



# OPIOID-RELATED OVERDOSES & ENCOUNTERS IN SAN DIEGO COUNTY, 2018-2022

*Overdose Surveillance and Response Program  
Epidemiology and Immunization Services Branch  
August 2024*



COUNTY OF SAN DIEGO  
HEALTH AND HUMAN  
SERVICES AGENCY



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# BACKGROUND



- In fall 2023, the County of San Diego Board of Supervisors approved the creation of the Overdose Surveillance and Response (OSAR) Program supported by Opioid Settlement Funds. OSAR is a cross-departmental effort between Behavioral Health Services and Public Health Services with the purpose of conducting countywide overdose surveillance, providing timely response, and community engagement. OSAR builds on the foundational work completed under the Overdose Data to Action (OD2A) grant, awarded by the Centers for Disease Control and Prevention in 2019.
- This report shows trends in opioid-related fatal overdoses and nonfatal hospitalizations and emergency department encounters among San Diego County residents.
- Monitoring trends can provide a greater understanding of the opioid epidemic in San Diego County and help direct prevention and response activities.



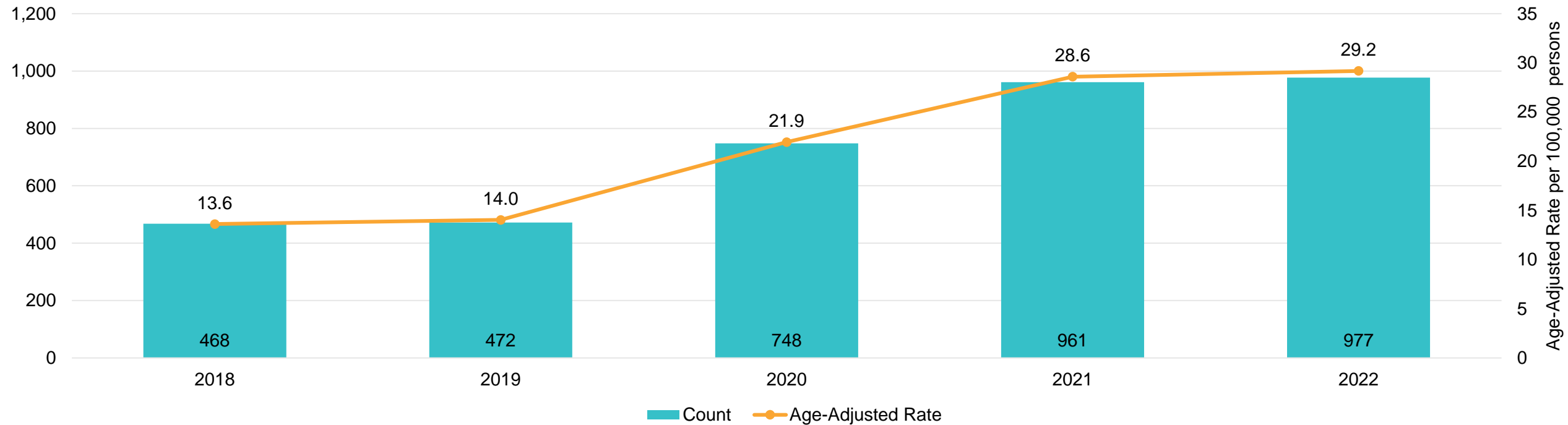
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# MORTALITY

# ANY-DRUG-RELATED MORTALITY



Any-Drug-Related Overdose Deaths, 2018-2022

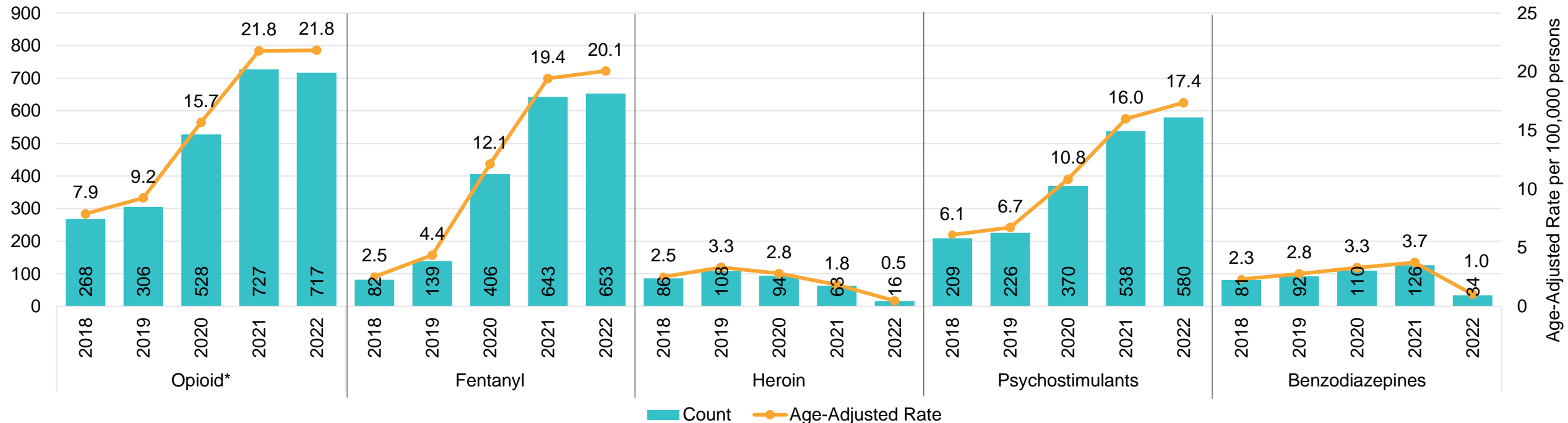


- From 2019 and 2021, the number and rate of any-drug-related overdose deaths in San Diego County sharply rose and was followed by stabilizing period from 2021 to 2022.
- The age-adjusted rate for any-drug-related overdose deaths more than doubled from 2018 to 2022.

# MORTALITY BY SUBSTANCE



Any-Drug-Related Overdose Deaths by Substance, 2018-2022



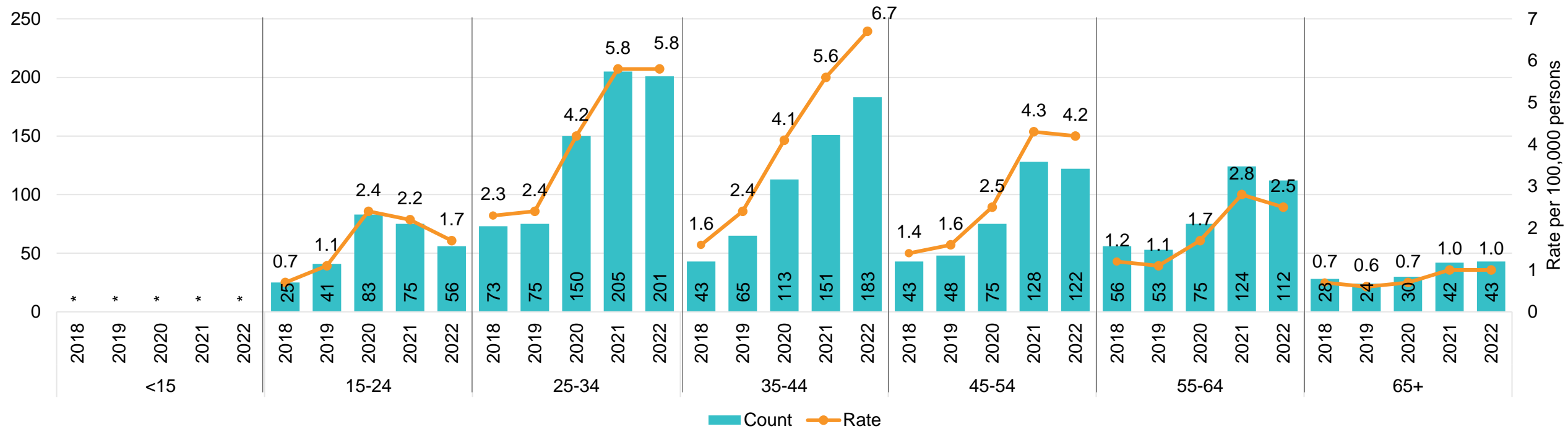
- Despite increasing rates of drug-related overdose deaths since 2018, 2022 marked a stabilization, with the exception of psychostimulant-related deaths (8% increase from 2021 to 2022).
- The number of heroin- and benzodiazepine- related overdose deaths decreased by 75% and 73%, respectively, from 2021 to 2022.
- Overdose deaths attributed to fentanyl accounted for 67% of overdose-related deaths in 2022 compared to 18% in 2018

\* Opioid includes fentanyl, heroin, and other opioids. Drug categories are not mutually exclusive.

# OPIOID-RELATED MORTALITY BY AGE



Opioid-Related Overdose Deaths by Age, 2018-2022



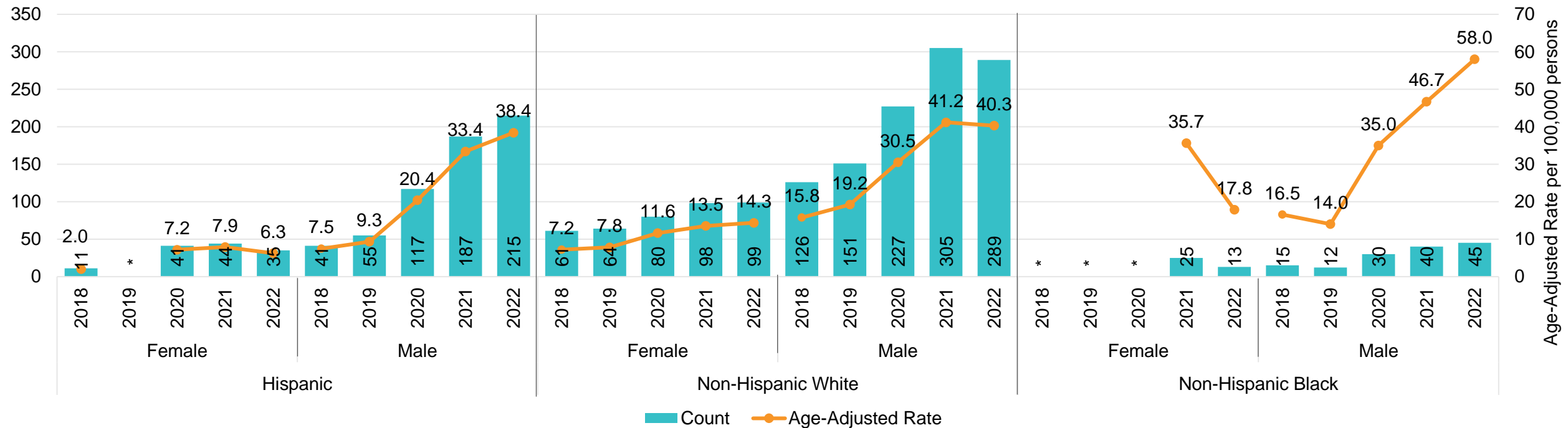
- Since 2018, opioid-related overdose deaths have been rising, but in 2022, the rates stabilized for nearly every age group, except for those aged 35 to 44.
- The rate of opioid-related overdose deaths in the age group 35-44 rose by 1.2 times from 2021 to 2022 and has continuously risen year after year since 2018.

\*Counts less than 11 are suppressed.

# OPIOID-RELATED MORTALITY BY SEX & RACE/ETHNICITY



Opioid-Related Overdose Deaths by Sex and Race/Ethnicity, 2018-2022



- The opioid-related overdose death age-adjusted rate (AAR) for non-Hispanic White males decreased slightly in 2022; non-Hispanic Black males had the highest AAR during this period.
- Between 2018 and 2022, there was a fivefold increase in the number and AAR of opioid-related overdose deaths among Hispanic males.
- From 2020-2022, the number and rate of opioid-related overdose deaths among non-Hispanic White females has increased.

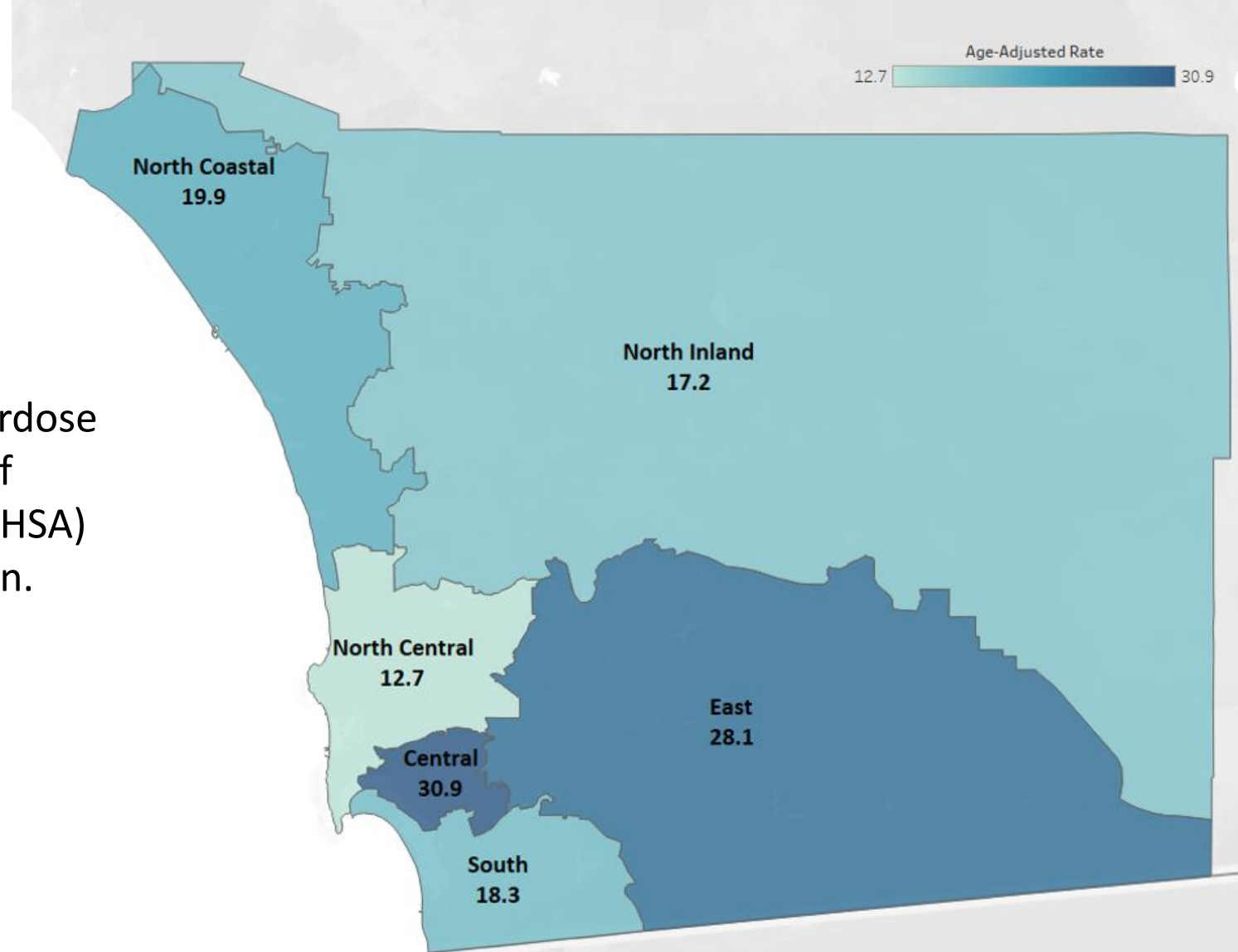
\*Counts less than 11 are suppressed. Other racial/ethnic groups are not shown due to small numbers.

# OPIOID-RELATED MORTALITY IN 2022 BY HHSA REGION OF RESIDENCE



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- In 2022, the rate of opioid-related overdose deaths was highest among residents of Health and Human Services Agency (HHSA) Central Region, followed by East Region.





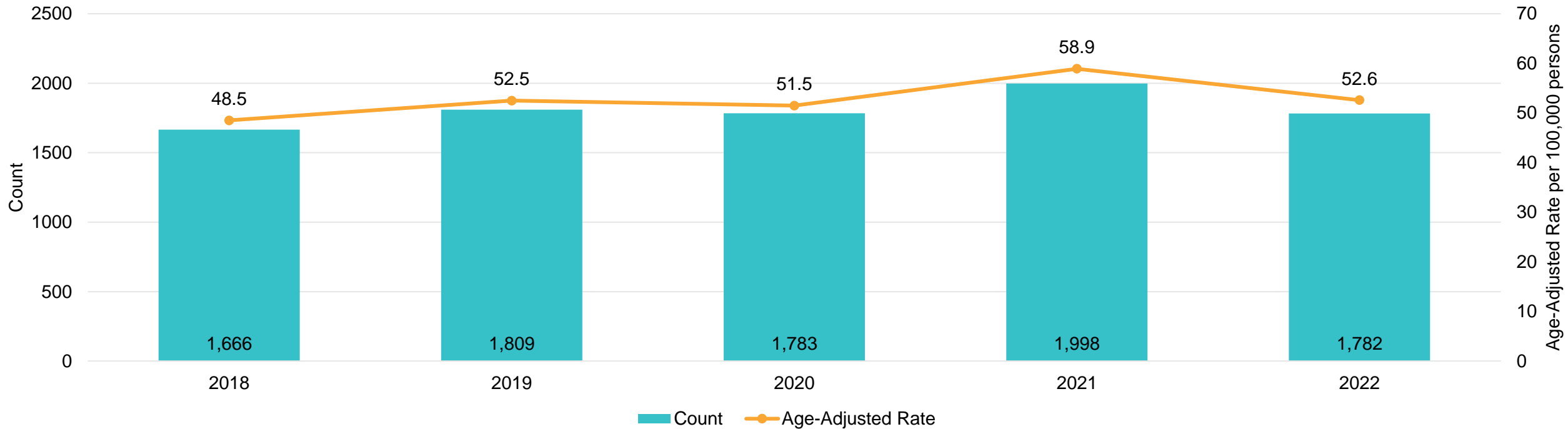


# HOSPITAL INPATIENT DISCHARGES

# ANY-DRUG-RELATED HOSPITALIZATION



### Any-Drug-Related Overdose Hospital Inpatient Discharges, 2018-2022

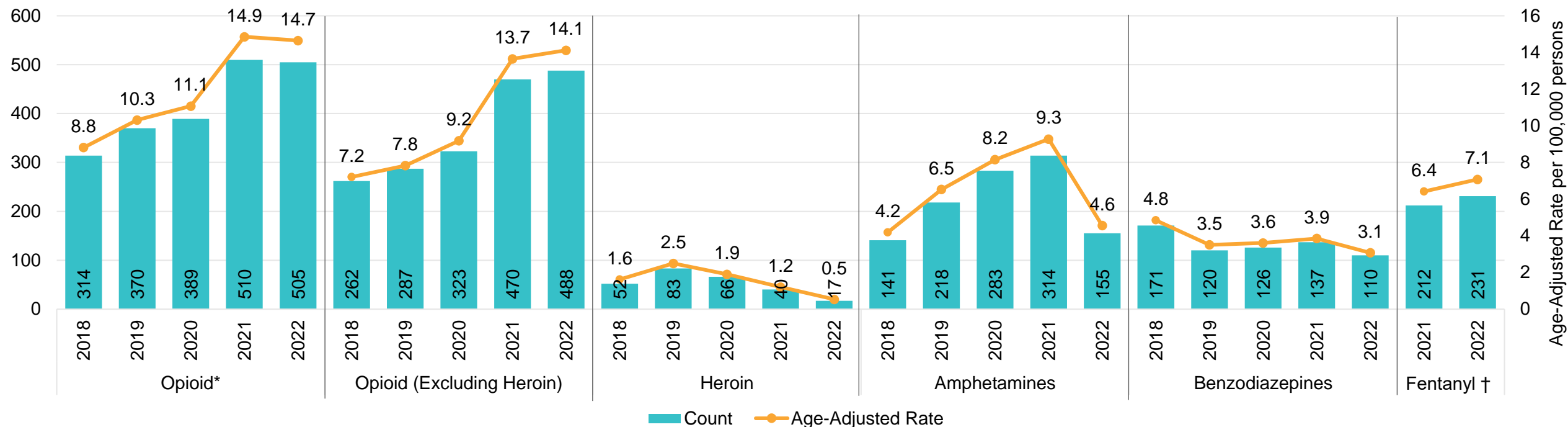


- The age-adjusted rate of any-drug-related overdose hospitalizations decreased by 10.7% from 2021 to 2022.

# HOSPITALIZATION BY SUBSTANCE



**Hospital Inpatient Discharges by Overdose Substance, 2018-2022**



- From 2021 to 2022, the rate of opioid-, heroin-, amphetamine-, and benzodiazepine-related overdose hospitalizations decreased, while fentanyl-related overdose hospitalizations increased.

\*Opioid includes heroin and other opioids.

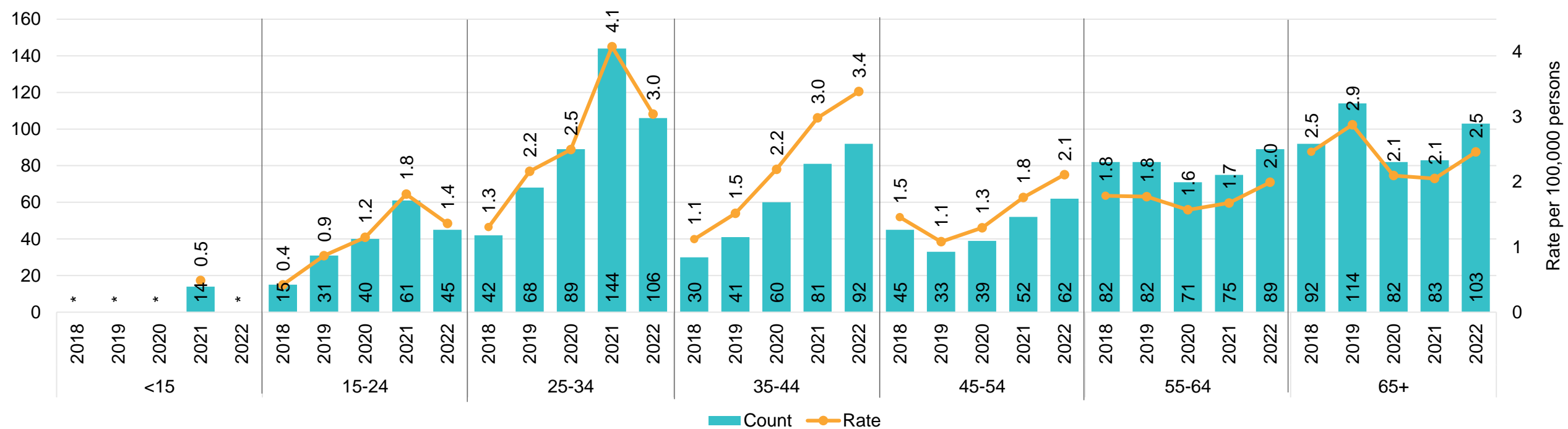
† Fentanyl-specific data from this source is only available starting in 2021.

# OPIOID-RELATED HOSPITALIZATION BY AGE



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Opioid-Related Overdose Hospital Inpatient Discharges by Age, 2018-2022



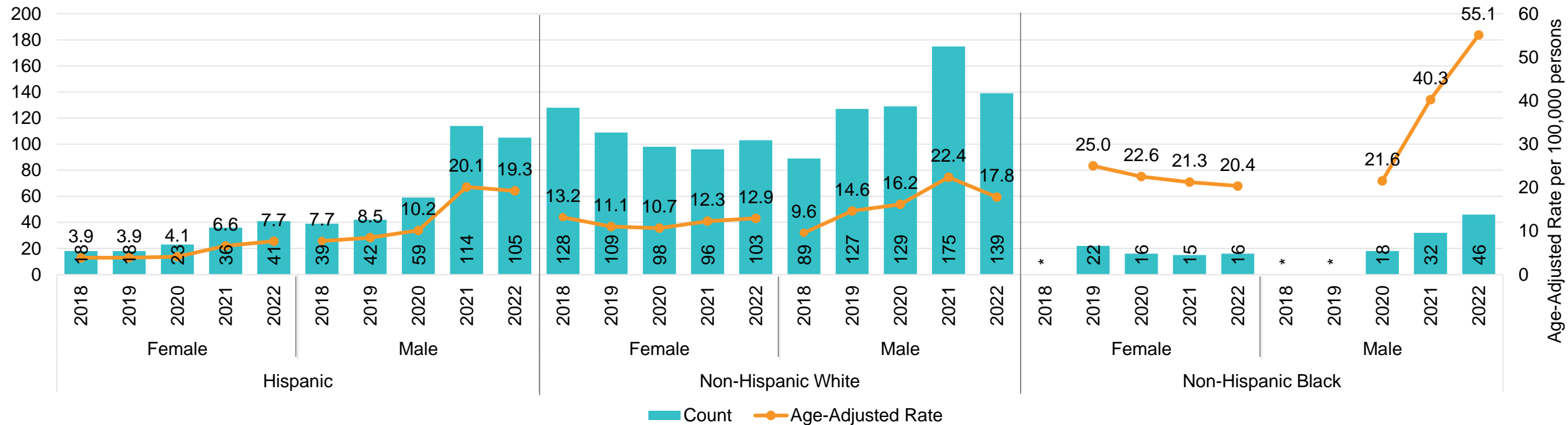
- From 2021 to 2022, the number of opioid-related overdose hospitalizations among individuals 15-34 years of age decreased 26%.
- From 2019 to 2022, among those 35-54 years of age, there has been a steady increase in the rate and number of opioid-related overdose hospitalizations.
- From 2021 to 2022, the number of opioid-related overdose hospitalizations among age groups 55-64 and 65+ years of age increased 19% and 24%, respectively.

\*Counts less than 11 are suppressed.

# OPIOID-RELATED HOSPITALIZATION BY SEX & RACE/ETHNICITY



Opioid-Related Overdose Hospital Inpatient Discharges by Sex and Race/Ethnicity, 2018-2022



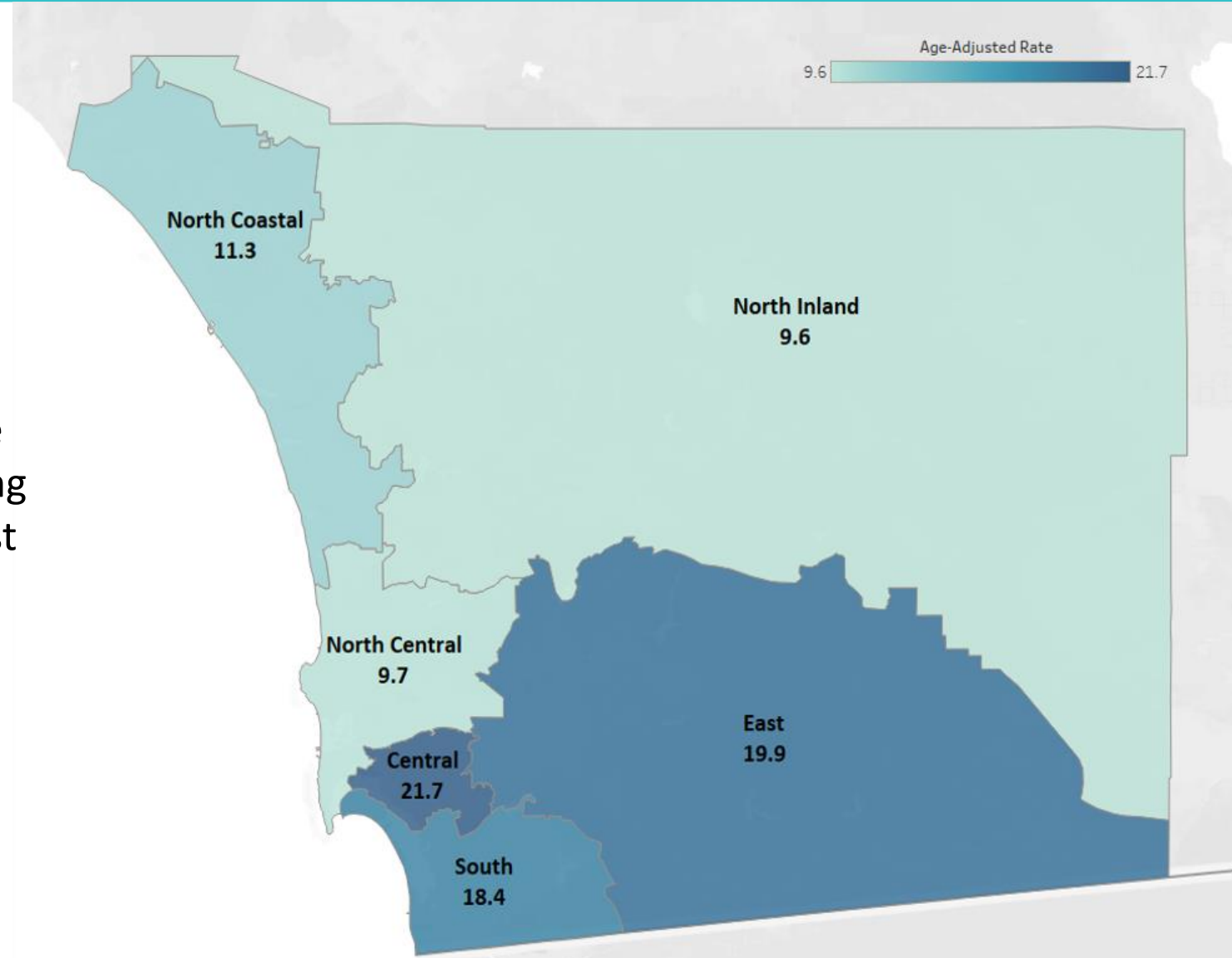
- From 2021 to 2022, the number of opioid-related overdose hospitalizations among non-Hispanic White males decreased by 21% and Hispanic males by 8%.
- The number of hospitalizations among non-Hispanic White females, Hispanic females, and non-Hispanic Black males increased by 7%, 14%, and 44%, respectively.
- In 2022, non-Hispanic White males had the highest number of opioid-related overdose hospitalizations while non-Hispanic Black males had the highest age-adjusted rate.

\*Counts less than 11 are suppressed.

# OPIOID-RELATED HOSPITAL DISCHARGES IN 2022 BY HHSA REGION OF RESIDENCE



- In 2022, the rate of opioid-related overdose inpatient hospitalizations was highest among residents of Central Region, followed by East Region.



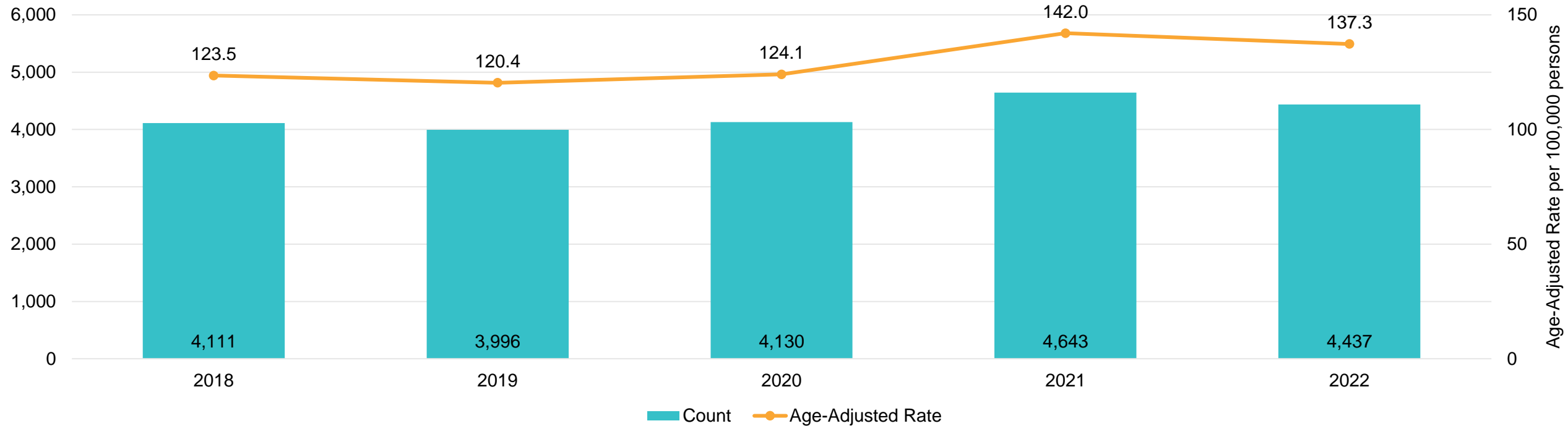


# EMERGENCY DEPARTMENT DISCHARGES

# ANY-DRUG-RELATED EMERGENCY DEPARTMENT DISCHARGES



Any-Drug-Related Overdose Emergency Department Discharges, 2018-2022



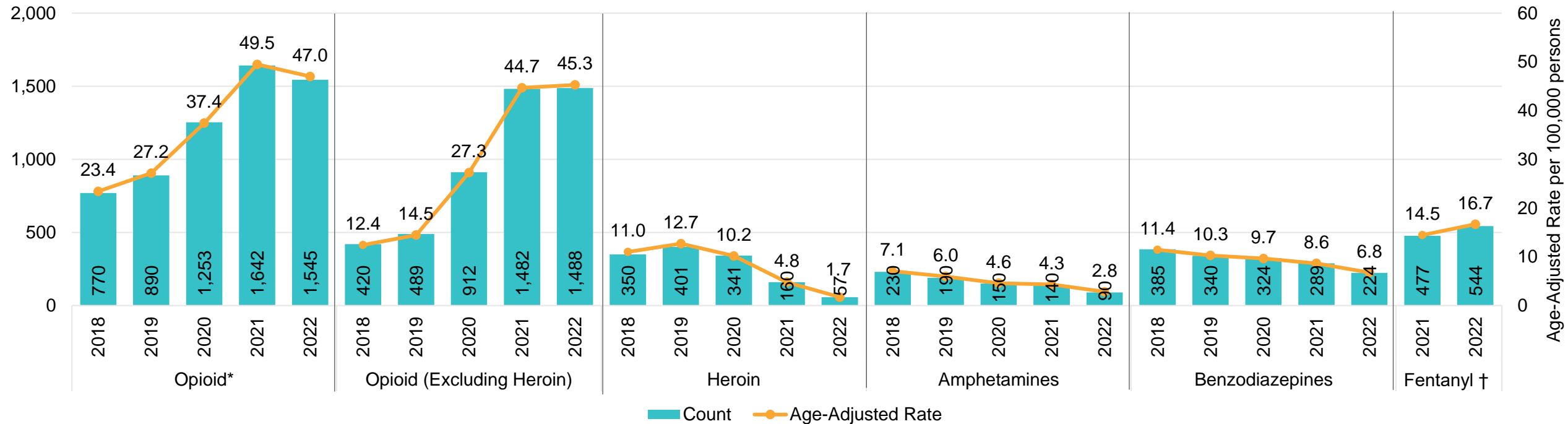
- The age-adjusted rate of any-drug-related overdose emergency department discharges increased by 11.2% from 2018 to 2022.



# EMERGENCY DEPARTMENT DISCHARGES BY SUBSTANCE



Emergency Department Discharges by Overdose Substance, 2018-2022



- The rate and number of opioid-, heroin-, amphetamine-, and benzodiazepine-related overdose emergency department discharges decreased from 2021 to 2022.
- The number of fentanyl-related overdose emergency department discharges increased by 14% from 2021 to 2022.

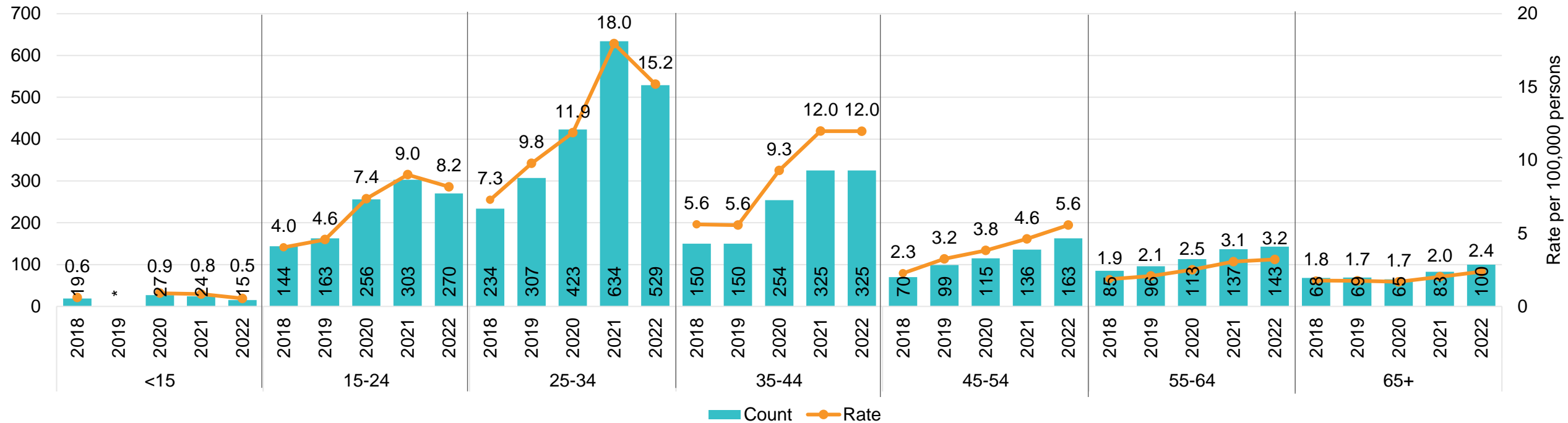
\*Opioid includes heroin and other opioids.

† Fentanyl-specific data from this source is only available starting in 2021.

# OPIOID-RELATED EMERGENCY DEPARTMENT DISCHARGES BY AGE



Opioid-Related Overdose Emergency Department Discharges by Age, 2018-2022



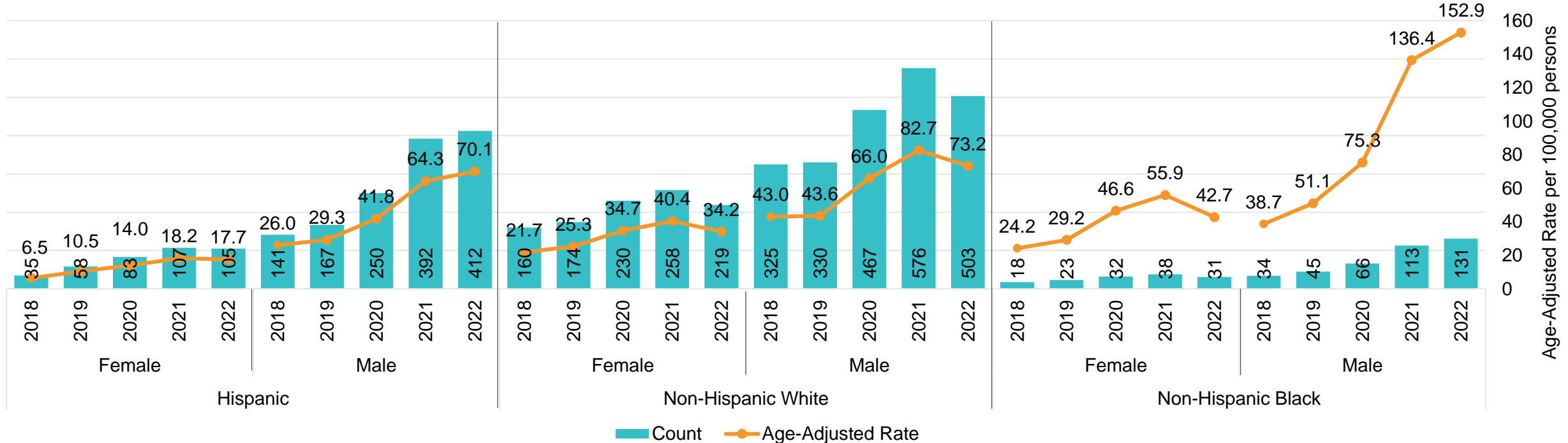
- From 2018 to 2021, among those aged 15-44 years, the number of opioid-related emergency department discharges increased. However, there was a decrease and stabilization from 2021 to 2022.
- Since 2018, among those aged 45+ years, there has been a gradual increase in the number and rate of opioid-related emergency department discharges.

\*Counts less than 11 are suppressed.

# OPIOID-RELATED EMERGENCY DEPARTMENT DISCHARGES BY SEX & RACE/ETHNICITY



**Opioid-Related Overdose Emergency Department Discharges by Sex and Race/Ethnicity, 2018-2022**



- In 2022, the number of opioid-related overdose emergency department (ED) discharges was highest among non-Hispanic White males, followed by Hispanic males.
- From 2021 to 2022, the number opioid-related overdose emergency department discharges for non-Hispanic White females and males decreased by 15% and 13%, respectively.
- Although non-Hispanic Black residents have a relatively low percent of the total number of discharges, they have the highest age-adjusted rate.

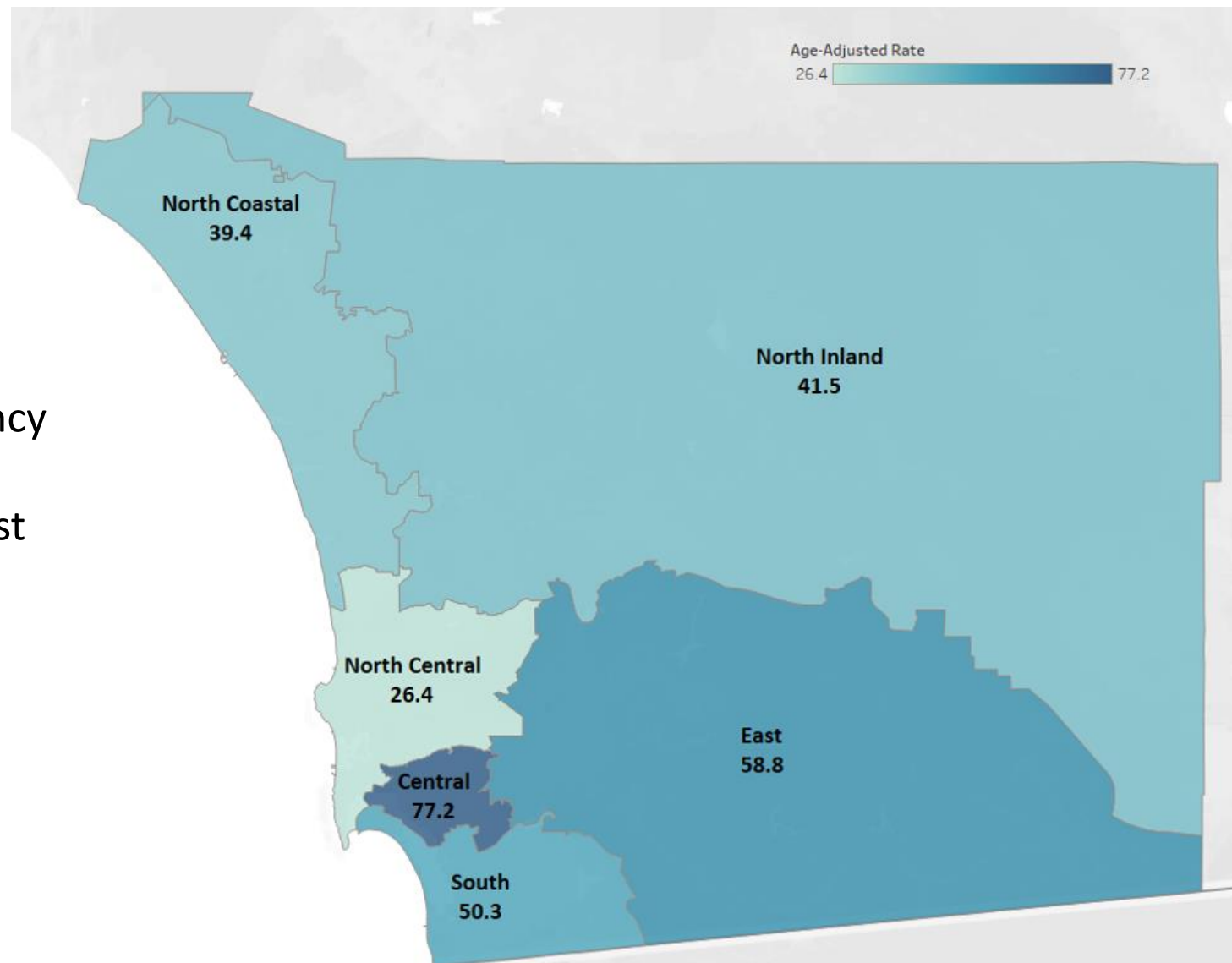
\*Counts less than 11 are suppressed. Other Race/ethnicity groups have been censored due to small counts.

# OPIOID-RELATED EMERGENCY DEPARTMENT DISCHARGES IN 2022 BY REGION OF RESIDENCE



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- In 2022, the rate of opioid-related emergency department discharges was highest among residents of Central Region, followed by East Region.



# CONCLUSIONS



- From 2021 to 2022, opioid-, heroin-, and benzodiazepine- related overdose fatalities, hospitalizations, and emergency department (ED) discharges decreased. Fentanyl-related hospitalizations and ED discharges also decreased, however, fatalities increased by 2%.
- In 2022, fentanyl accounted for 91% of opioid-related deaths, 46% of opioid-related hospitalizations, and 35% of opioid-related ED discharges.
- Since 2018, the number and rate of psychostimulant-related deaths has increased. From 2021 to 2022, however, amphetamine-related ED discharges and hospitalizations decreased.
- In 2022, opioid-related overdose fatalities, hospitalizations, and ED discharges decreased among those aged 15-34 years, whereas incidence has continued to rise for those aged 35-44.
- Non-Hispanic Black males have the highest rate of opioid-related ED discharges, hospitalizations, and mortality, whereas non-Hispanic White males have the highest incidence. Unlike non-Hispanic White males, the age-adjusted rate for Black males has been increasing across all three areas since 2019.
- In 2022, Central Region, followed by East Region, experienced the highest rates of opioid-related overdose fatalities, hospitalizations, and ED discharges.

# NOTES AND SOURCES



- Retrospective analysis of fatal and nonfatal overdoses regardless of intent among San Diego County residents, from 2018 to 2022.
- Data Sources:
  - Mortality data from the Vital Records Business Intelligence System, managed by the California Department of Public Health.
  - Emergency department discharge and hospitalization data from the California Department of Health Care Access and Information, previously California's Office of Statewide Health Planning and Development. Beginning in the 4<sup>th</sup> quarter of 2020, the generic ICD-10-CM code for other synthetic narcotics was replaced by three more specific codes. Hospital inpatient encounter data use date of discharge for annual counts, which differs from previous reports, which utilized date of admission. ED visits which result in a same-hospital admission, are not counted as an ED visit, but as a hospitalization encounter.
  - 2018-2022 SANDAG population estimates were used to calculate rates, using the populated estimates data file obtained in January 2024. Rates between reports may differ due to updates in population estimates.
- Null values and counts <11 are suppressed.
- More than one drug may contribute to a person's death, hospitalization, or ED discharge; that death, hospitalization, or ED discharge is included in multiple categories.

# CASE DEFINITIONS



## Mortality Case Definitions ([CDPH Overdose Surveillance Dashboard](#))

Any Drug Overdose	All overdose deaths, regardless of intent (e.g., unintentional, suicide, assault, or undetermined). This indicator does not include: (1) deaths related to chronic use of drugs (e.g., damage to organs from long-term drug use), 2) deaths due to alcohol and tobacco, and 3) deaths that occur under the influence of drugs, but do not involve acute poisoning.
Opioid Overdose	Any opioid as a contributing cause of death, regardless of intent. Opioids include both prescription opioid pain relievers such as hydrocodone, oxycodone, and morphine, as well as heroin and opium. Deaths related to chronic use of drugs are excluded from this indicator.
Opioid Excluding Heroin	Any opioid as a contributing cause of death, regardless of intent, except for heroin. Opioids include both prescription opioid pain relievers such as hydrocodone, oxycodone, and morphine, and opium. Deaths related to chronic use of drugs are excluded from this indicator.
Heroin Overdose	Drug overdose deaths caused by acute poisoning that involve heroin as a contributing cause of death, regardless of intent. Deaths related to chronic use of drugs are excluded from this indicator.
Psychostimulants Overdose	Drug overdose deaths caused by acute poisonings that involve psychostimulants with abuse potential excluding cocaine (T40.5), regardless of intent. Psychostimulants with abuse potential include methamphetamine, MDMA, dextroamphetamine, and levoamphetamine. Deaths related to chronic use of drugs are excluded from this indicator. Overdose deaths involving amphetamine and associated analogs were identified by using a text search algorithm.
Benzodiazepine Overdose	Drug overdose deaths caused by acute poisonings that involve benzodiazepines as a contributing cause of death, regardless of intent. Benzodiazepines include anti-anxiety medications such as alprazolam (Xanax) and lorazepam (Ativan). Deaths related to chronic use of drugs are excluded from this indicator. Overdose deaths involving benzodiazepine and associated analogs were identified by using a text search algorithm.
Fentanyl Overdose	Drug overdose deaths caused by acute poisonings that involve fentanyl or fentanyl analogs as a contributing cause of death, regardless of intent. Deaths related to chronic use of drugs are excluded from this indicator. Overdose deaths involving fentanyl and associated analogs were identified by using a text search algorithm.

# CASE DEFINITIONS



## Emergency Department Discharge and Hospitalization Case Definitions ([CDPH Overdose Surveillance Dashboard](#)):

Any Drug Overdose	ED visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of drugs, regardless of intent. ED visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use) are excluded from this indicator.
Opioid Overdose	ED visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of any opioid drugs, regardless of intent. ED visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs are excluded from this indicator. Beginning in the 4 <sup>th</sup> quarter of 2020, the generic ICD10-CM code for other synthetic narcotics (T40.4X) was replaced by three more specific codes (T40.41, T40.42, T40.49).
Opioid Excluding Heroin	ED visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of any opioid drugs, regardless of intent. ED visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs are excluded from this indicator. Beginning in the 4 <sup>th</sup> quarter of 2020, the generic ICD10-CM code for other synthetic narcotics (T40.4X) was replaced by three more specific codes (T40.41, T40.42, T40.49).
Heroin Overdose	Emergency department visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of heroin, regardless of intent. Emergency department visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs.
Amphetamine Overdose	ED visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of amphetamines (stimulants such as methamphetamine), regardless of intent. ED visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs, are excluded from this indicator.
Benzodiazepine Overdose	Emergency department visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of benzodiazepines, regardless of intent (e.g., suicide, unintentional, or undetermined). Emergency department visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs (e.g., damage to organs from long-term drug use), are excluded from this indicator.
Fentanyl Overdose	ED visits or inpatient hospitalizations caused by non-fatal acute poisonings due to the effects of fentanyl or fentanyl analogs, regardless of intent. ED visits or inpatient hospitalizations related to late effects, adverse effects, and chronic poisonings due to the effects of drugs are excluded from this indicator. This indicator is only available beginning in 2021.





County of San Diego  
Health and Human Services Agency  
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Overdose Surveillance and Response Program  
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***The Public Health Services department, County of San Diego Health and Human Services Agency, has maintained national public health accreditation, since May 17, 2016, and re-accredited by the Public Health Accreditation Board on August 21, 2023.***