

# Nevada Drug Overdose Data: Washoe County Updates

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# Presentation Overview

- Review recent overdose-related data from multiple sources (emphasis on Washoe County data with some Statewide data included):
  - Hospital-based data (non-fatal overdose)
  - Mortality data (fatal overdose)
  - Prescription drug monitoring data

# Hospital-based Overdose Data

Data prepared/compiled by:

Nevada Overdose Data to Action  
Program

Nevada Department of Health and  
Human Services

Office of Analytics



# Hospital-based Overdose Data

	Data Origin	Advantages	Disadvantages
<b>1. Syndromic Surveillance</b>	ED visits before confirmatory diagnosis	Most data available within 24 hours, 90%+ of emergency departments reporting	Sensitive case definitions Suspected visits – lack confirmatory drug testing
<b>2. Hospital Billing Data (CHIA)</b>	Billing data from ED visits and inpatient admissions	Demographics and wide range of discharge diagnosis metrics available, all EDs report	Delayed several months Relies on ICD codes only



# Case Definitions for Hospital-based Sources

## Syndromic Surveillance

- ICD Codes for poisoning, overdose, and abuse
- SNOMED Codes
- Chief complaint description

## Hospital Billing (CHIA)

- ICD codes for opioid poisoning and opioid related disorders

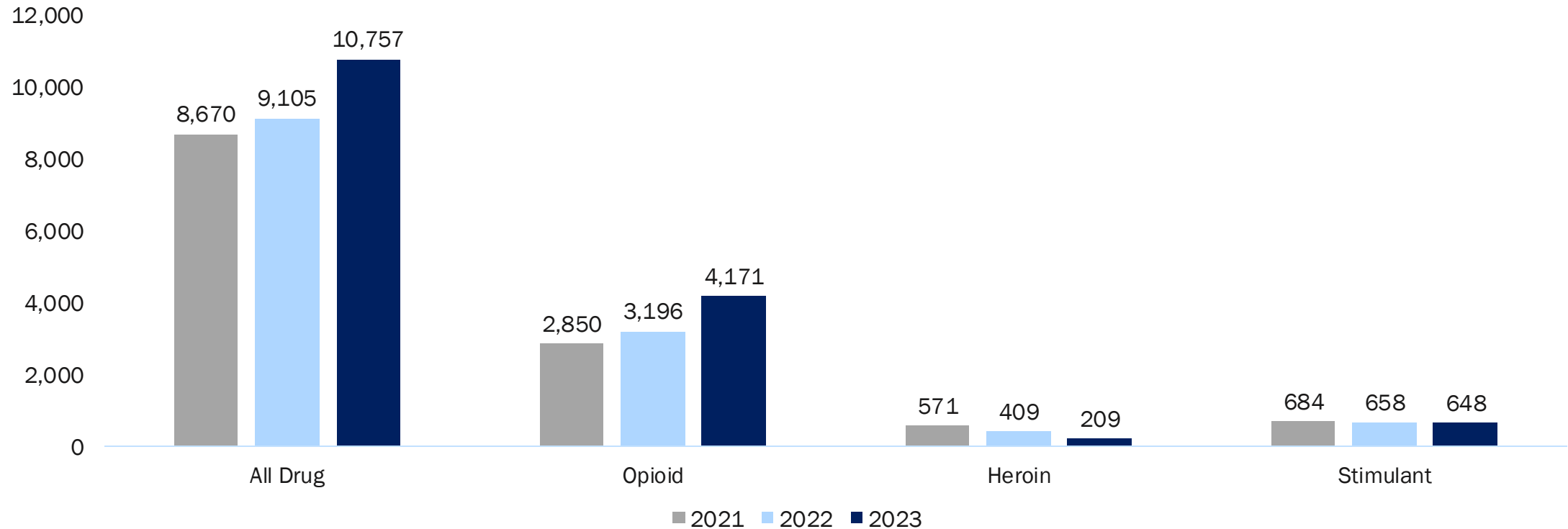


# Syndromic Surveillance Data

- Note: Monthly syndromic surveillance reports dating back to September 2020 are available at <https://nvopioidresponse.org/initiatives/od2a/>



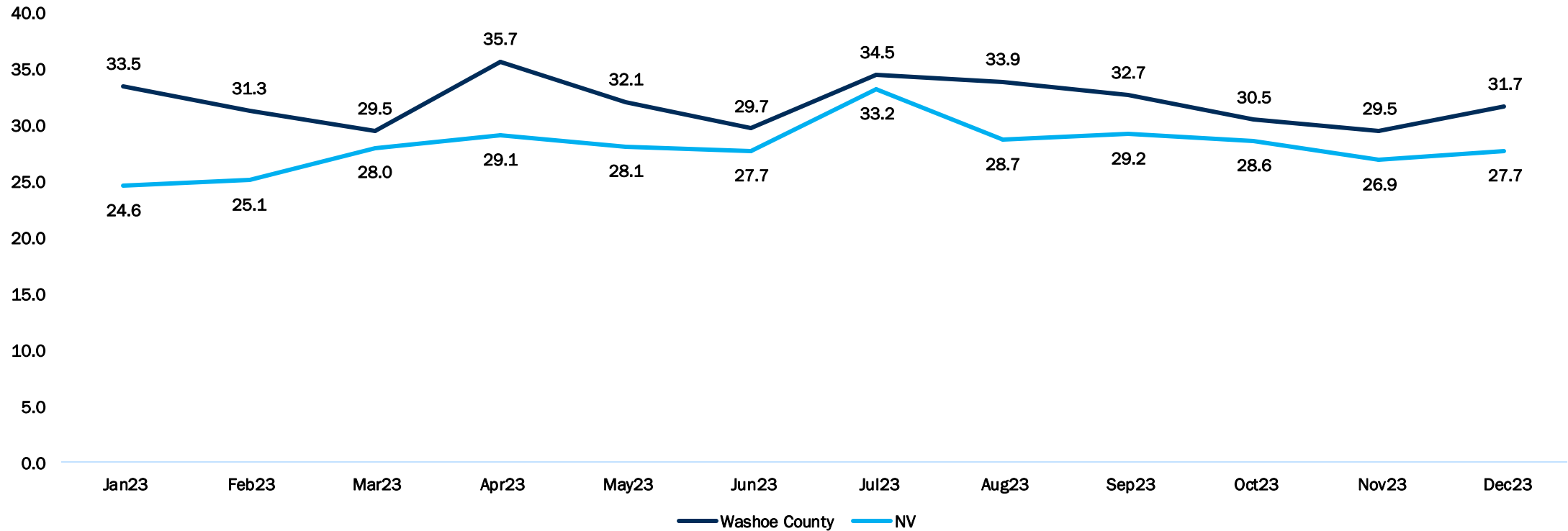
# Suspected all drug, opioid, heroin, and stimulant-related overdose encounters in NV from Syndromic Surveillance, 2021-2023



Note: 2022 data only include January – September.

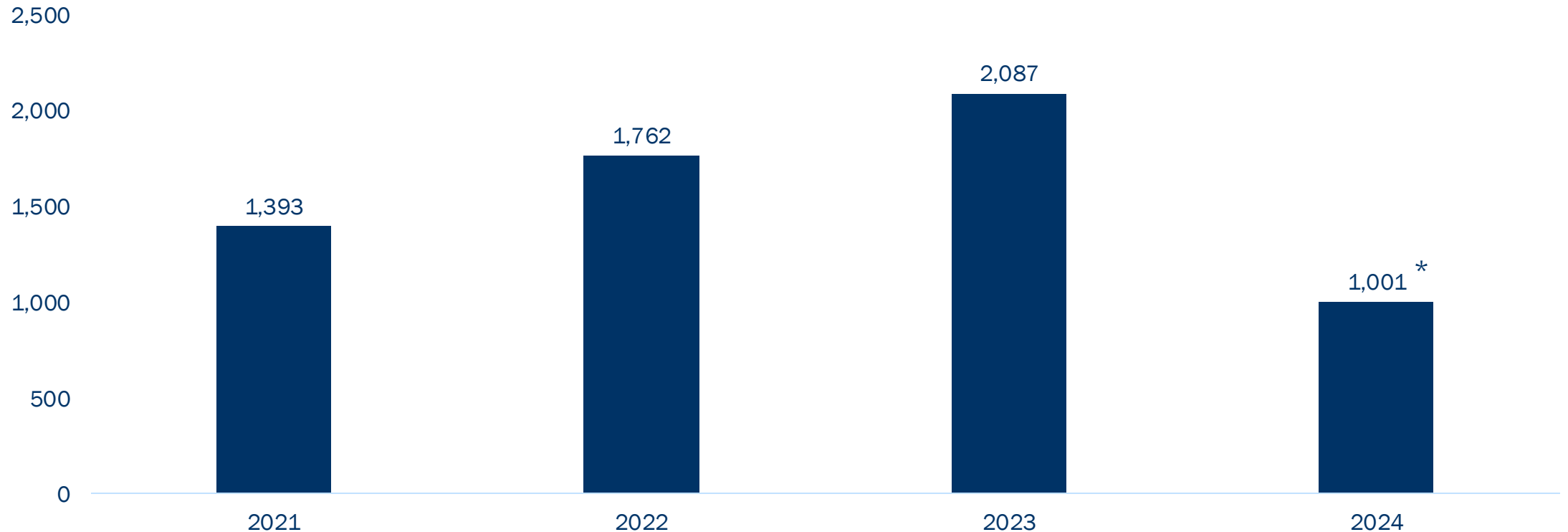


# Rate of emergency department overdose encounters per 100,000 population, NV vs. Washoe County



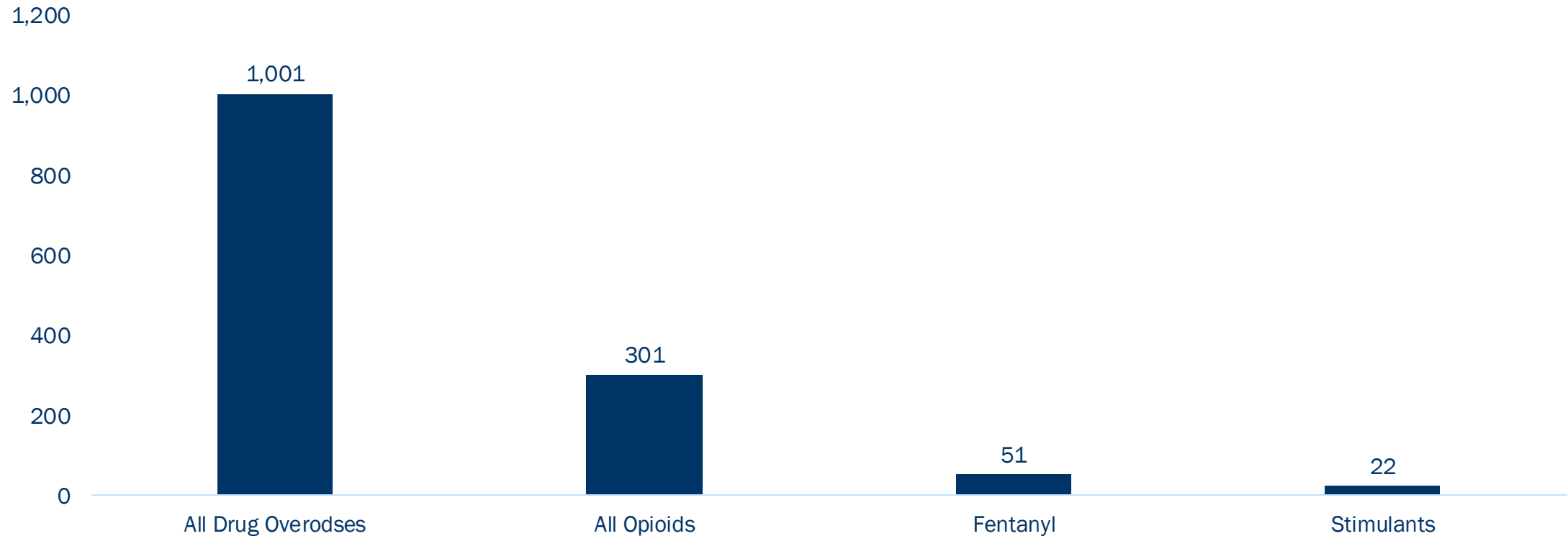


# Suspected all drug overdose encounters at emergency departments in Washoe County, NV, 2021-2024

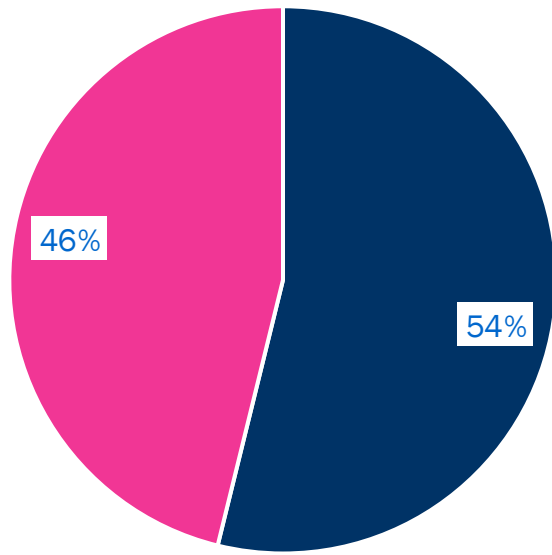


\* Note: 2024 data include Jan – Jun.

# Substances Involved in Emergency Department Overdose Encounters, Washoe County, January 2024 – June 2024

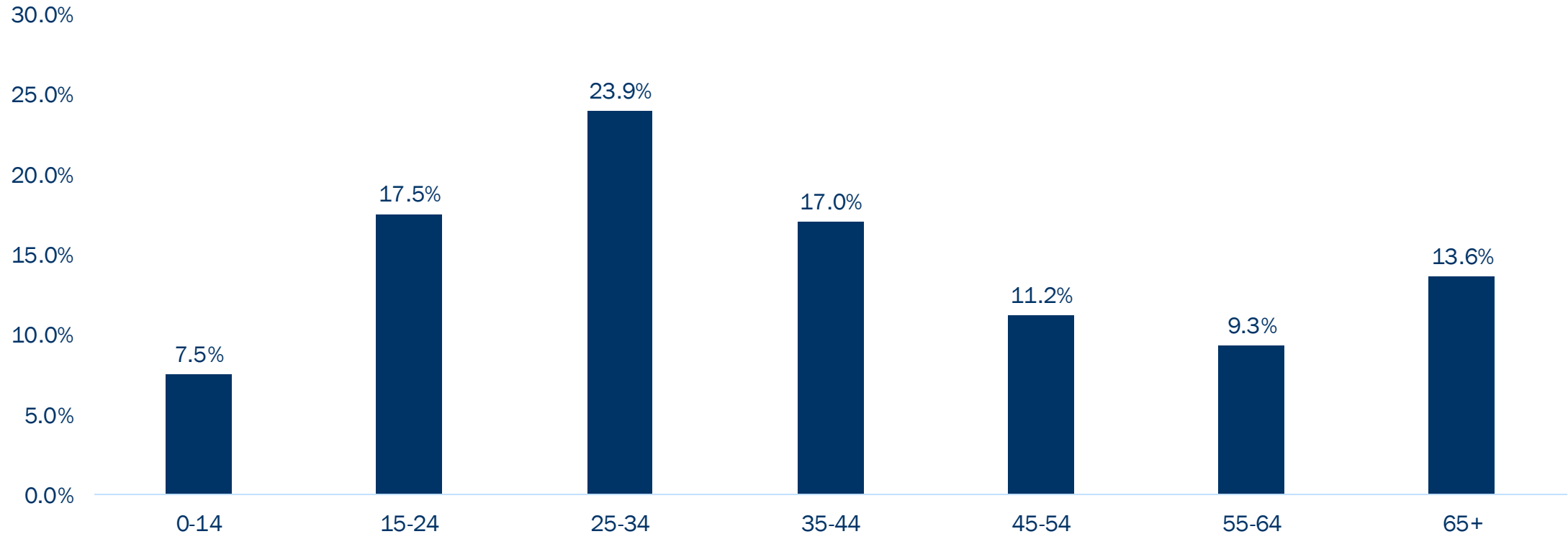


# Sex of Emergency Department Overdose Encounters, Washoe County, January 2024 – June 2024

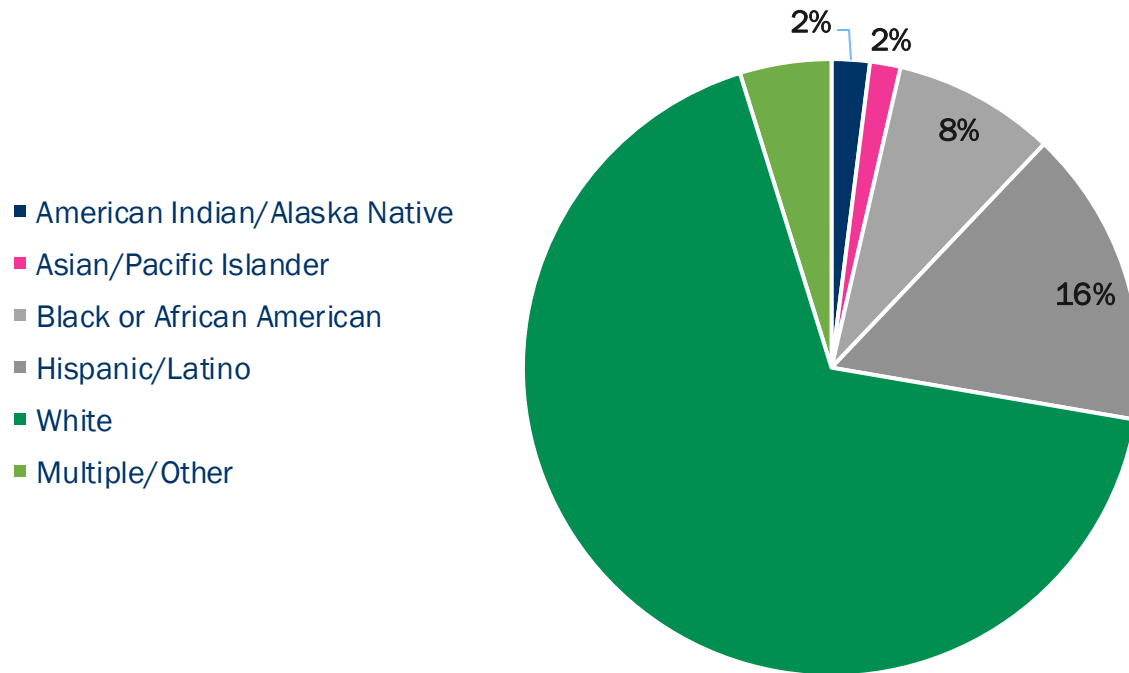


■ Male ■ Female

# Age of Emergency Department Overdose Encounters, Washoe County, January 2024 – June 2024



# Race/Ethnicity of Emergency Department Overdose Encounters, Washoe County, January 2024 – June 2024



	Rate per 100,000 population
Black or African American	566.9
American Indian/Alaska Native	291.9
White	205.0
Hispanic/Latino	102.3
Asian/Pacific Islander	36.9

**Note:** Race and ethnicity categories utilize calculated and combined race and ethnicity categories using the CDC NSSP broad definition (if ethnicity is not reported, it is non-Hispanic), which was computed using PHIN flatline codes. All categories are non-Hispanic unless otherwise stated. Native Hawaiian/Other Pacific Islander are included in the Asian category. Data quality may change month to month race/ethnicity. Percentages exclude missing data. NH=Non-Hispanic. AI/AN = American Indian/Alaskan Native. Other includes multi-racial and other race.

# Social Vulnerability and Emergency Department Overdose Encounters, Washoe County, January 2024 – June 2024



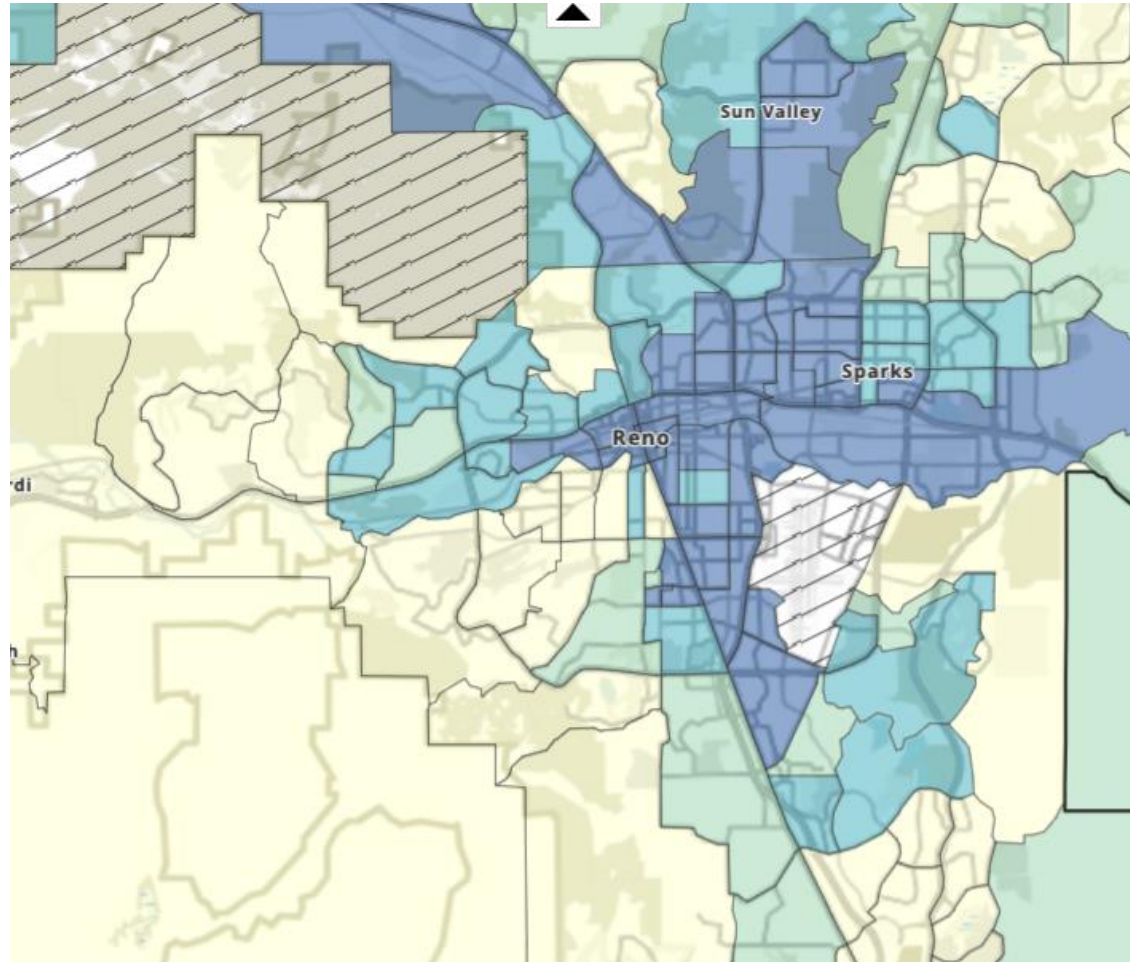
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- The CDC created a Social Vulnerability Index (SVI) to determine the social vulnerability of every county and census tract in the US
  - Index measure based on 15 social factors, including poverty, lack of vehicle access, and crowded housing.
- Each county and census tract are assigned a score ranging from 0 (low vulnerability) to 1 (high vulnerability).



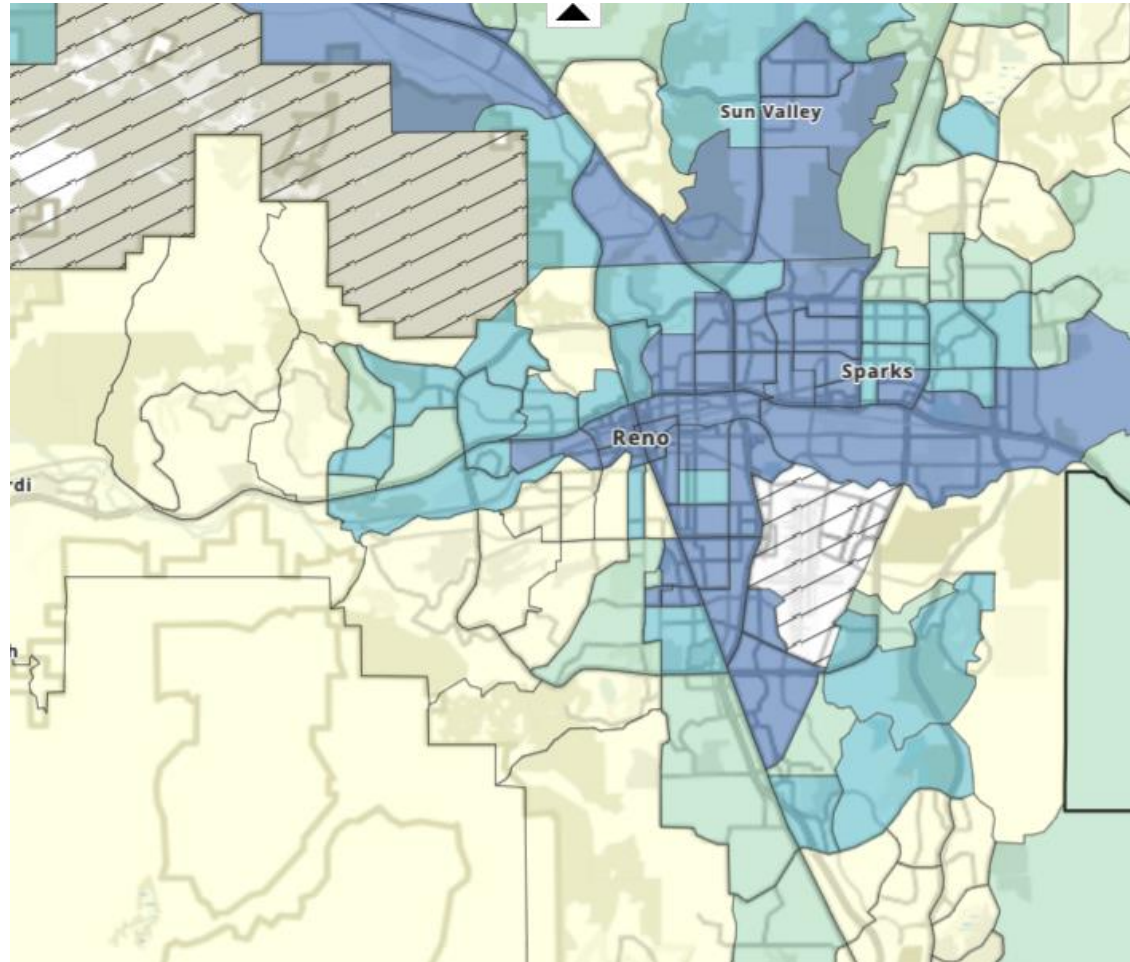
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Social Vulnerability Index (SVI) in Washoe County





Between January – June 2024, 97% of suspected drug overdose emergency department encounters in Washoe County were from patients living in areas of medium-high and high vulnerability (turquoise and dark blue).







# Hospital Billing (CHIA) Data

- Focusing on statewide data due to small Washoe-County specific counts
- I will go through this section quickly and am only showing inpatient admissions data – overall this data shows the same highlights/trends as what we see with syndromic surveillance data



# Inpatient Admission Discharges for Opioid-Related Conditions in NV from Billing Data, 2022-2023



Note: 2023 data are preliminary and are subject to change.



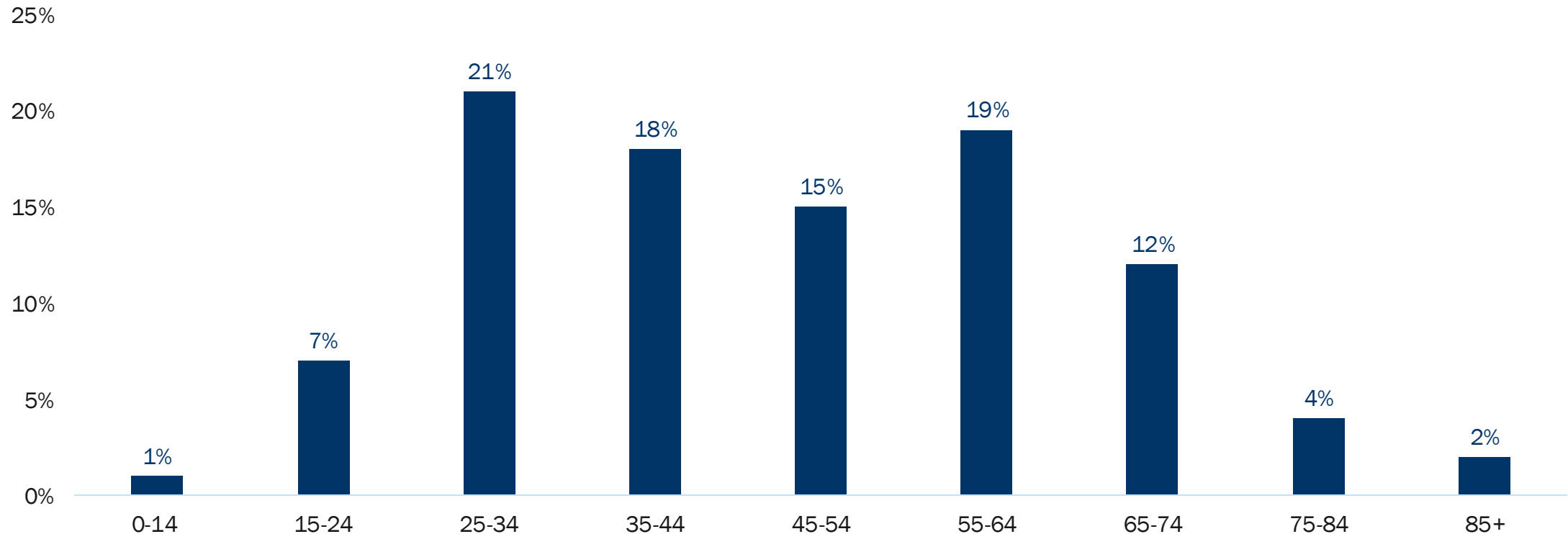
# Sex of Inpatient Admission Discharges for Opioid-Related Conditions in NV from Billing Data, 2023



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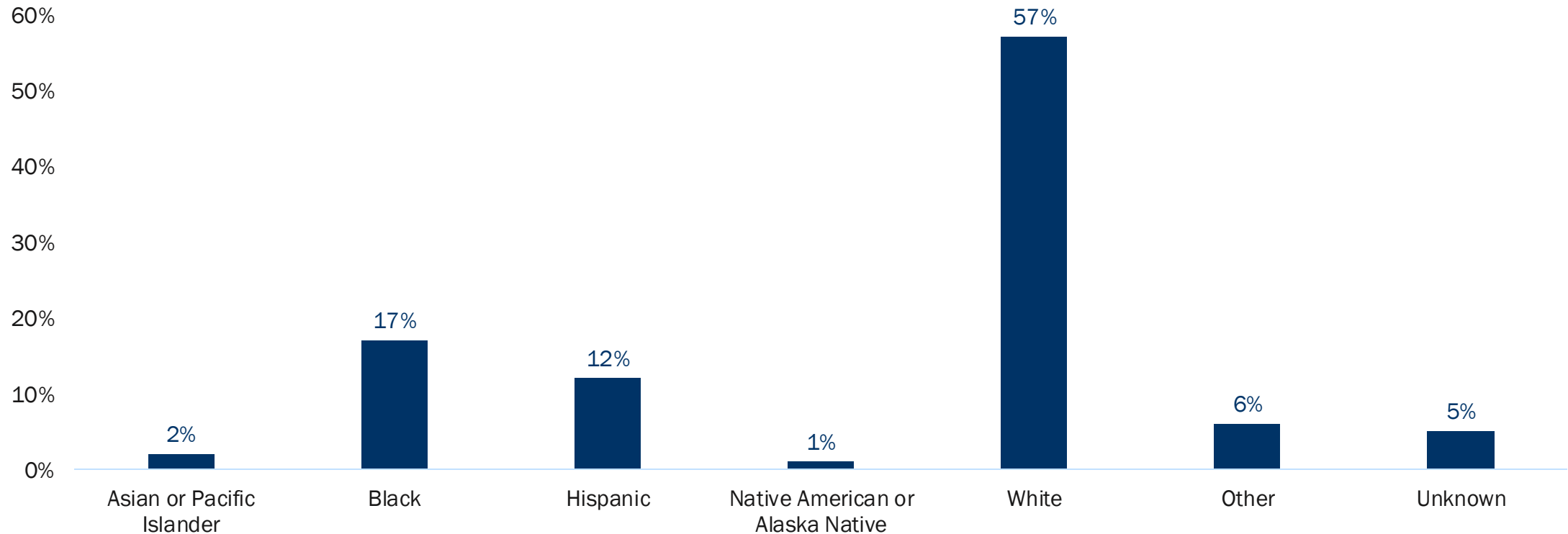
# Age of Inpatient Admission Discharges for Opioid-Related Conditions in NV from Billing Data, 2023



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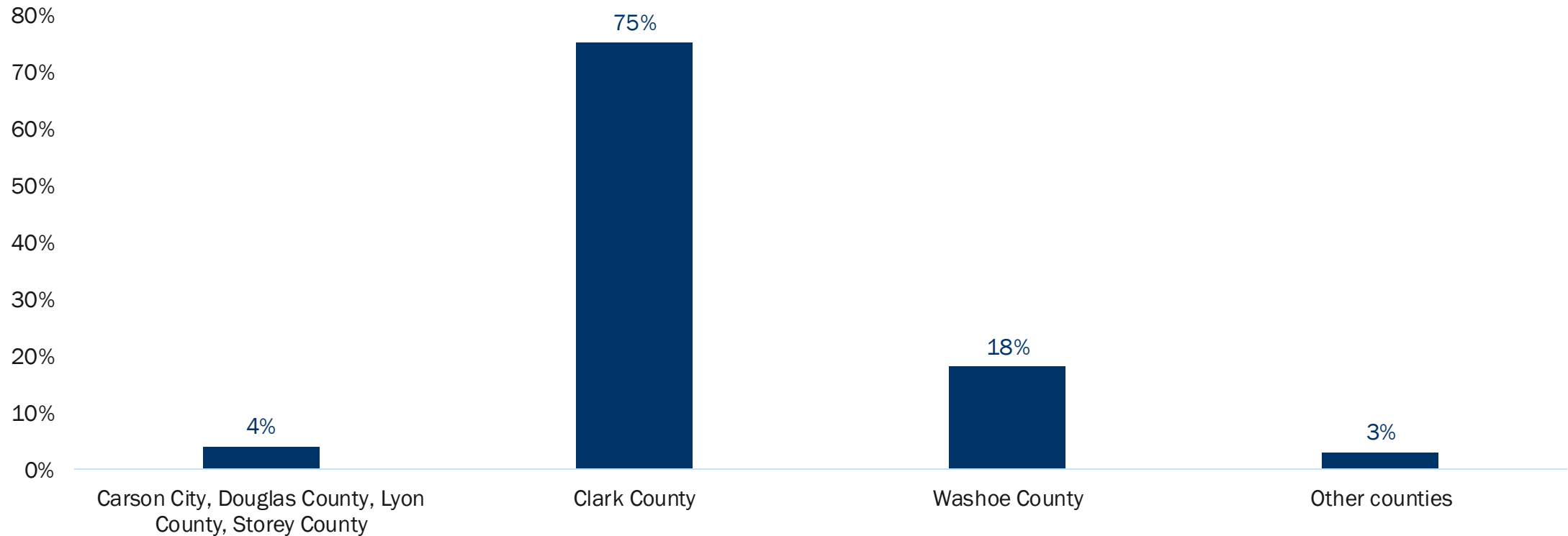
# Race/Ethnicity of Inpatient Admission Discharges for Opioid-Related Conditions in NV from Billing Data, 2023



Note: 2023 data are preliminary and are subject to change.



# Location of Inpatient Admission Discharges for Opioid-Related Conditions in NV from Billing Data, 2023



Note: 2023 data are preliminary and are subject to change.



# Hospital-based Data Sources: Key Takeaways

- Different systems with unique features
- Syndromic Surveillance: Suspected overdose visits increased from 2021 to 2023
  - All drug visits increased by 24% statewide
  - Opioid visits increased by 46% statewide
  - Similar patterns observed in Washoe County
- Inpatient billing data
  - Slight increase in inpatient encounters

# Mortality Data

Data prepared/compiled by:

Nevada Department of Health and  
Human Services, Office of Analytics

Nevada Overdose Data to Action  
Program

Washoe County Regional Medical  
Examiner's Office





# Mortality Data Sources

- *SUDORS*
  - *Nevada Overdose Data to Action*
- *Washoe County Regional Medical Examiner's Office*



# State Unintentional Drug Overdose Reporting System (SUDORS)

- *Ascertained via death investigation, toxicology, and death certificates*
- *Case definition: Unintentional/undetermined intent drug overdose among Nevada residents*
  - *2021: 787 deaths*
  - *2022: 836 deaths*
- *Limitations:*
  - *Data lag*
  - *Missing data*
  - *Witness report*
- *Public-facing dashboard at:*
  - <https://app.powerbigov.us/view?r=eyJrljoiNzlxNjlzMTktYmNiYy00YWRhLTk0OWQtNmYwZDA2YjQ4OTZjIiwidCI6ImUOYTM0MGU2LWI4OWUtNGU2OC04ZWZhLTE1NDRkMjcwMzk4MCJ9>

# 2022 Statewide SUDORS Data: Total Numbers and Circumstances



## KEY METRICS (2022)

**836**

UNINTENTIONAL DRUG DEATHS

**26.1**

UNINTENTIONAL DRUG DEATH CRUDE  
RATE PER 100K POPULATION

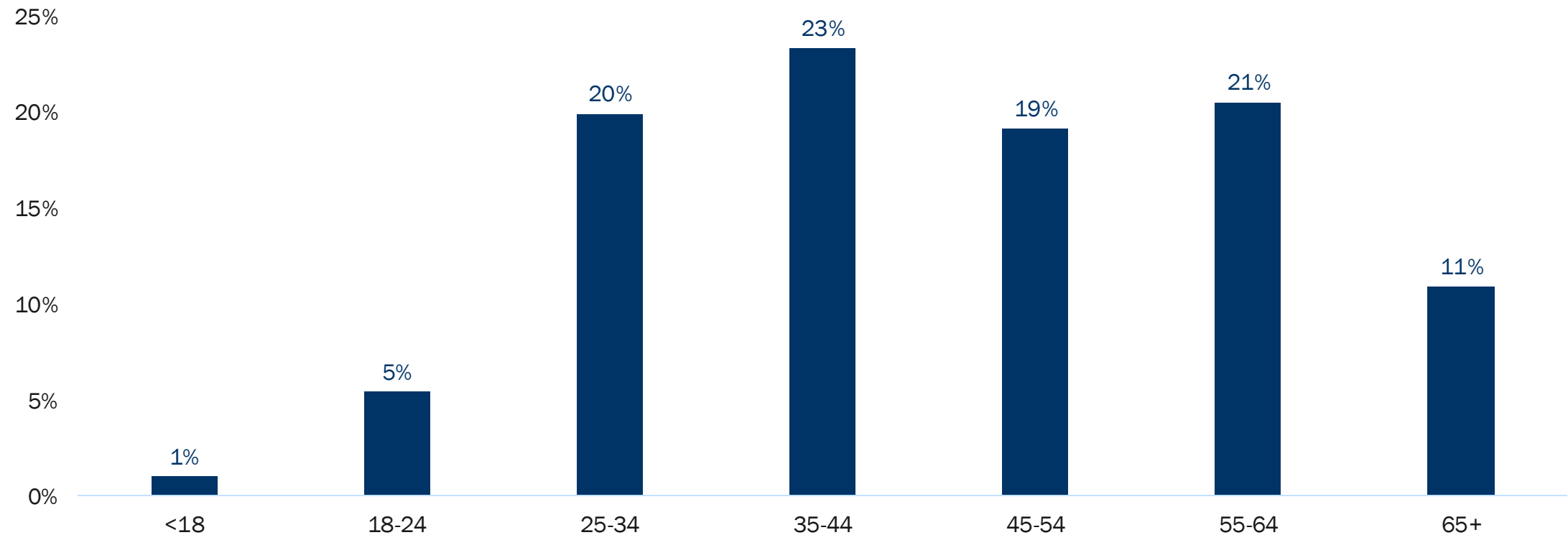
**25.2**

UNINTENTIONAL DRUG DEATH AGE-  
ADJUSTED RATE PER 100,000

CIRCUMSTANCE	OVERDOSES	PERCENT
Evidence Substance Use	569	68.1%
Occured in Household	497	59.4%
Bystanders Present	364	43.5%
Mental Health Diagnosis	185	22.1%
Naloxone Administered	171	20.5%
Homeless	88	10.5%
Ever Treated for SUD	76	9.1%
Previous Overdose	72	8.6%
Released From Institution	72	8.6%
Served in U.S. Military	67	8.0%
Treated For Pain	7	0.8%



# SUDORS Demographics: Age



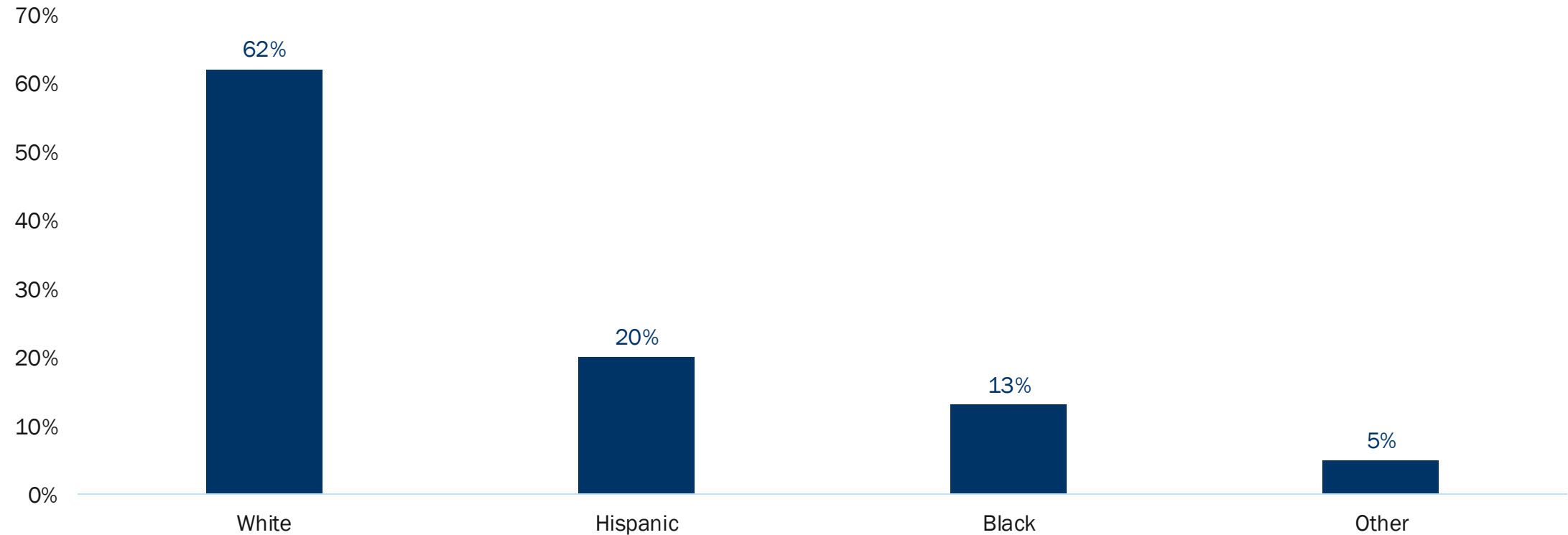


# SUDORS Demographics: Sex

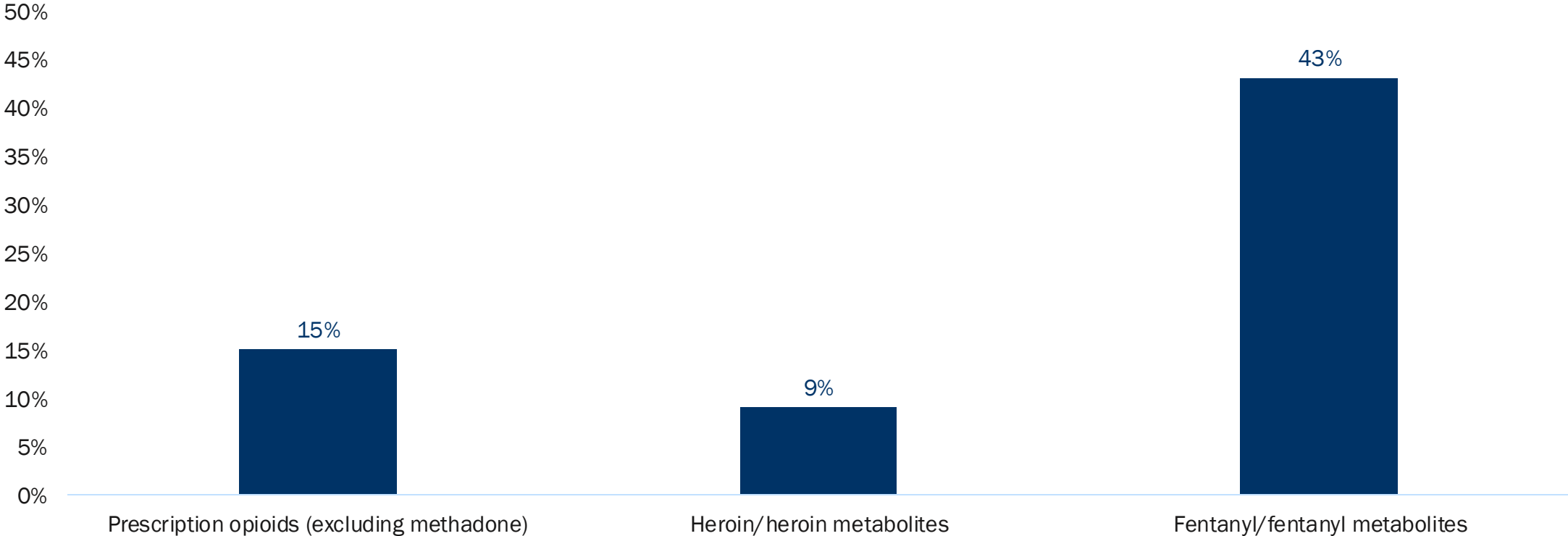




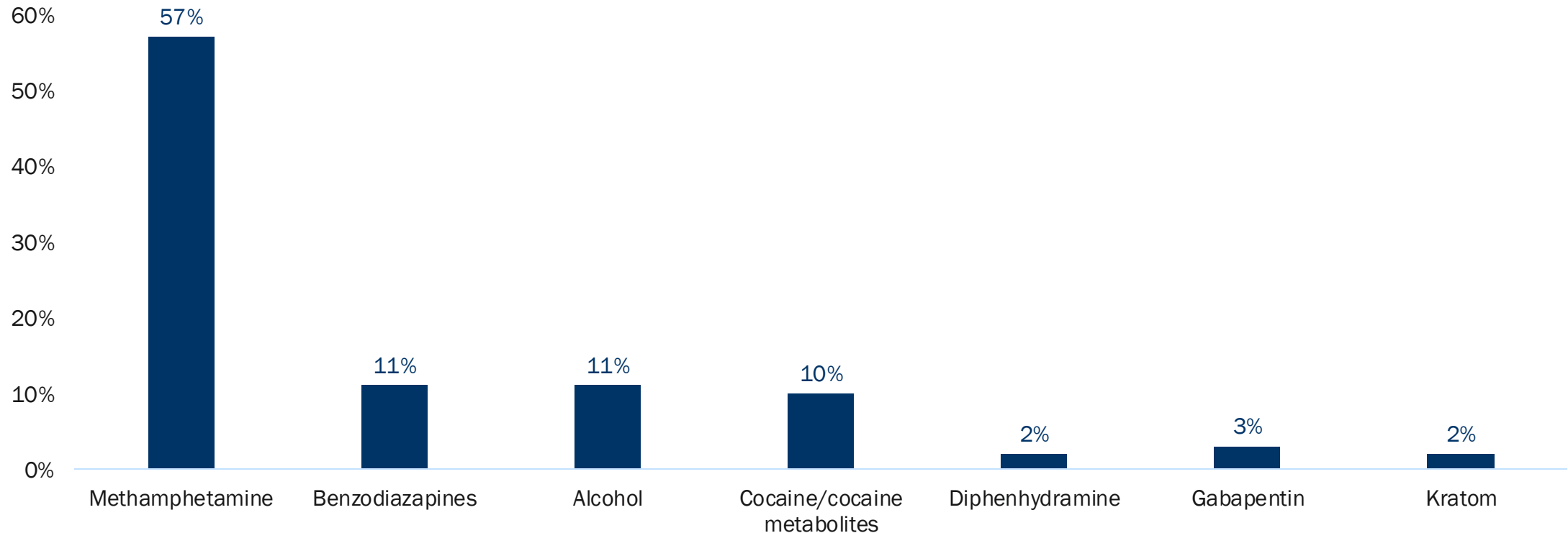
# SUDORS Demographics: Race/Ethnicity



# SUDORS Demographics: Opioids Attributing to Death



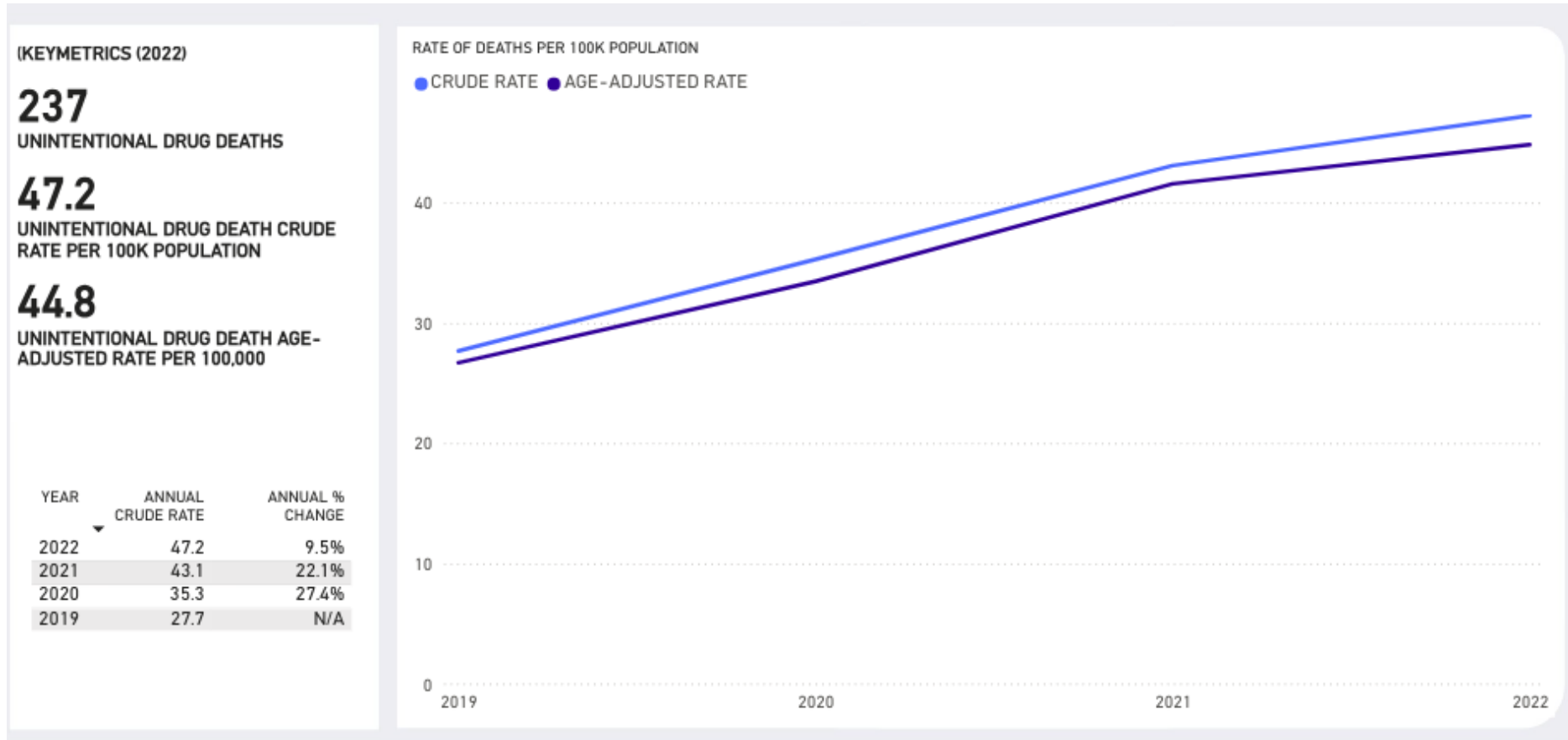
# SUDORS Demographics: Top Non-opioids Contributing to Death







# SUDORS Data: Washoe County





## Number and rate (per 100,000 population) of unintentional drug overdose deaths in Nevada, 2022, by region

REGION	POPULATION	TOTAL OVERDOSES	AGE-ADJUSTED RATE	CRUDE RATE
▲ Clark	2,338,122	505	21.0	21.6
Northern	202,440	47	23.7	23.2
Rural	99,663	29	29.2	29.1
Southern	62,243	14	21.6	22.5
Washoe	501,635	237	44.8	47.2
Unknown	0	4	0.0	0.0
<b>Total</b>	<b>3,204,103</b>	<b>836</b>	<b>25.2</b>	<b>26.1</b>

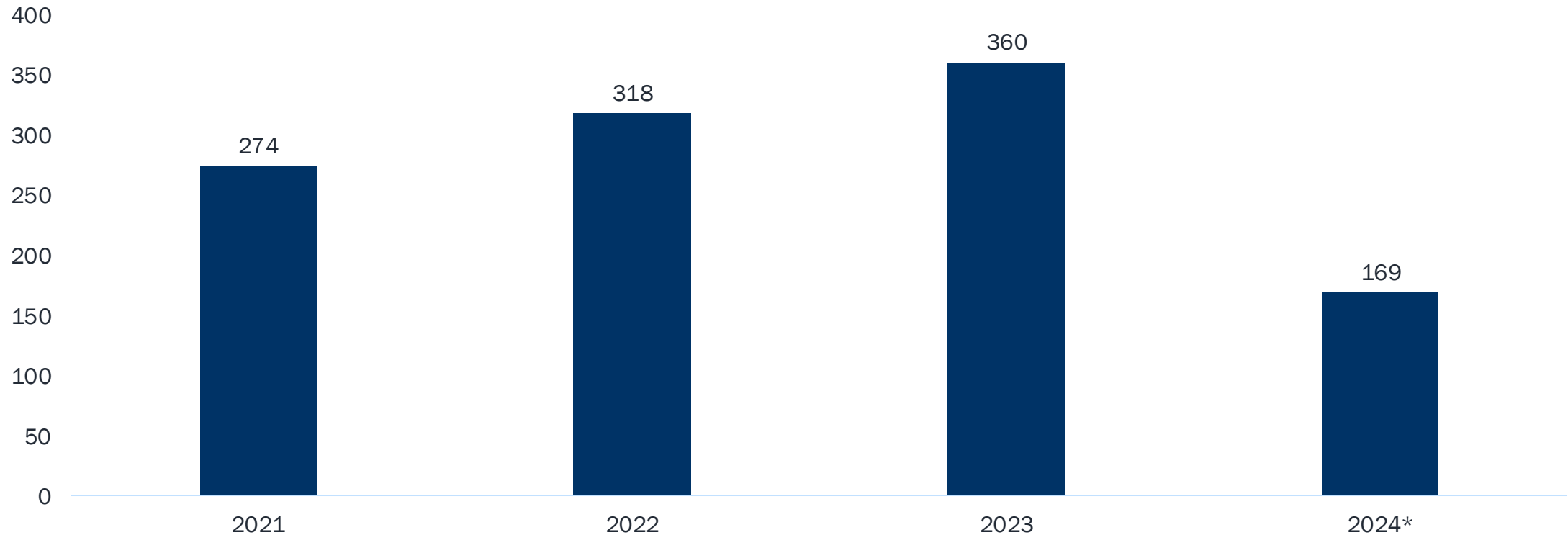


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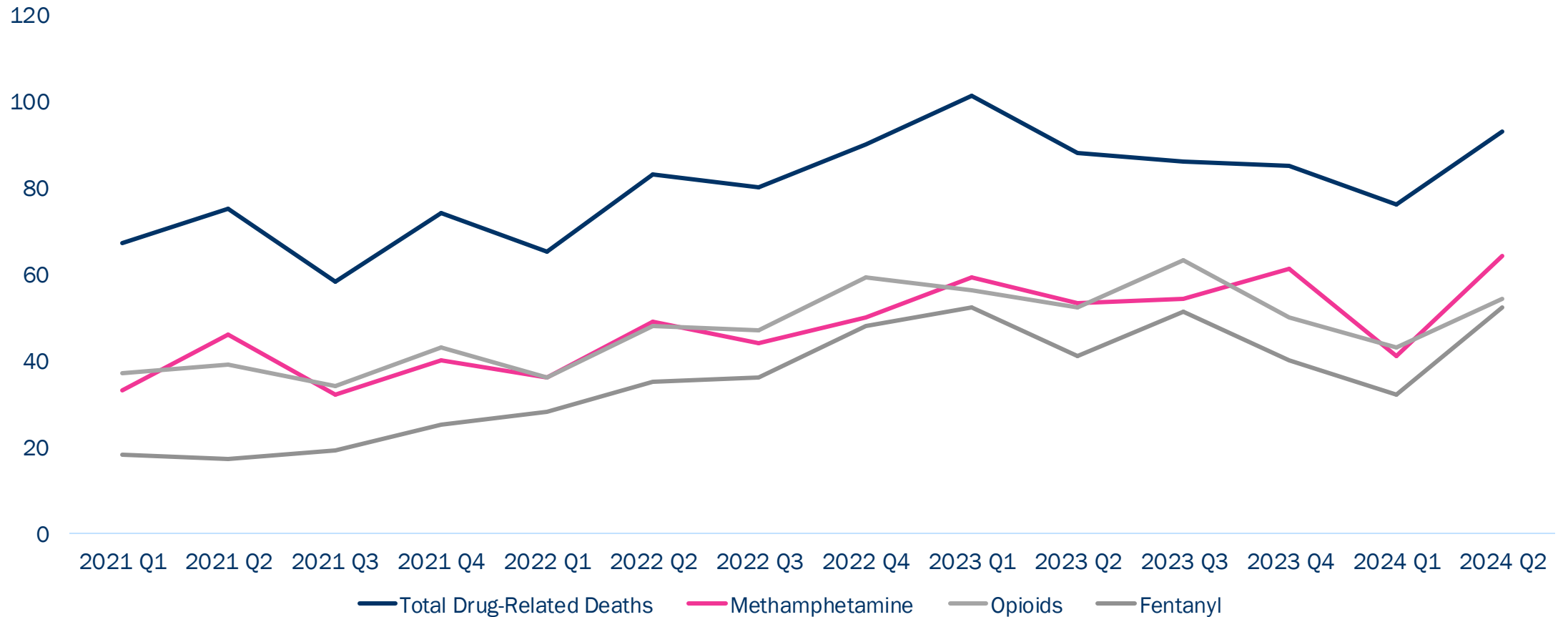


# Washoe County Regional Medical Examiner's Office – Drug Related Deaths in Washoe County, 2021-2024 (first half)



\* Note: 2024 data include Jan – Jun.

# Drug-Related Deaths in Washoe County, 2021-2024 (first half)





# Summary

- Comparing SUDORS data from 2021 to 2022:
  - Increase in number of overdoses between 2021 and 2022 (6% increase)
  - Increase in deaths attributed to fentanyl (20% increase)
- Comparing Washoe County vs. the rest of the state
  - Overdose fatality rates increased in Washoe County between 2019 and 2022, following the same general trend as statewide data
  - However, Washoe County had highest rate of overdose deaths by a significant margin
- Most common substances involved:
  - Methamphetamine
  - Opioids
  - Fentanyl



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# Prescription Drug Monitoring Program (PDMP) Data



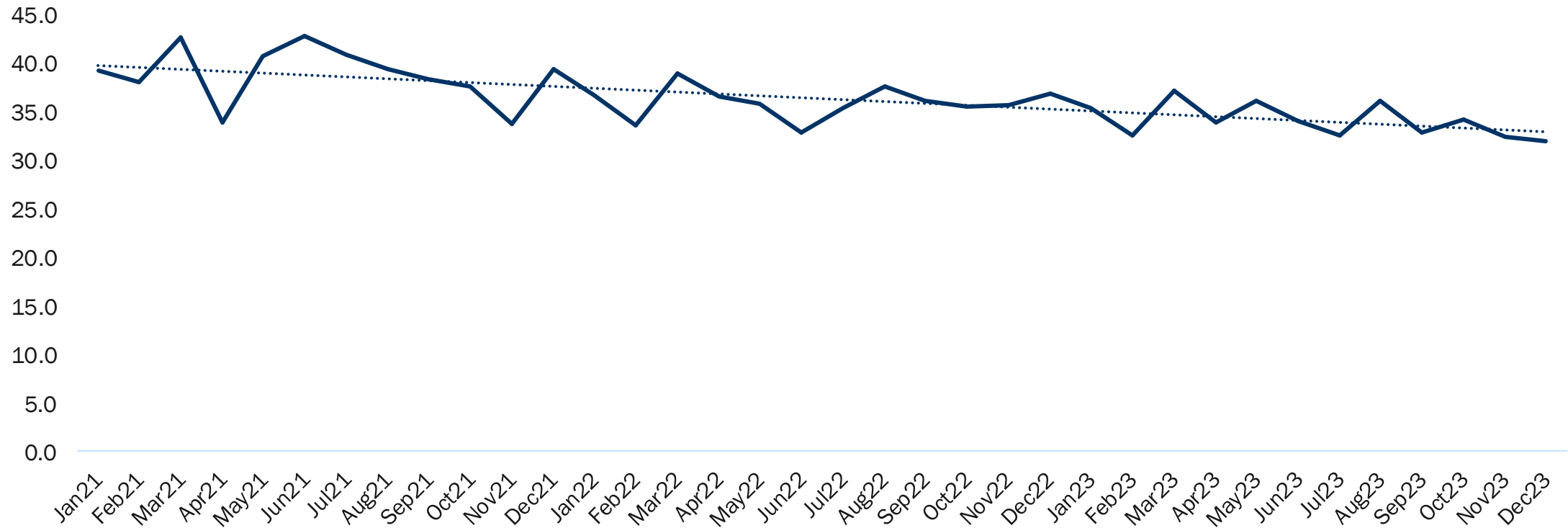
# Prescription Drug Monitoring Program

- *Stores comprehensive client record of reportable prescriptions across providers.*
- *Assists in improving patient care and reducing misuse of controlled substances*
  - *Prescribed opioids: opioid analgesic-controlled substance prescriptions dispensed, including schedule II, III, IV prescription opioids dispensed to patients*
- **Limitations:**
  - *Data are total number of prescriptions filled to Nevada residents*
    - *Does not capture whether medications were taken as prescribed or taken by the prescribed patient*
  - *Counts are not mutually exclusive*
    - *A person can have more than one prescription*





# Opioid prescriptions (rate per 1,000 residents), 2021-2023





## Total number of opioid prescriptions in Nevada, 2019-2023

- 2019 Prescriptions: 1,720,382
  - 2020 Prescriptions: 1,617,664
  - 2021 Prescriptions: 1,474,223
  - 2022 Prescriptions: 1,363,910
  - 2023 Prescriptions: 956,659
- 
- 44% decrease from 2019 - 2023

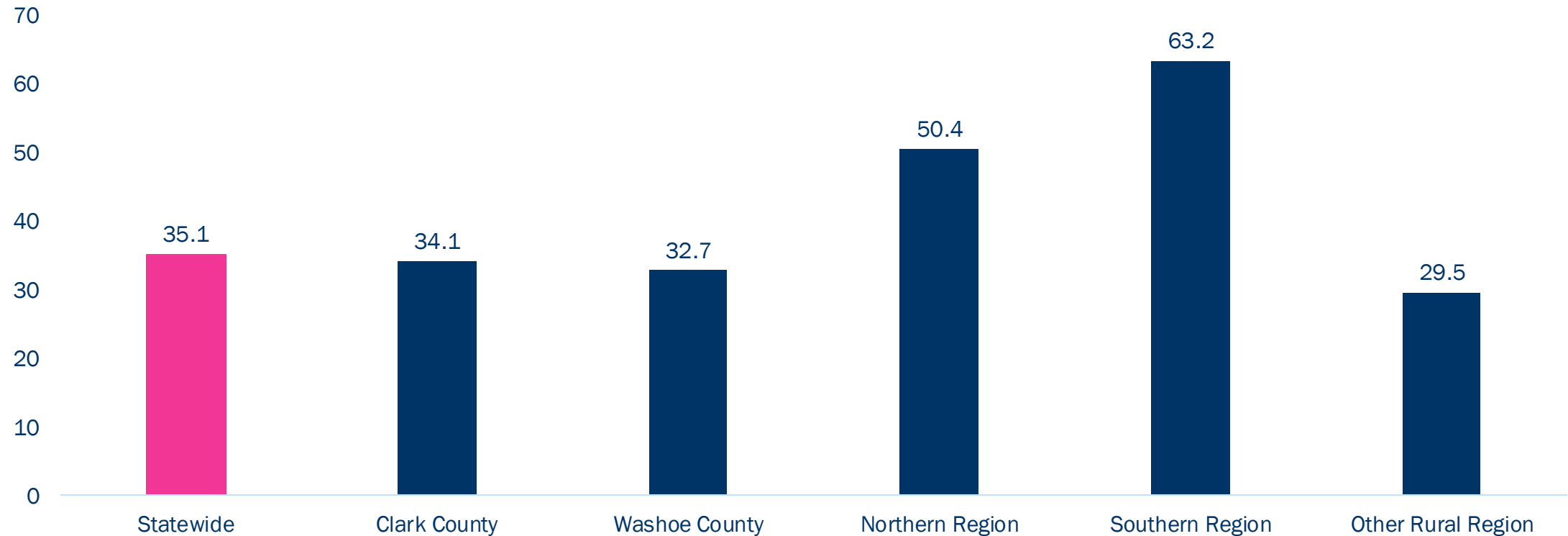


## Total number of opioid prescriptions in Washoe County, 2019-2023

- 2019 Prescriptions: 250,940
  - 2020 Prescriptions: 232,248
  - 2021 Prescriptions: 211,636
  - 2022 Prescriptions: 197,488
  - 2023 Prescriptions: 196,745
- 
- 22% decrease from 2019 - 2023

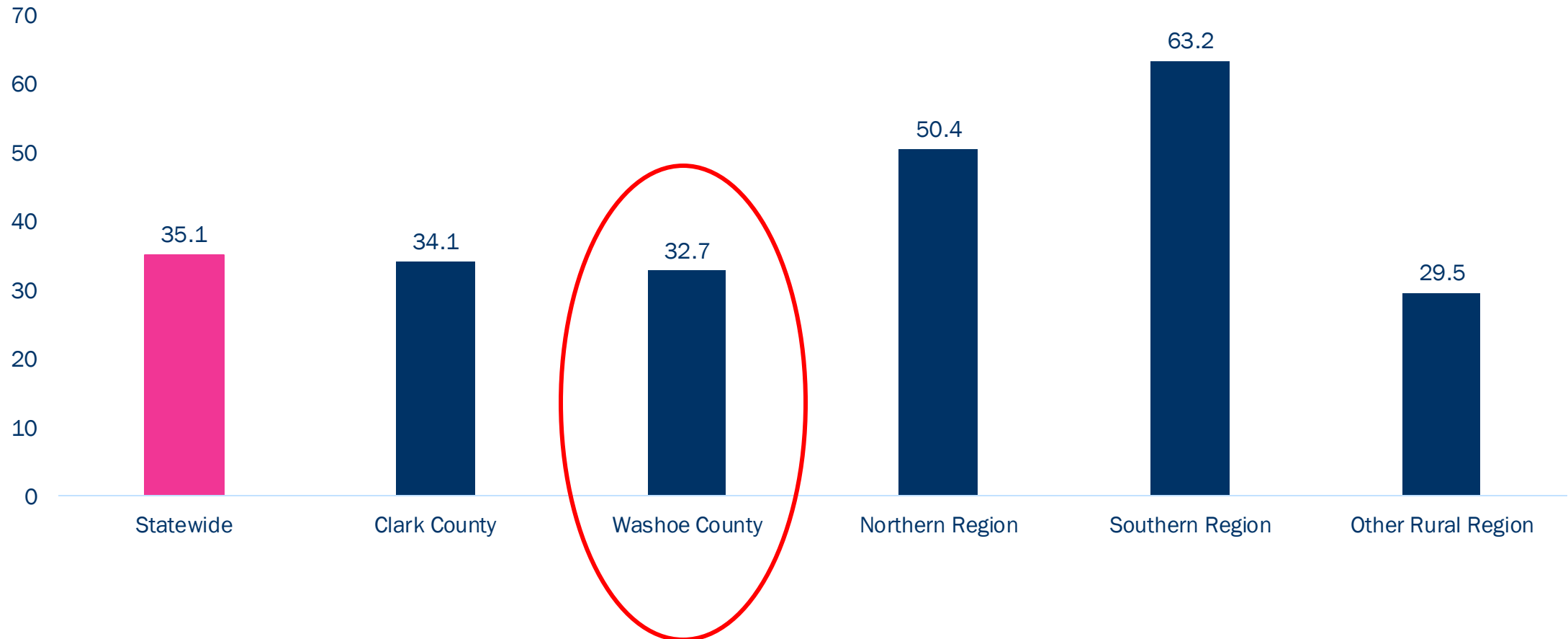


# Average monthly prescription rate per 1,000 population in Nevada by region, 2023





# Average monthly prescription rate per 1,000 population in Nevada by region, 2023





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# Summary

# Data Trends



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Source	Summary
Hospital Data	
<ul style="list-style-type: none"><li>Billing Data</li><li>Syndromic Surveillance</li></ul>	<ul style="list-style-type: none"><li>From 2022 to 2023, increase in inpatient visits for opioid poisoning and little change for emergency department visits</li><li>Increases in suspected opioid overdoses in ED from syndromic surveillance from 2021 to 2023 (24% for all drugs)</li></ul>
Mortality	
<ul style="list-style-type: none"><li>SUDORS</li></ul>	<ul style="list-style-type: none"><li>6% increase in deaths from SUDORS, with 20% increase in deaths involving fentanyl</li><li>Washoe County's unintentional overdose death rate is nearly twice as high as all other jurisdictions</li></ul>
Prescribing	
<ul style="list-style-type: none"><li>PDMP</li></ul>	<ul style="list-style-type: none"><li>44% decrease in prescriptions statewide since 2019, 22% in Washoe County</li></ul>



# Publicly available data

- Nevada OD2A Website
  - Monthly syndromic surveillance reports
- Nevada Office of Analytics
  - SUDORS dashboard – updated annually
  - PDMP data dashboard – updated monthly





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# Questions?

**Please reach out to me  
(Taylor Lensch) at [tlensch@unr.edu](mailto:tlensch@unr.edu)**