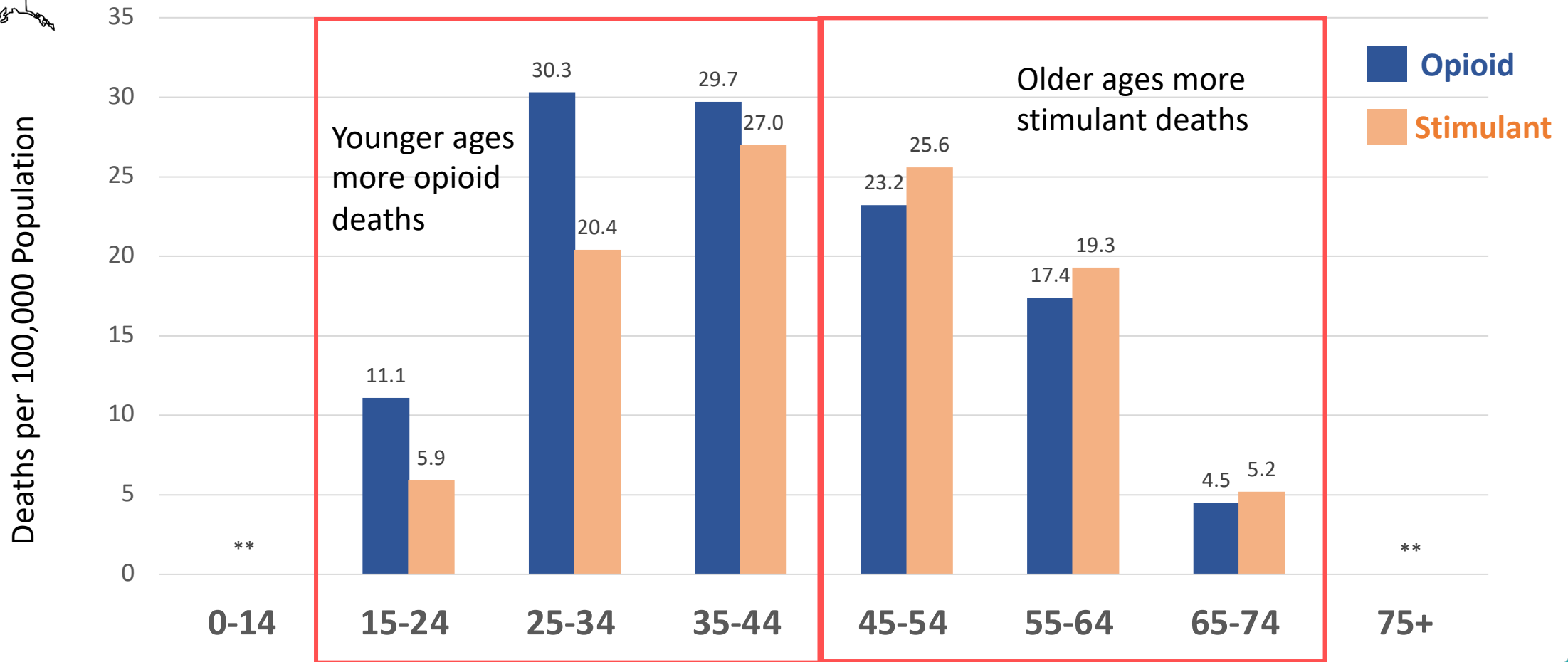
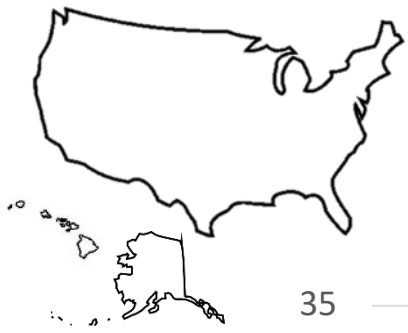
Deaths per 100,000 Population



\*Data for 2021 is preliminary; \*\*Rate suppressed or unreliable due to small count



# National AI/AN Drug Overdose Deaths: By Age & Drug, 2018-2021\*

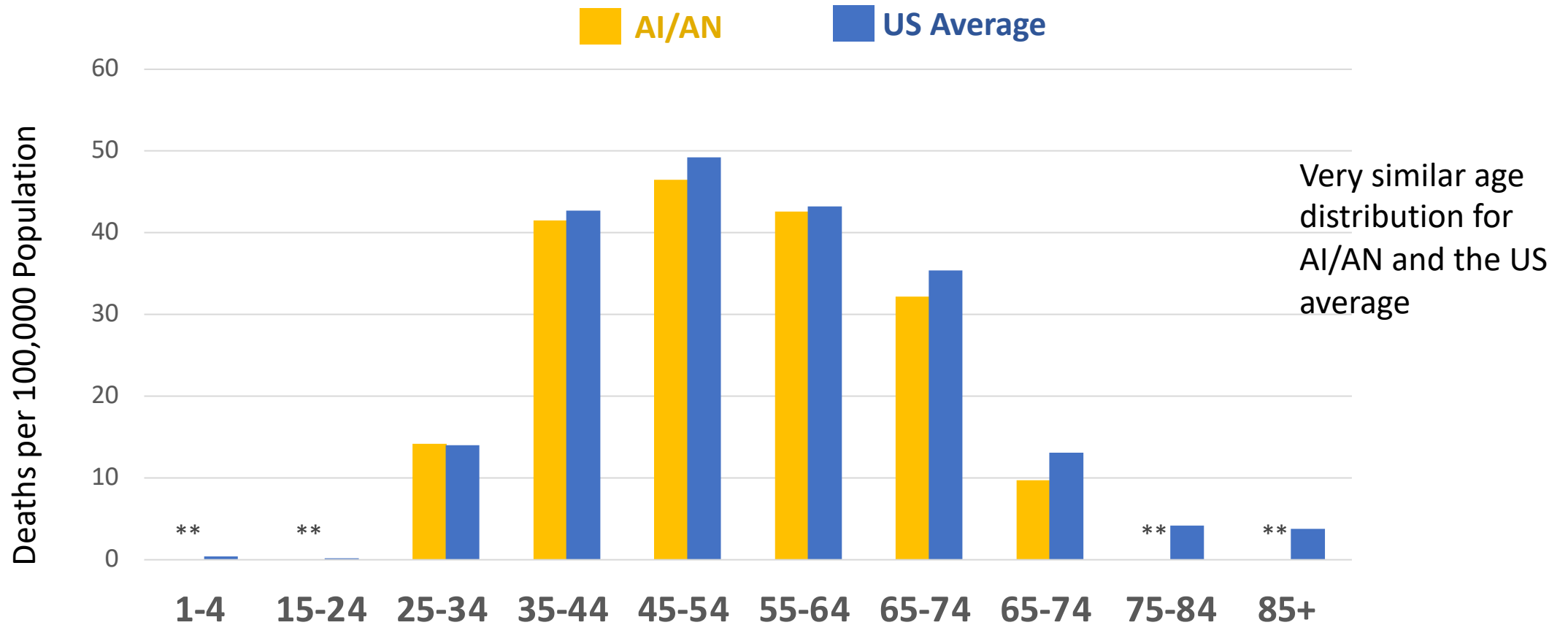


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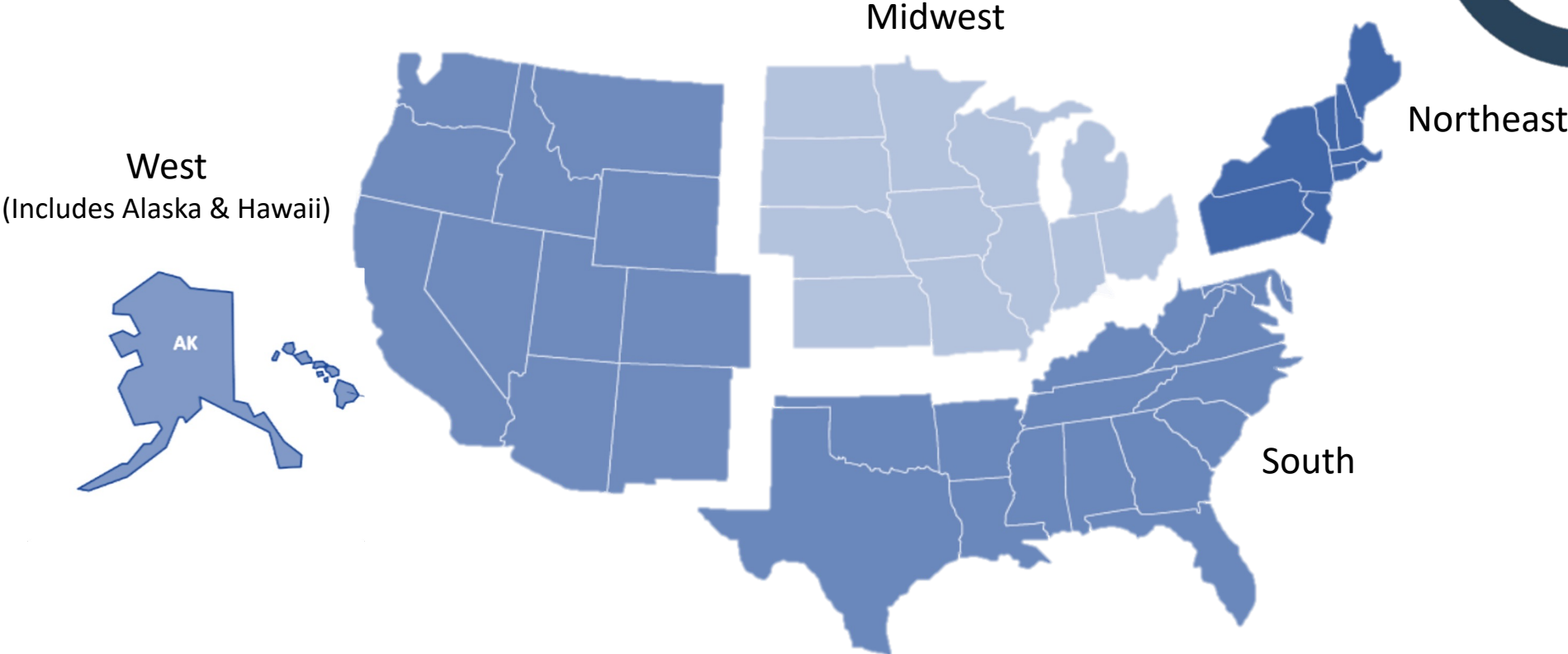
# National Drug Overdose Deaths: By Age & Race, 2018-2021\*



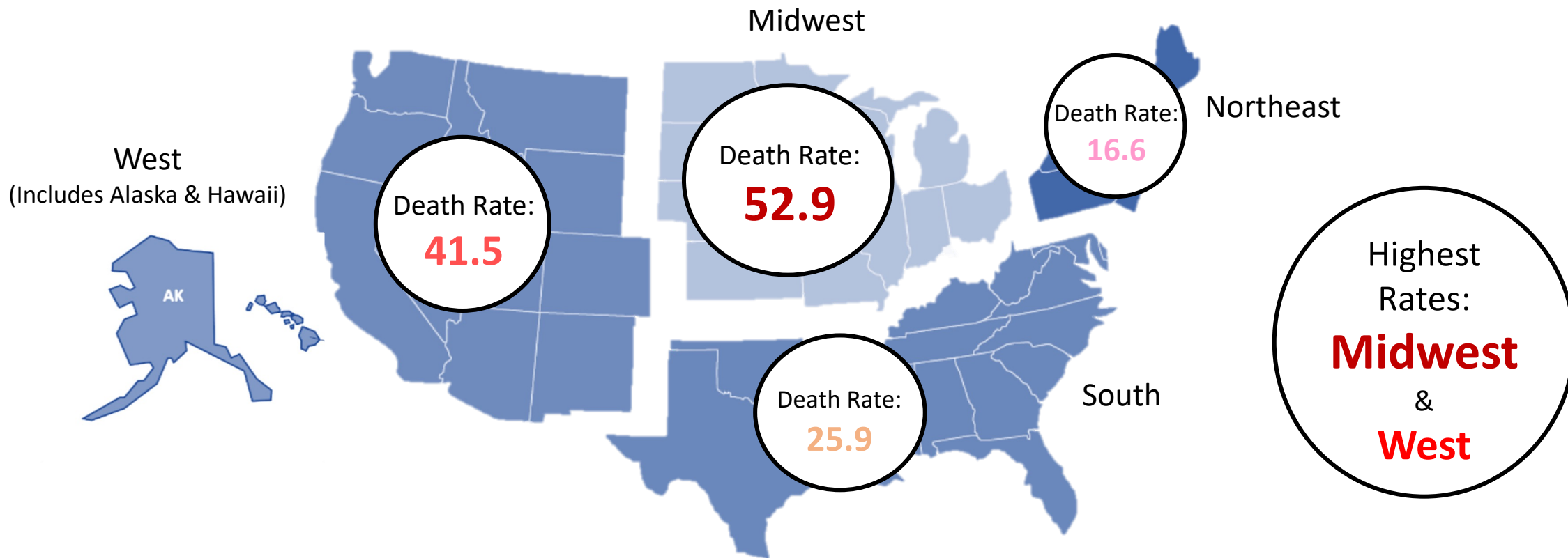
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# Regional Differences?



# National AI/AN Drug Overdose Deaths: By Census Region, 2021\* Rates

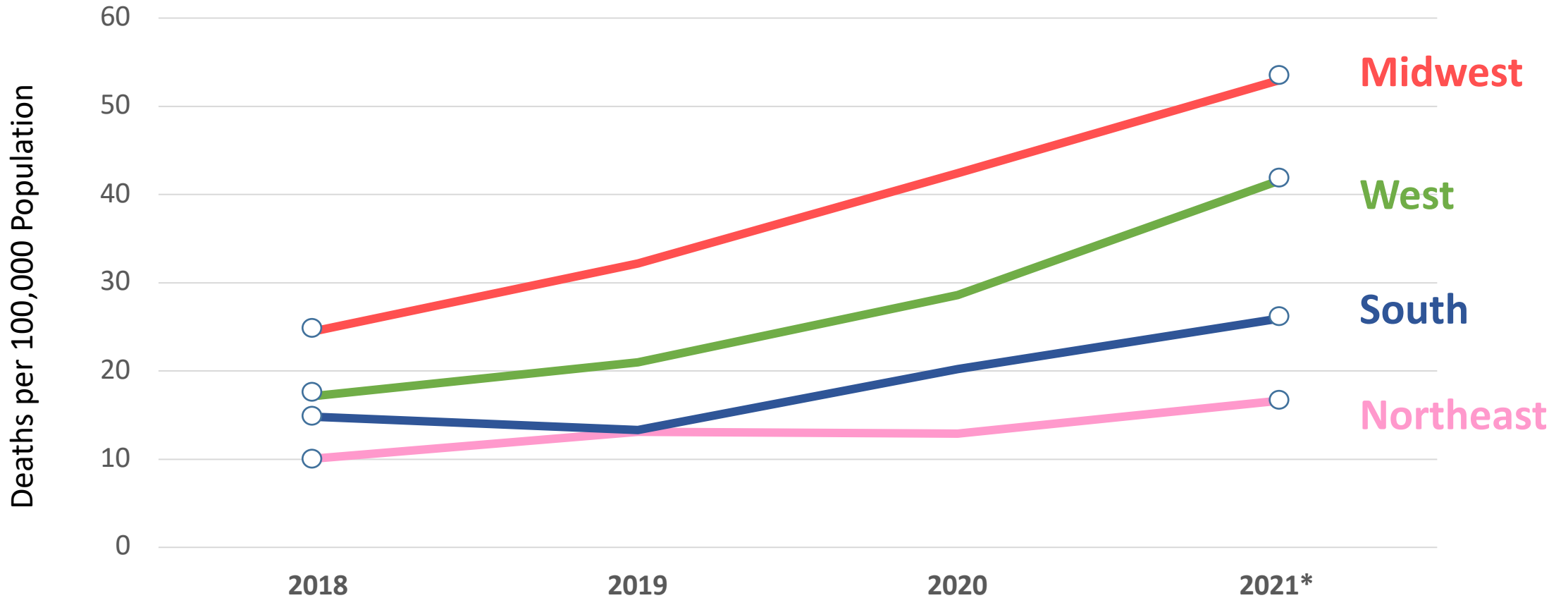


\*Data for 2021 is preliminary





# National AI/AN Drug Overdose Deaths: By Census Region over Time, Rates



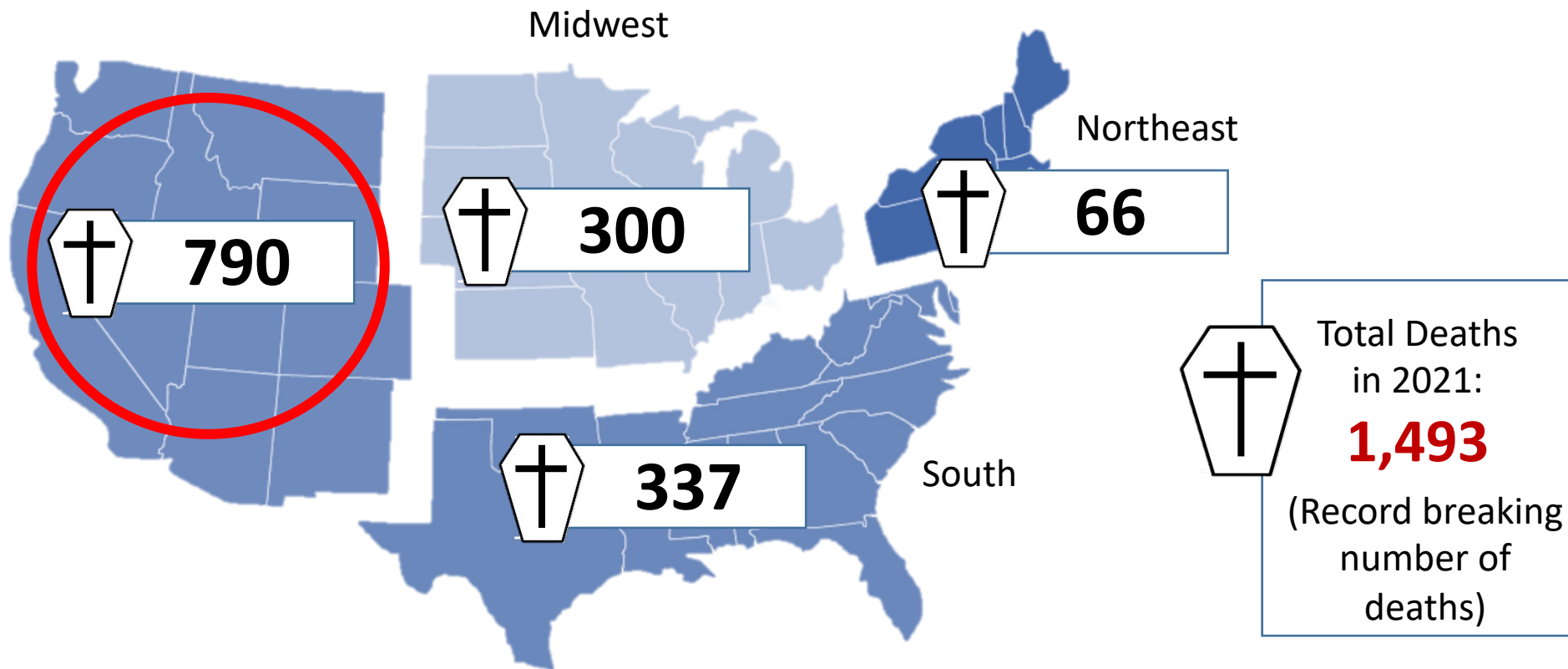
\*Data for 2021 is preliminary



# National AI/AN Drug Overdose Deaths: By Census Region, 2021\* Number of Deaths



- Most AI/AN deaths occurred in the West
- The *rate* is lower in West compared to the Midwest
- The rate is lower because the West has a much larger AI/AN population
  - About 2 million AI/AN in the West vs 600,000 in the Midwest

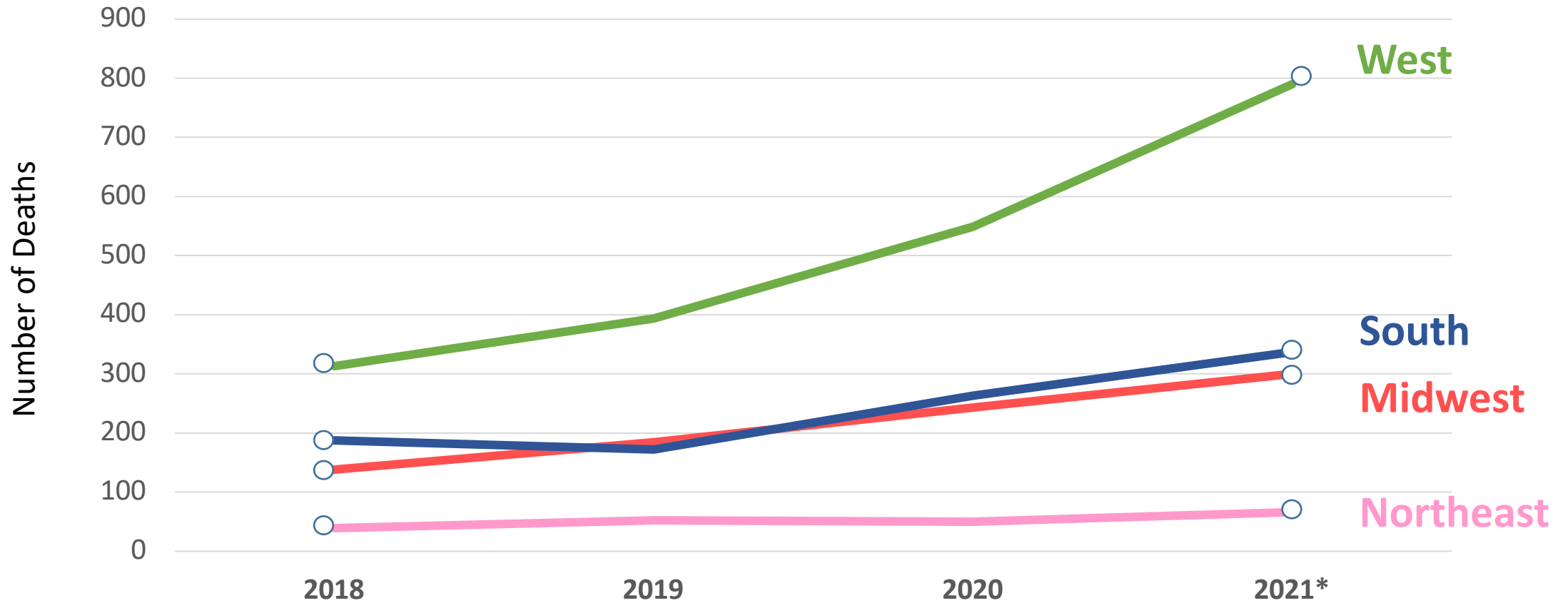


\*Data for 2021 is preliminary





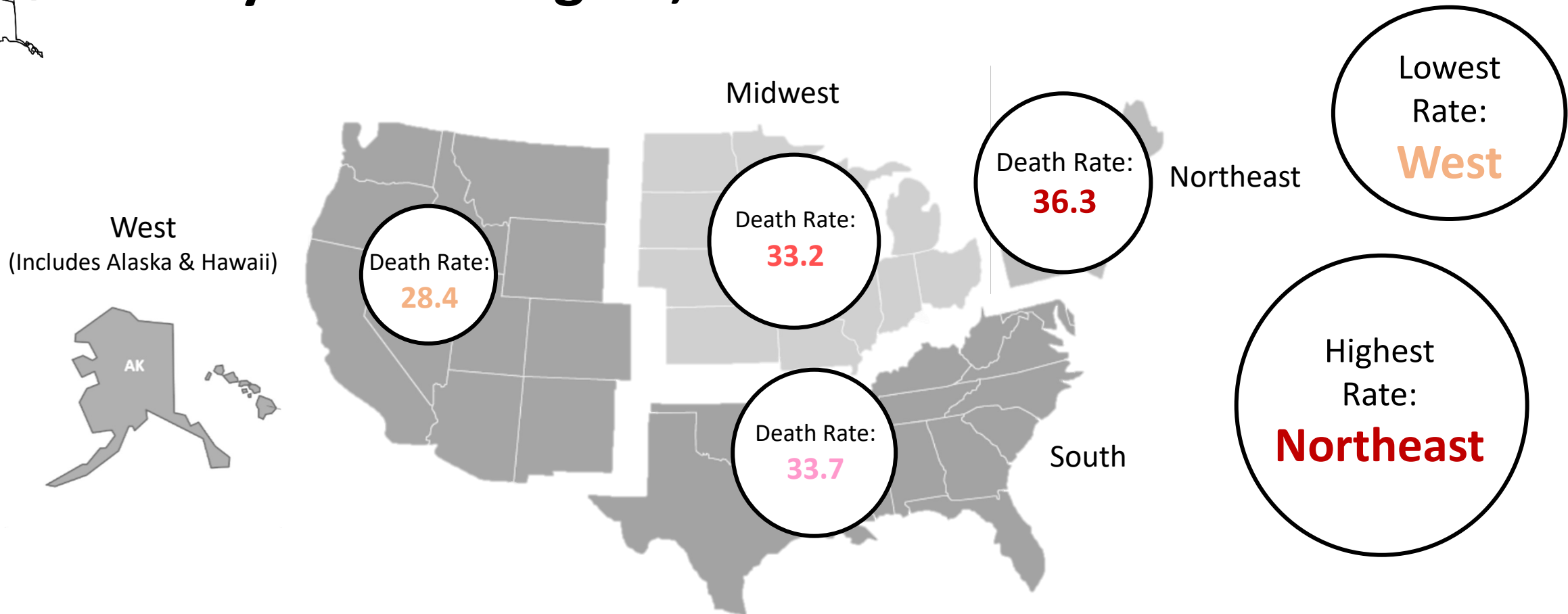
# National AI/AN Drug Overdose Deaths: By Census Region over Time, Number of Deaths



\*Data for 2021 is preliminary



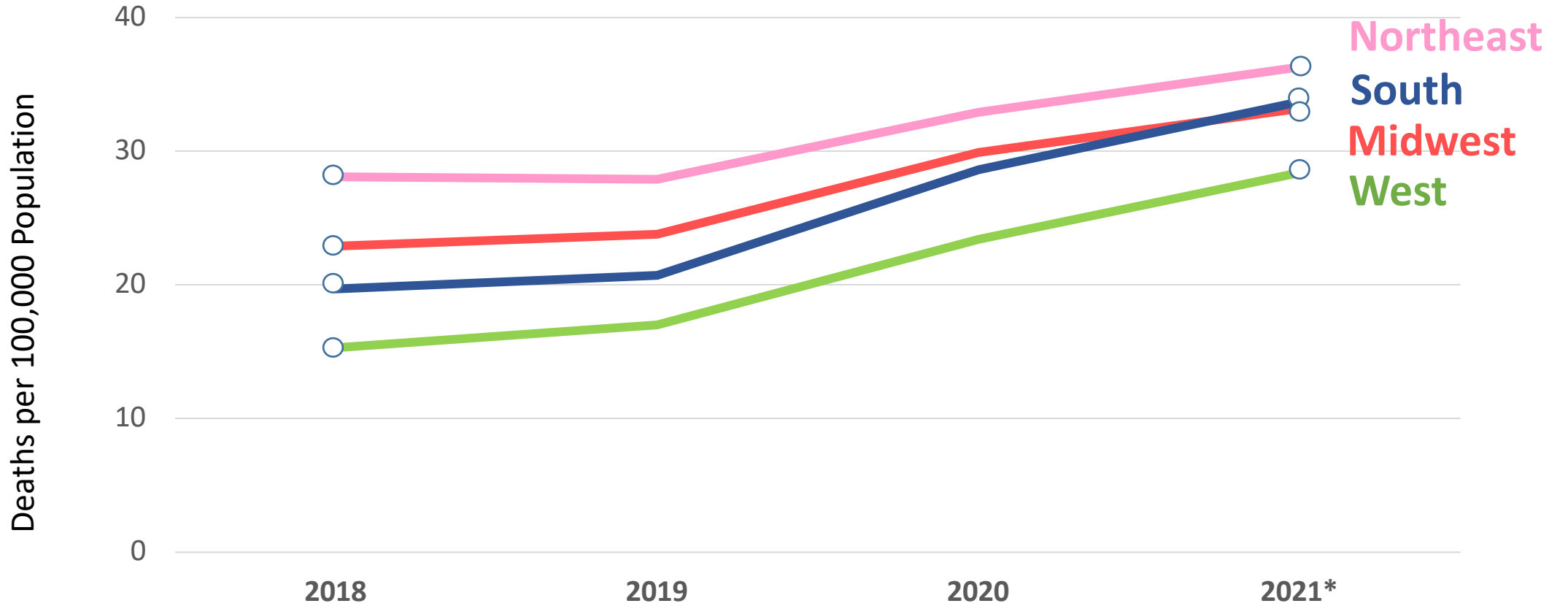
# National All Population Drug Overdose Deaths: By Census Region, 2021\* Rates



\*Data for 2021 is preliminary



# National All Population Drug Overdose Deaths: By Census Region over Time, Rates

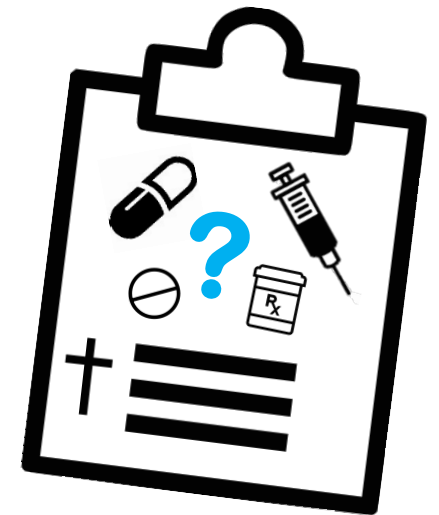


\*Data for 2021 is preliminary



# Opioid and Overdose Epidemiology Data Challenges

- Racial misclassification
  - Many AI/AN are not classified as AI/AN in state data systems = **underrepresentation** of burden on AI/AN
- Limited access to behavioral health/treatment data
  - Hard to know how many people have SUD in the community or are being treated for SUD
- Difficulty obtaining tribe-specific data
  - Can only provide state or county data
- Inconsistency in overdose cause of death reporting
  - What drug(s) actually involved?
    - “Unspecified Narcotic”

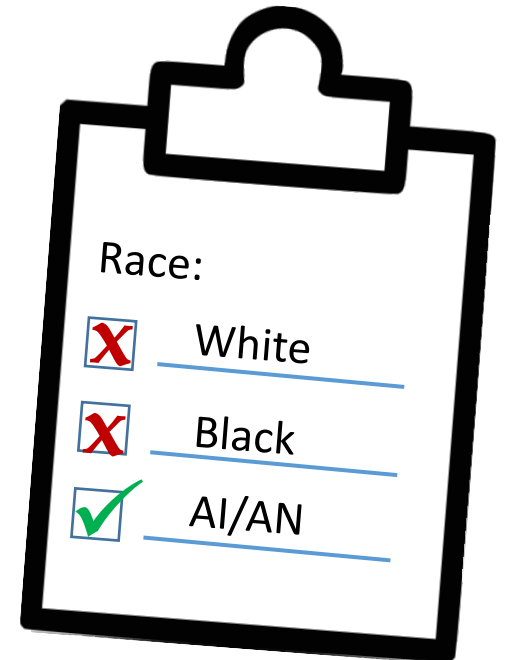


# What is racial misclassification?

- Racial misclassification is an incorrect recording of a person's race in a data or surveillance system

## Examples:

- A person who is American Indian is coded as “white” on their death certificate
- A person who is American Indian and Black is recorded as only “Black” on their hospital visit record
- A person who is American Indian is recorded as “Hispanic White” at their doctor’s office

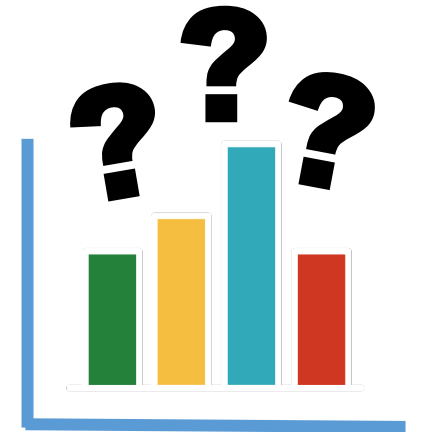


# Why does misclassification matter?

Misclassified AI/AN are not counted in AI/AN health reports, disease rates, or public health surveillance

Leads to an **underrepresentation** of AI/AN and:

- Inaccurate AI/AN health data
- Artificially lowered disease burden
- Too few AI/AN to calculate stable disease rates and trends
- Incomplete health data for public health decision-making

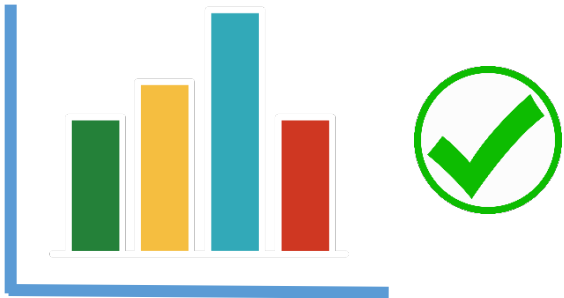
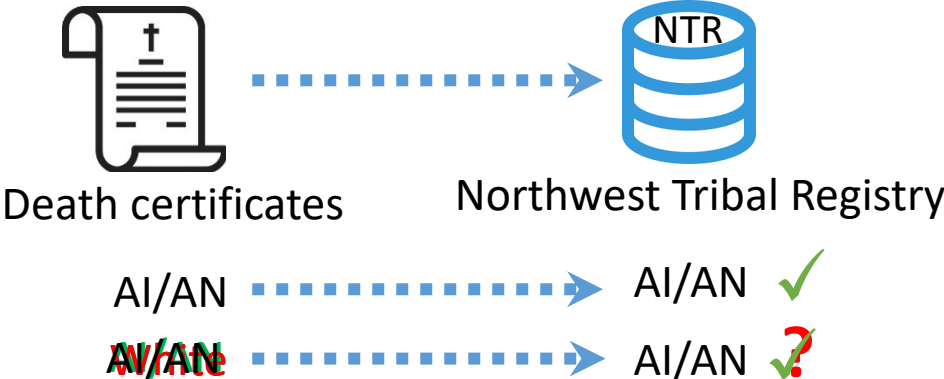


# Racial Misclassification: What we do about it

✓ We fix race in the data

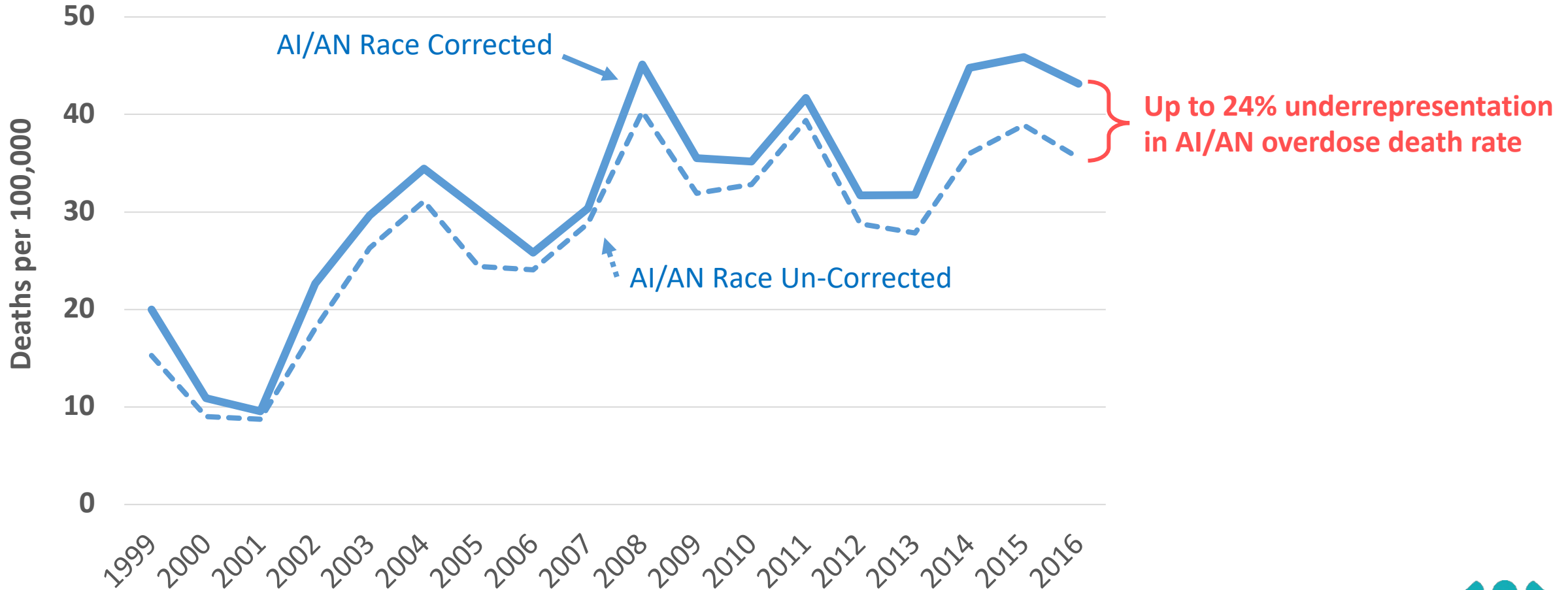
Process:

- 1. Obtain state data, like death certificates
- 2. Link data with the Northwest Tribal Registry
- 3. Check if AI/AN is indicated on one database but not the other
- 4. Correct racial classification
- 5. Do our own statistics with the corrected data



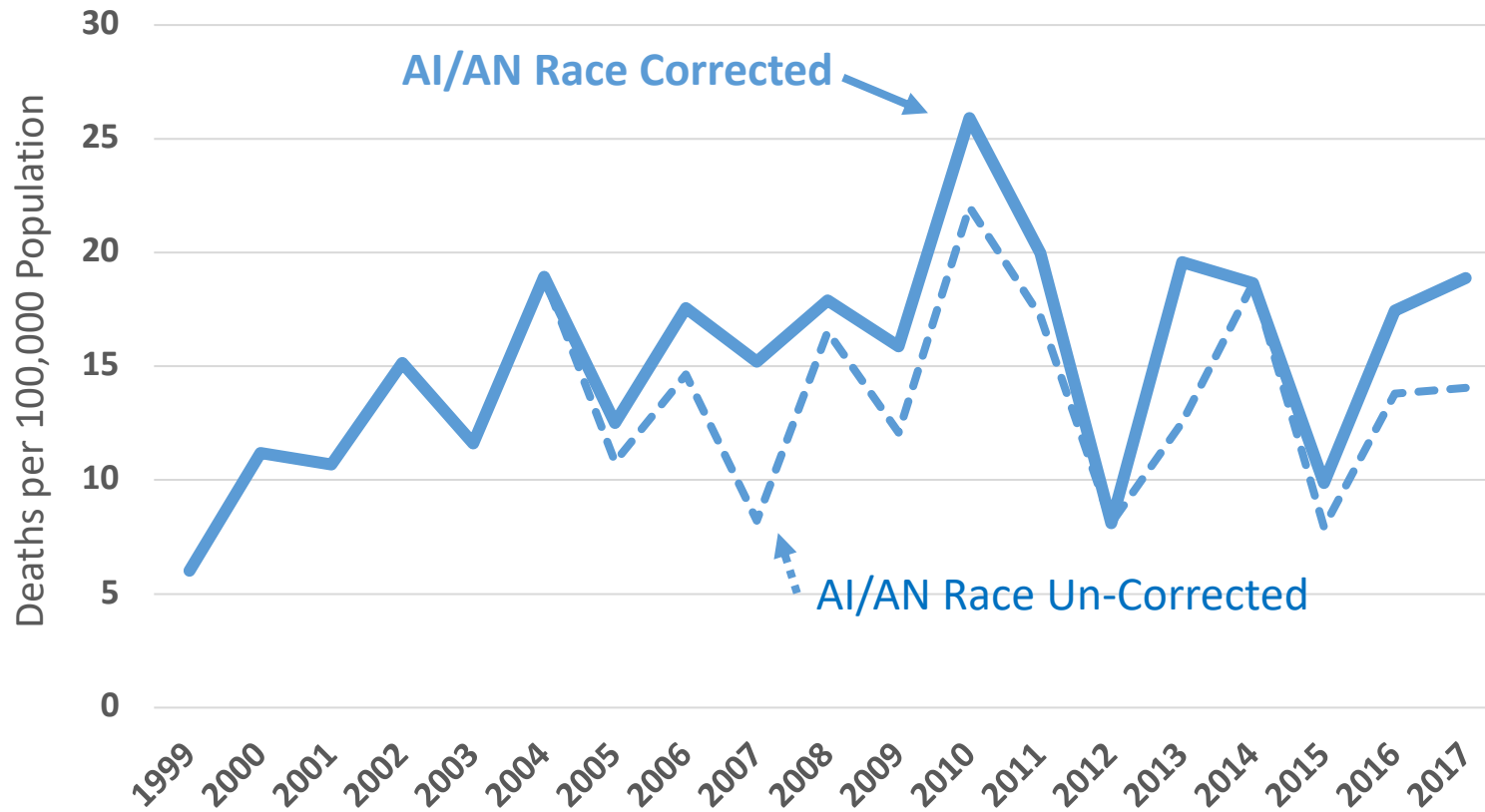


# Washington State Drug Overdose Deaths: Race Corrected vs Race Un-Corrected





# Oregon AI/AN Drug Overdose Deaths: Race Corrected vs Race Un-Corrected



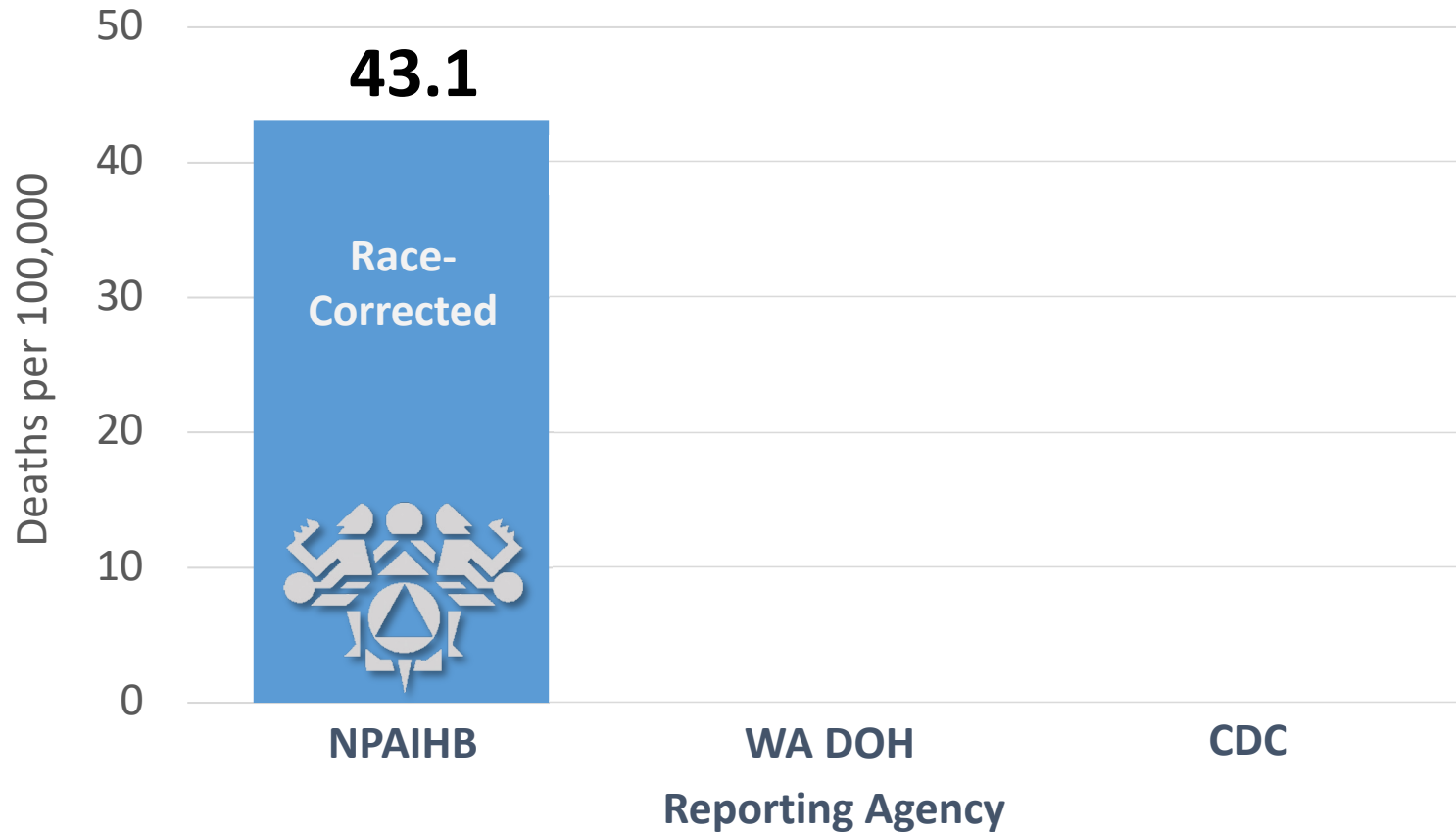
Up to 46% underrepresentation  
in AI/AN overdose death rate,  
~12% average





# Washington State Drug Overdose Deaths: by Reporting Agency

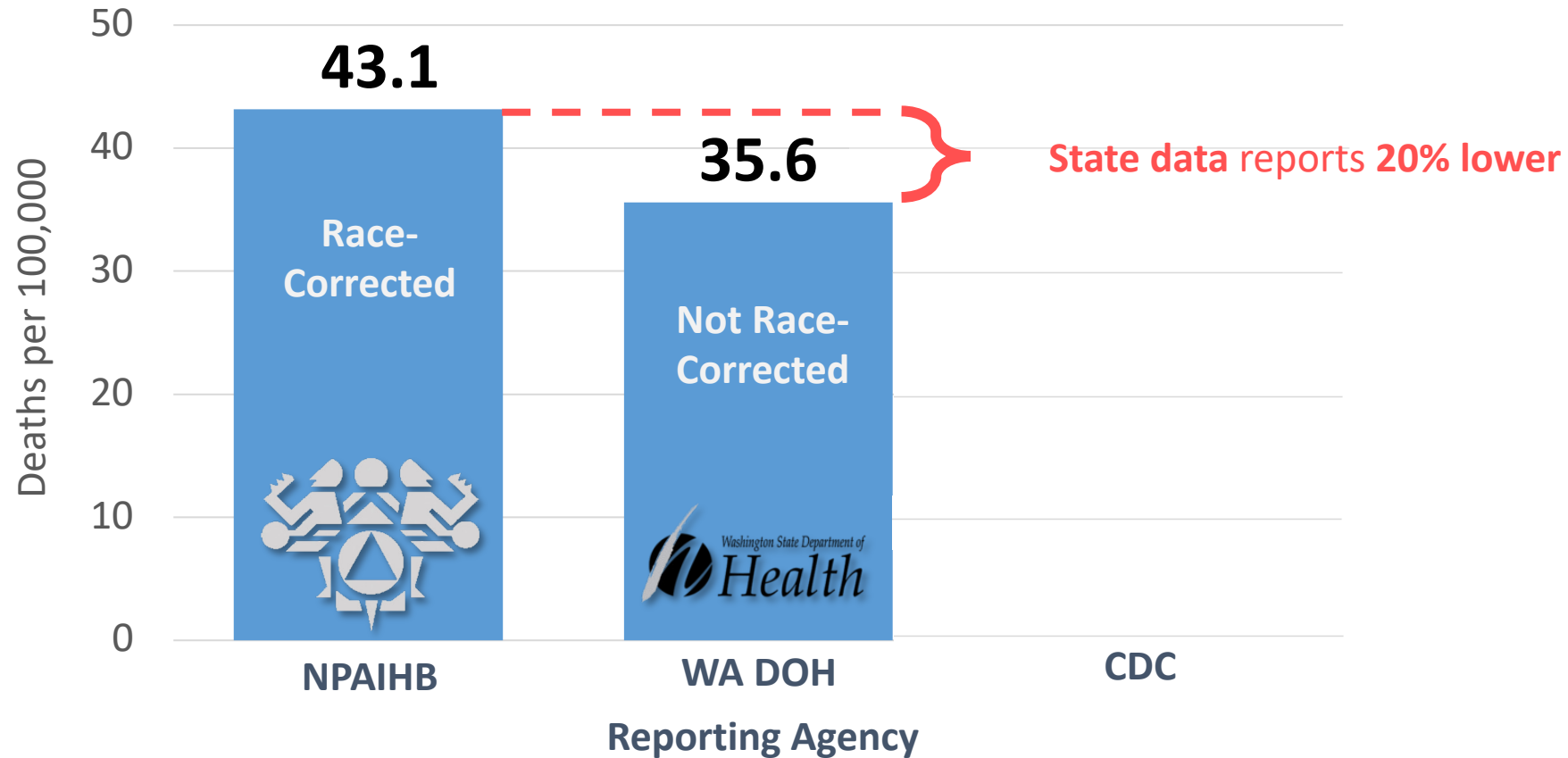
2016 AI/AN Drug Overdose Death Rate in Washington





# Washington State Drug Overdose Deaths: by Reporting Agency

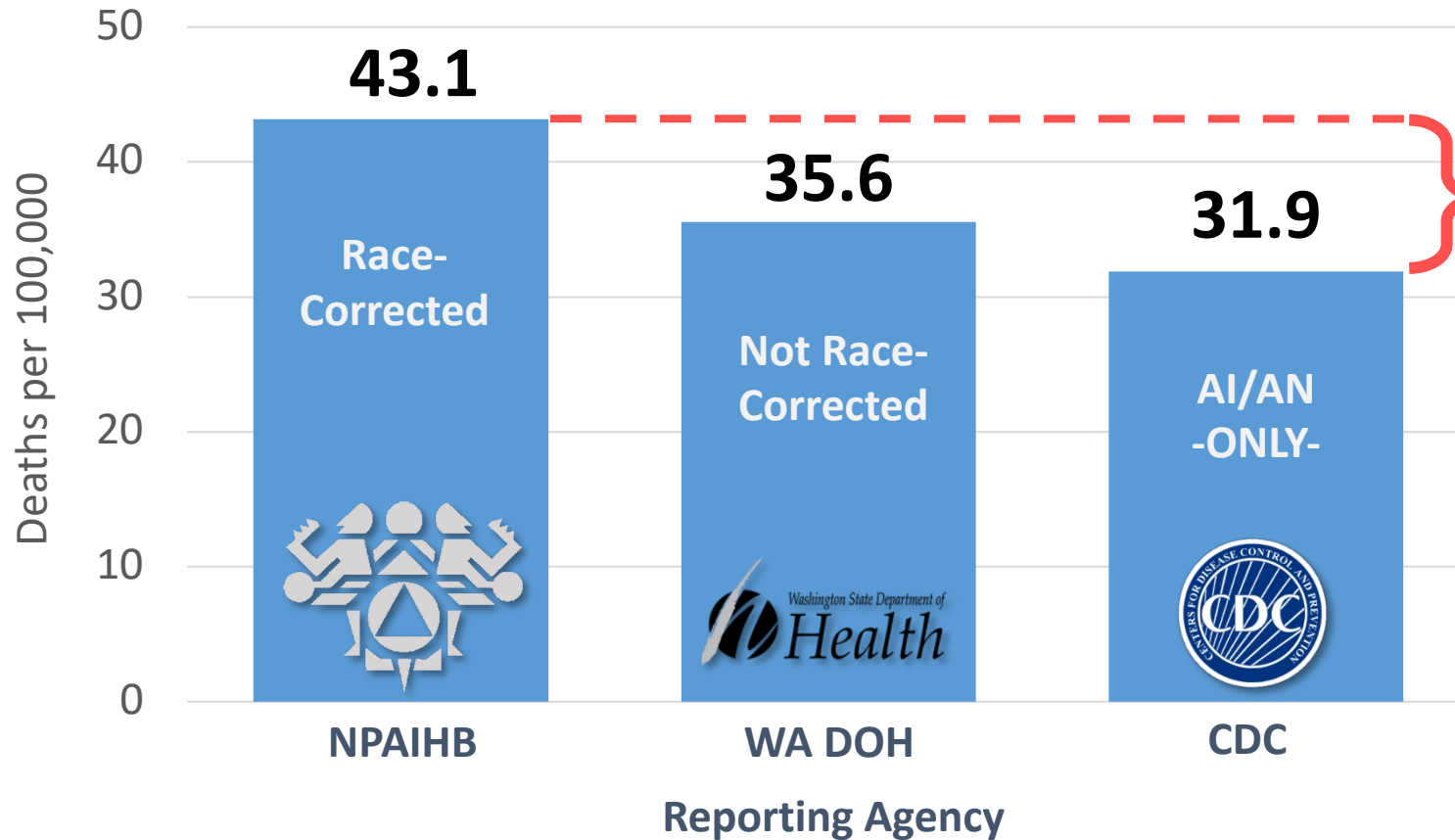
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# Washington State Drug Overdose Deaths: by Reporting Agency

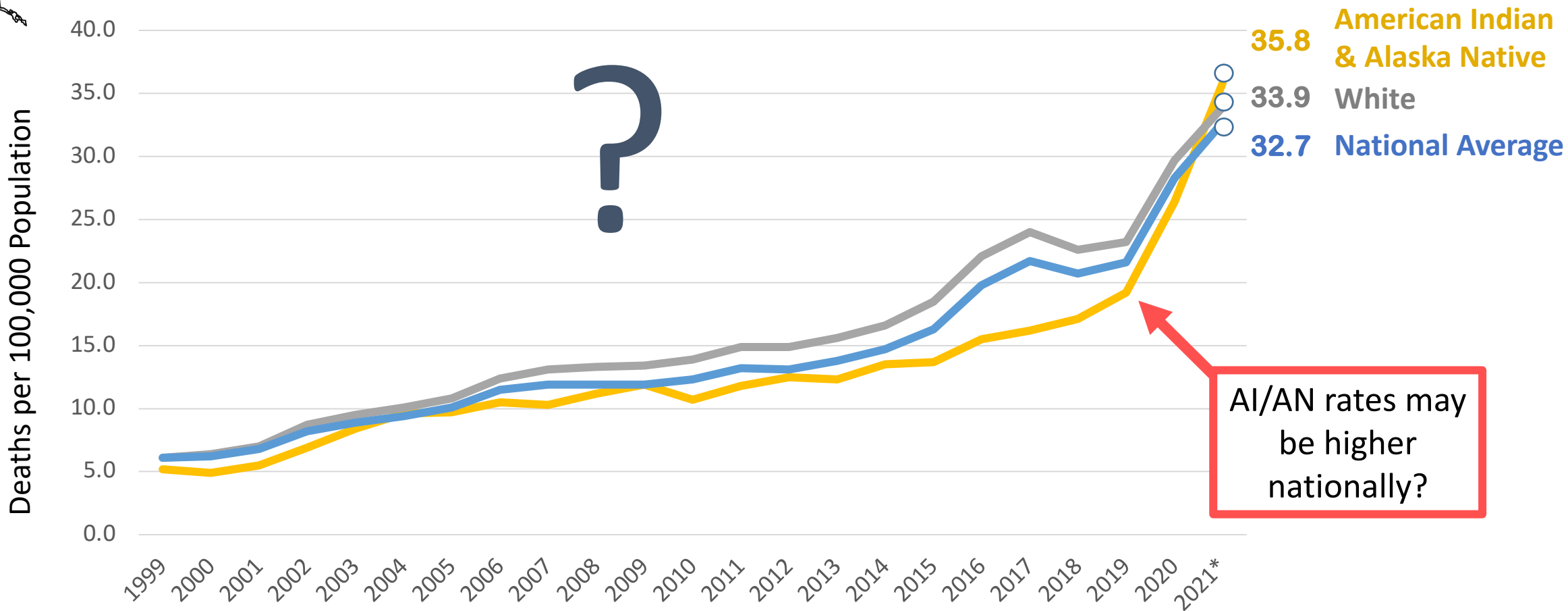
2016 AI/AN Drug Overdose Death Rate in Washington



National data reports 30% lower



# National Drug Overdose Deaths: By Race



\*Data for 2021 is preliminary



# Take Away Messages

- Deaths from drug overdoses are increasing over time
  - Steep increase since start of COVID-19 pandemic (2020)
- As of 2021, AI/AN have the highest overdose death rate in the USA compared to other races
- Most overdose deaths involve opioids, prescription opioids (specifically fentanyl) are most common
- Deaths involving stimulants (mostly methamphetamine) are increasing
- Male AI/AN have higher rates of overdose compared to female AI/AN, but lower rates of overdose compared to the US male average (except for stimulant-related deaths, about the same as US average)
- Female AI/AN have higher stimulant-related overdose deaths compared to the US female average
- The Midwest region has the highest rate of AI/AN overdose deaths, followed by the West
  - This differs from the US average where the West and Midwest have the lowest rates
- National and state statistics may significantly underestimate AI/AN statistics



# Thank You!

## Questions?

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