



# OPIOID-RELATED OVERDOSES & ENCOUNTERS IN SAN DIEGO COUNTY, 2016-2020

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*Overdose Data to Action (OD2A) Strategy 3: Surveillance  
Epidemiology and Immunization Services Branch*

*October 2022*

*Revised April 2023*



# BACKGROUND



LIVE WELL  
SAN DIEGO

- The County of San Diego (CoSD) Health and Human Services Agency (HHSA) is one of the recipients of the 2019 Overdose Data to Action (OD2A) grant awarded by the CDC, funding opportunity number CDC-RFA-CE19-1904.
- Through innovative surveillance activities, linked with evidence-based prevention, this grant aims to reduce opioid misuse and opioid use disorder, increase evidence-based treatment for opioid use disorder, and reduce emergency department visits and deaths from opioid overdoses. These aims will be achieved through five strategies.
- This presentation shows trends in opioid-related fatal overdoses and nonfatal hospitalizations and emergency department encounters in San Diego County. Monitoring trends can provide a greater understanding of the opioid epidemic in San Diego County and help direct prevention and response activities.



- Retrospective analysis of fatal overdoses and nonfatal drug encounters regardless of intent among San Diego County residents, from 2016 to 2020.
- Null values and counts <15 were suppressed.
- Data Sources:
  - Mortality data from the Vital Records Business Intelligence System (VRBIS), managed by the California Department of Public Health.
  - Emergency Department (ED) and hospitalization (HOSP) discharge data from California Department of Health Care Access and Information (HCAI), previously California's Office of Statewide Health Planning and Development (OSHPD).
  - Data are available from the State annually ~9-12 months after the end of each year.



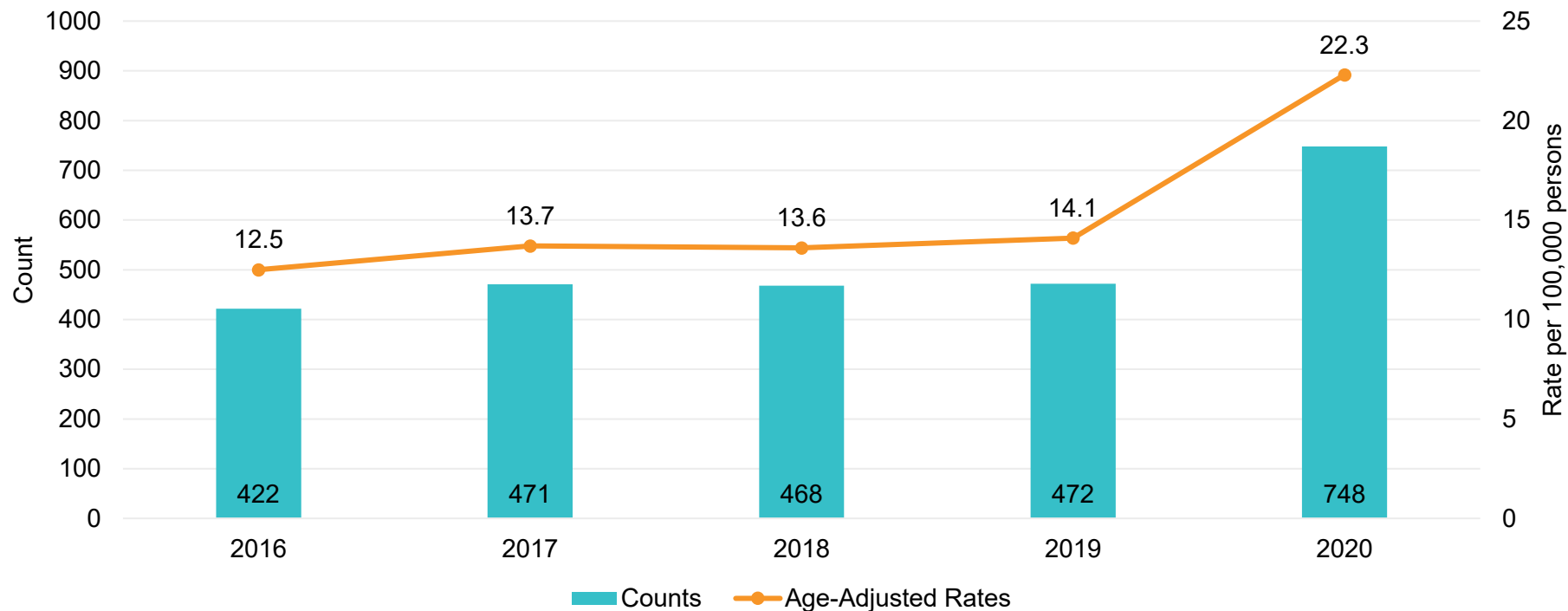
# MORTALITY



# DRUG-RELATED MORTALITY



**Drug Overdose Deaths  
San Diego County Residents, 2016-2020**

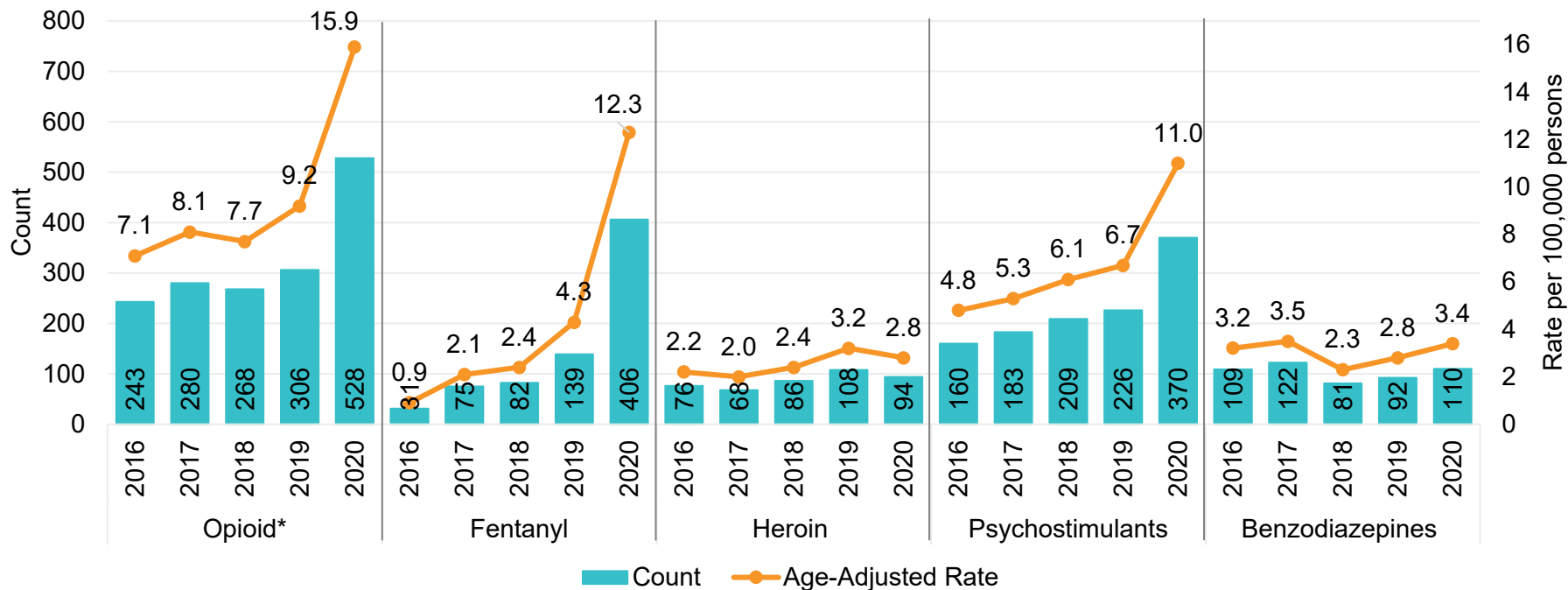


- From 2016 to 2019 there was a gradual increase in the number of drug overdose deaths in San Diego County, followed by a sharp increase from 2019 to 2020.
- The age-adjusted rate for drug overdose deaths almost doubled from 2016 to 2020.

# MORTALITY BY DRUG



**Drug Overdose Deaths by Drug  
San Diego County Residents, 2016-2020**



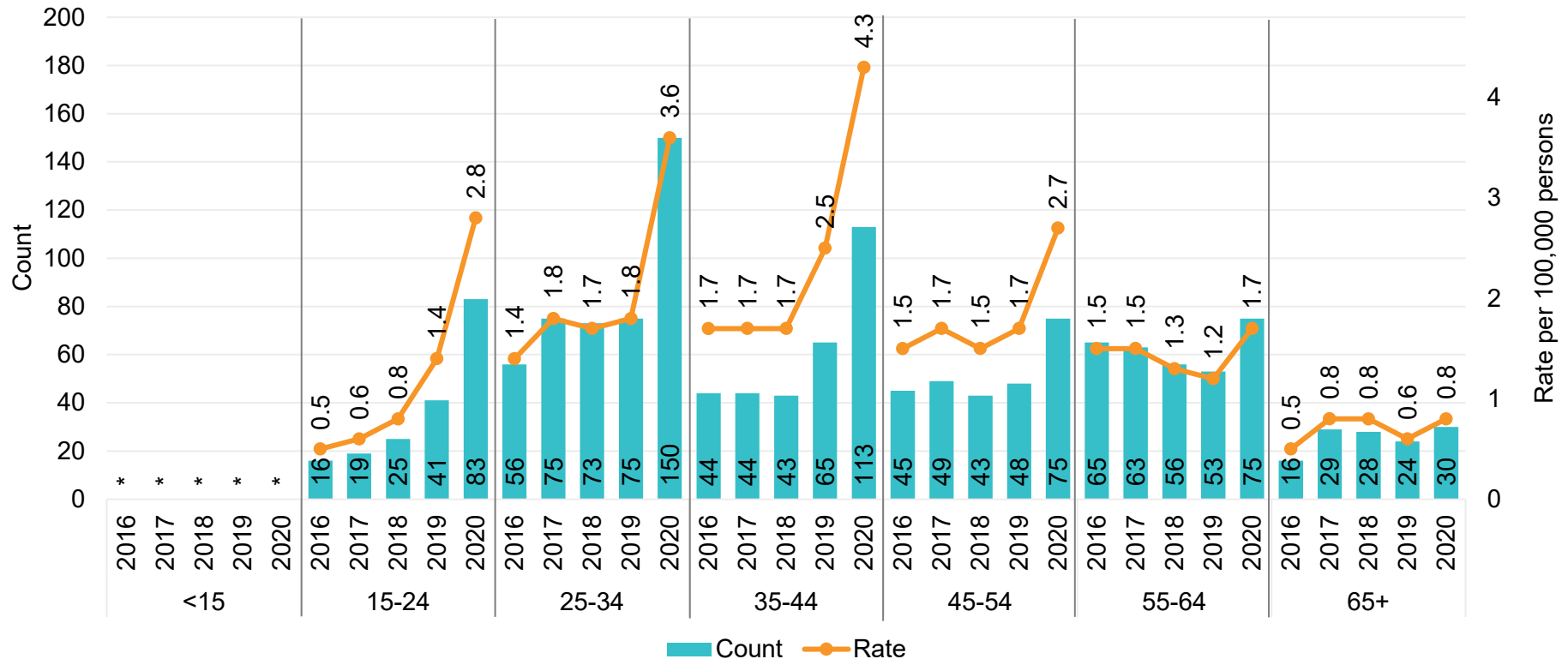
- Opioid-related drug deaths have increased since 2016.
- Overdose deaths attributed to fentanyl almost tripled from 2019 to 2020 and accounted for 77% of opioid-related deaths in 2020 compared to 45% in 2019.
- Psychostimulant overdose deaths increased 64% from 2019 to 2020.

\* Opioid includes fentanyl, heroin, and other opioids.

# OPIOID-RELATED MORTALITY BY AGE



**Opioid-Related Deaths by Age  
San Diego County Residents, 2016-2020**



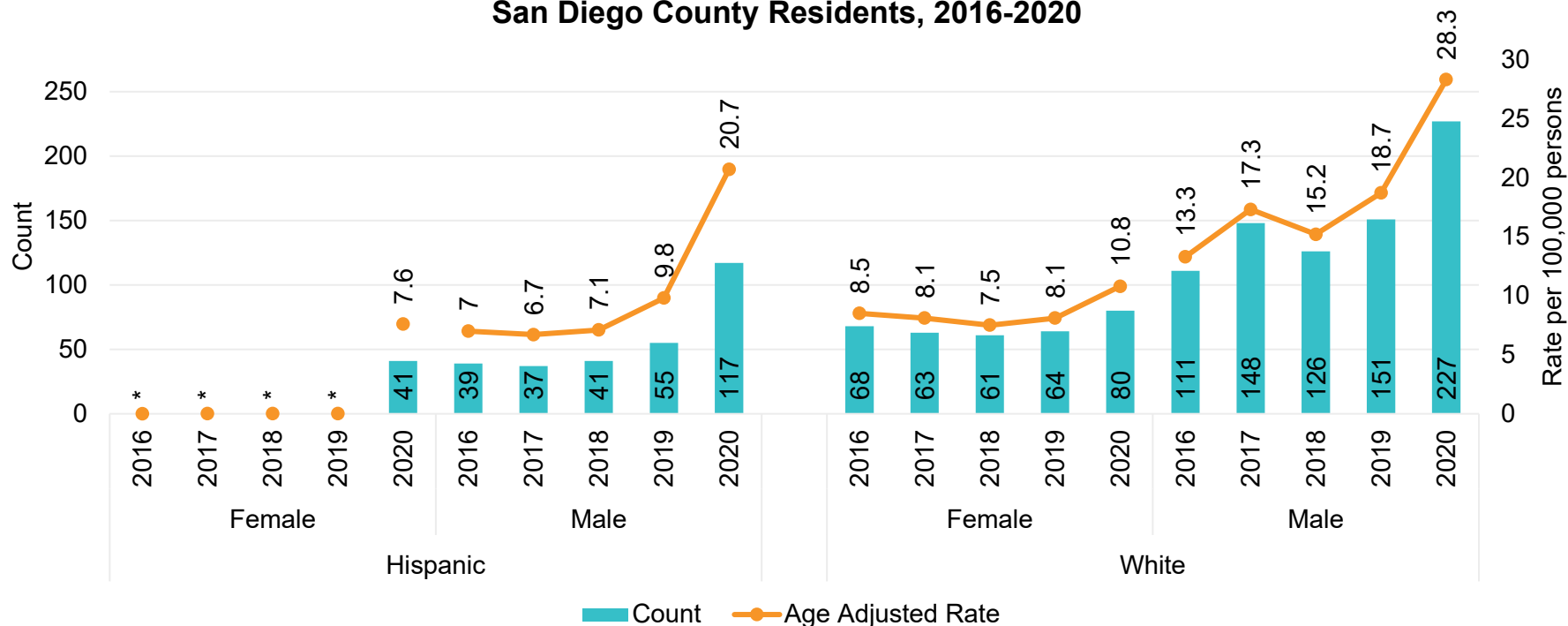
- Opioid-related overdose deaths more than doubled between 2016 and 2020 in age groups between 15 and 44 years. There was also an increase among 45-54-year-olds. Trends were less clear in older age groups.

\*Counts less than 15 are suppressed.

# OPIOID-RELATED MORTALITY BY SEX & RACE/ETHNICITY



**Opioid-Related Deaths by Sex and Race/Ethnicity  
San Diego County Residents, 2016-2020**



- White men had a higher rate of opioid related overdose deaths than any other group; deaths in this group doubled from 2016 to 2020.
- The count and age-adjusted rate of opioid-related deaths in Hispanic men more than doubled from 2019 to 2020.
- Other racial/ethnic groups are not shown due to small numbers.

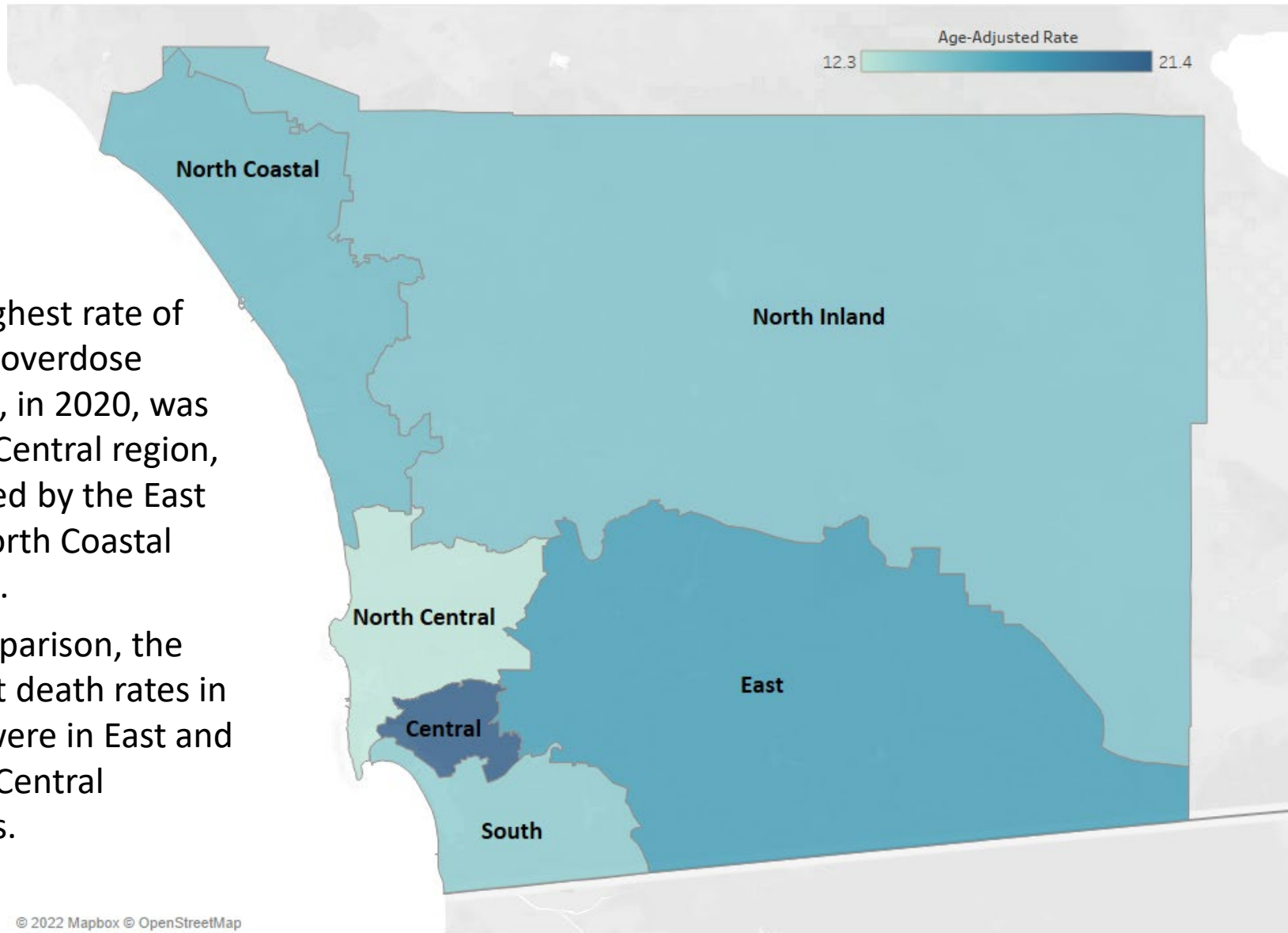
\*Counts less than 15 are suppressed.



# OPIOID-RELATED MORTALITY IN 2020 BY HHSA REGION OF RESIDENCE



- The highest rate of opioid overdose deaths, in 2020, was in the Central region, followed by the East and North Coastal Region.
- In comparison, the highest death rates in 2019 were in East and North Central regions.





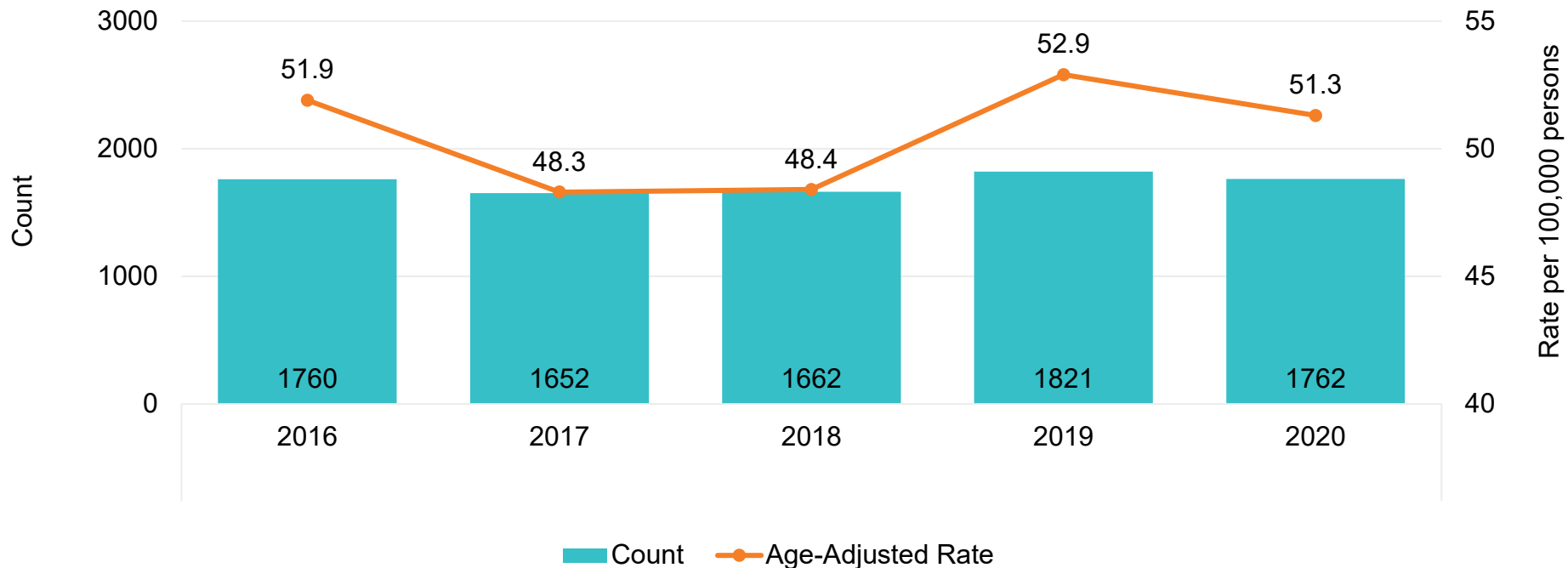
# HOSPITAL INPATIENT ENCOUNTERS



# DRUG-RELATED HOSPITALIZATION



**Drug-Related Inpatient Hospitalization Encounters  
for San Diego County Residents, 2016-2020**

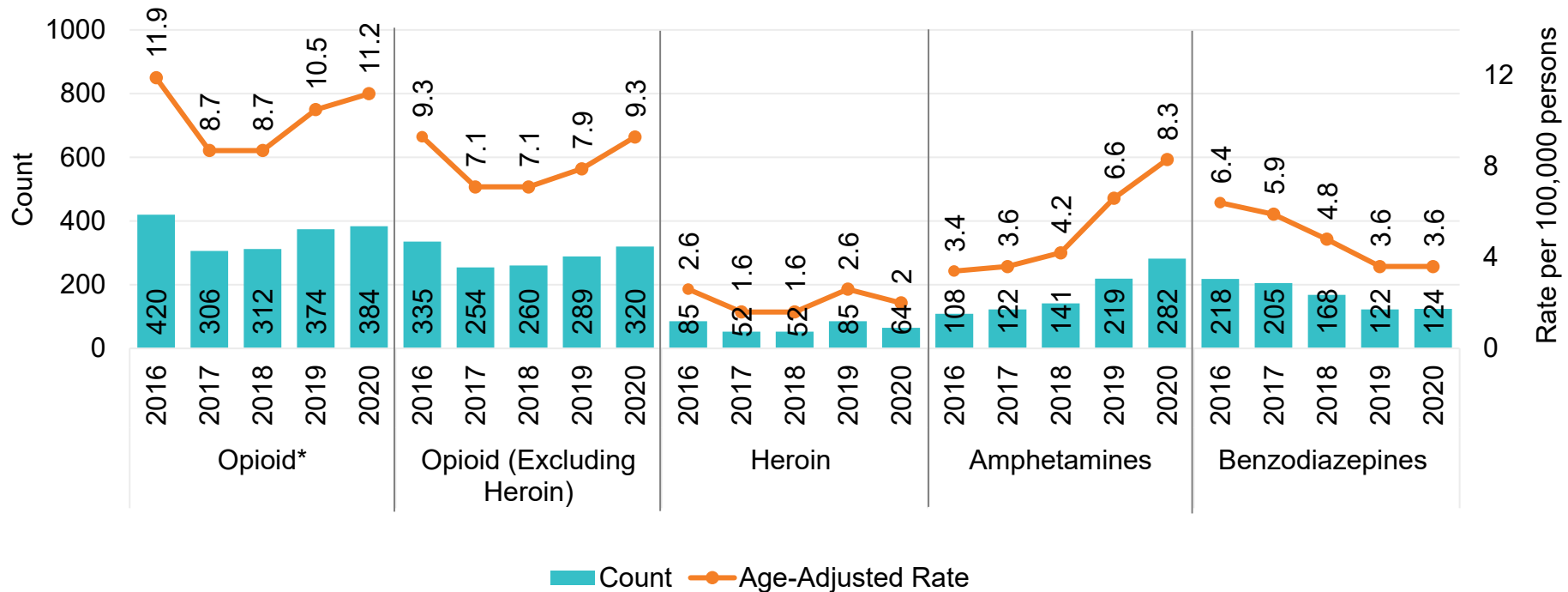


- There was no clear pattern in the rate of drug-related inpatient encounters at hospitals in San Diego County between 2016 and 2020.

# HOSPITALIZATION BY DRUG



**Inpatient Hospitalization Encounters by Drug  
for San Diego County Residents, 2016-2020**



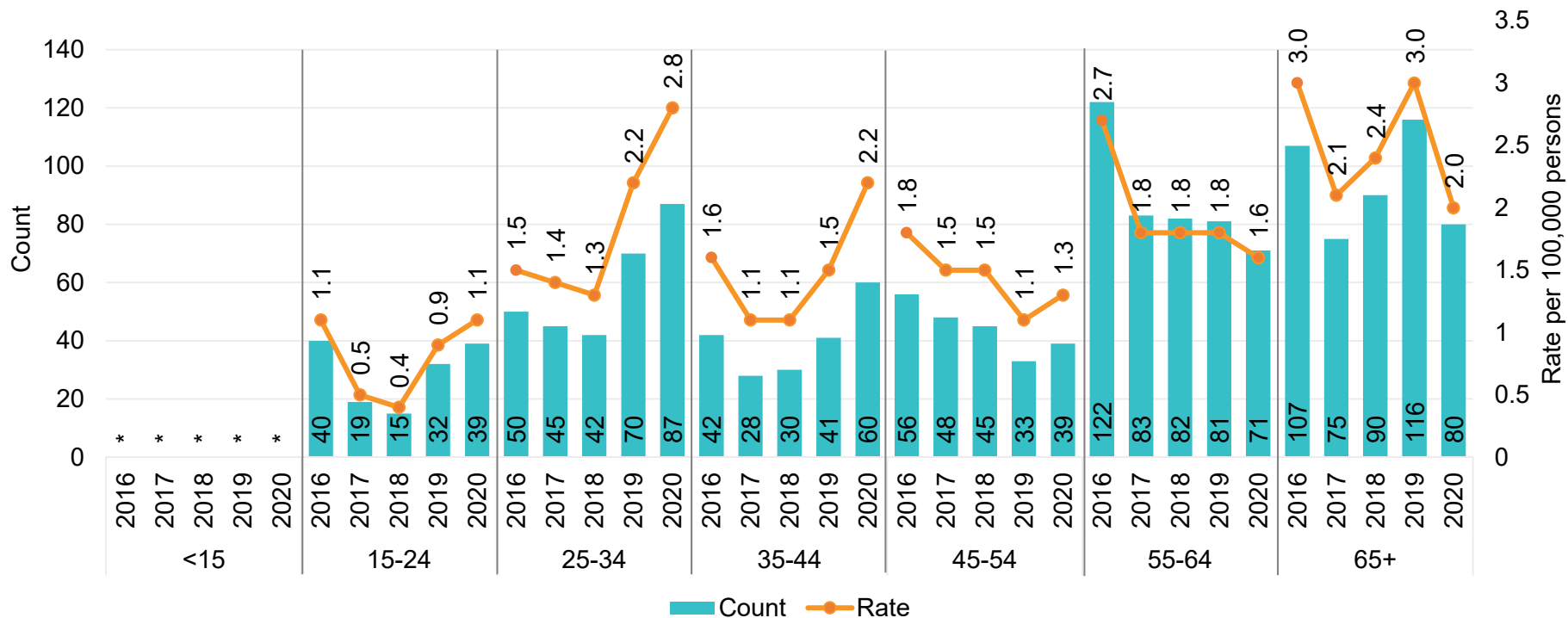
- Between 2016 and 2017, rate of opioid decreased and increased from 2018 to 2020.
- Benzodiazepine hospitalizations showed a clear downward trend, while amphetamine-related hospitalizations more than doubled over the 5-year period.

\* Opioid includes heroin and other opioids.

# OPIOID-RELATED HOSPITALIZATION BY AGE



**Opioid-Related Inpatient Hospitalization Encounters by Age  
for San Diego County Residents, 2016-2020**



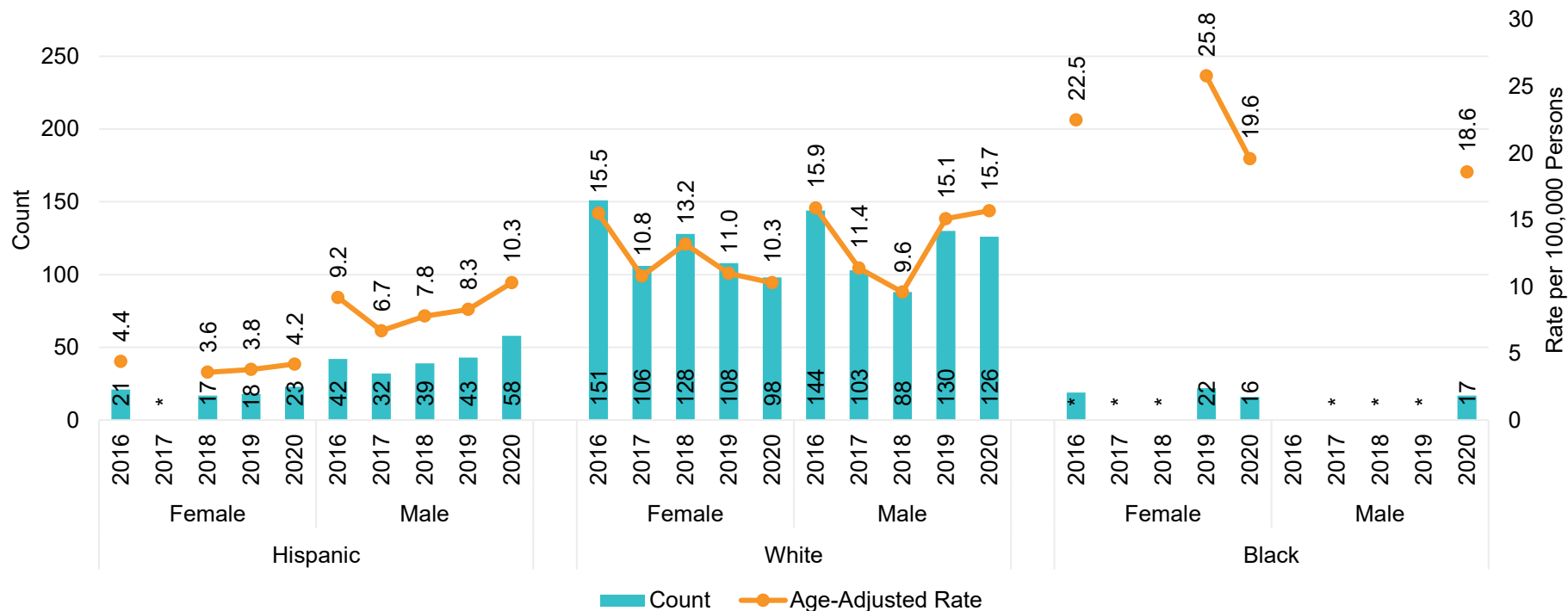
- From 2016 to 2020, a greater number of opioid-related inpatient hospital encounters were among persons 55 years and older.
- From 2018 to 2020, the rate of opioid-related hospital encounters increased among age groups between 15-44.

\*Counts less than 15 are suppressed.

# OPIOID-RELATED HOSPITALIZATION BY SEX & RACE/ETHNICITY



**Opioid-Related Inpatient Hospitalization Encounters by Sex and Race/Ethnicity  
for San Diego County Residents, 2016-2020**



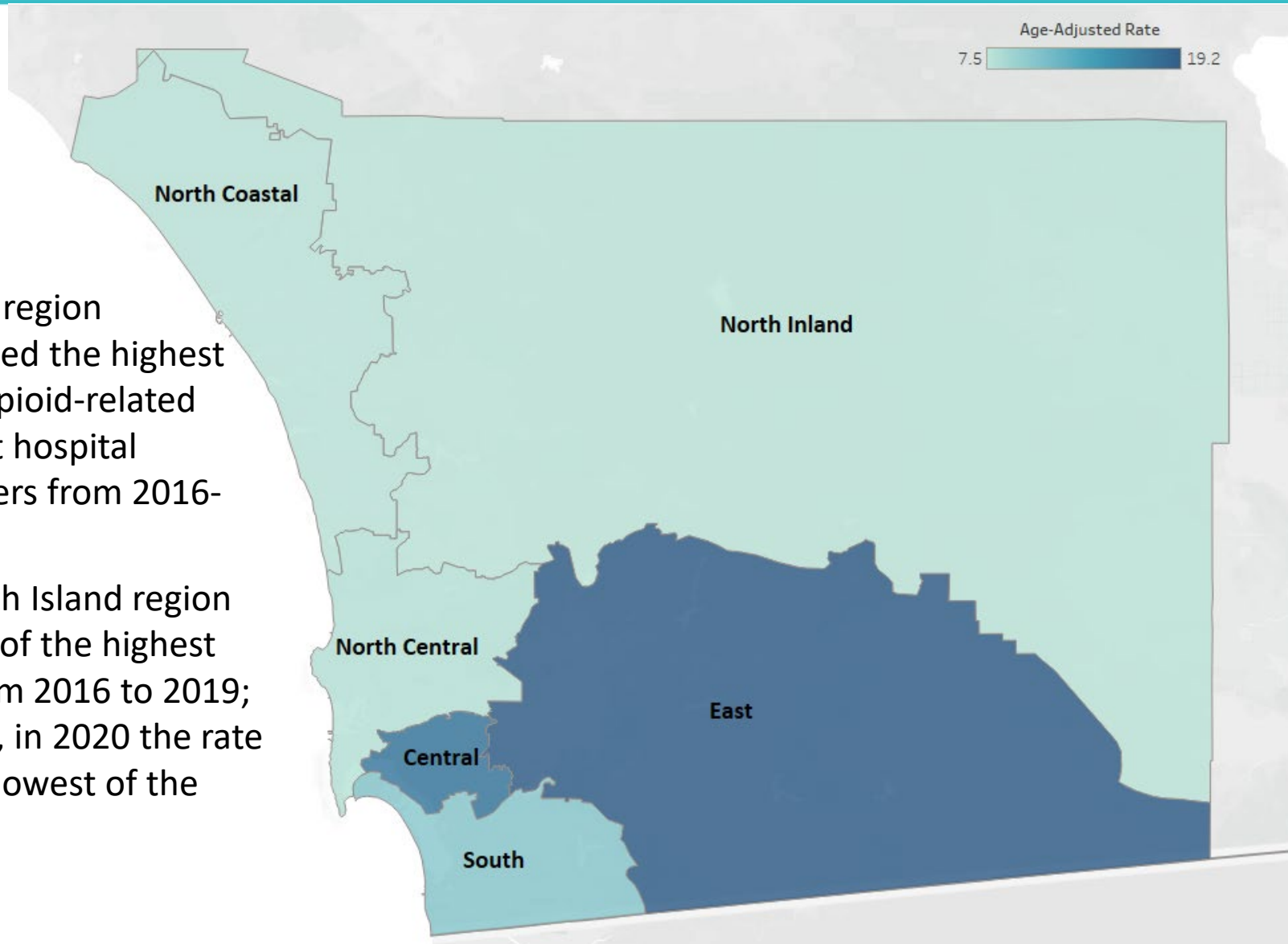
- The rates of opioid-related hospital inpatient encounters among Whites were higher than those among Hispanics and did not differ greatly between males and females.
- Across the 5 years, rates slightly increased among Hispanic men and women, while it fluctuated in the White population.

\*Counts less than 15 are suppressed.

# OPIOID-RELATED HOSPITAL ENCOUNTERS IN 2020 BY HHSA REGION OF RESIDENCE



- The East region maintained the highest rate of opioid-related inpatient hospital encounters from 2016-2020.
- The North Island region had one of the highest rates from 2016 to 2019; however, in 2020 the rate was the lowest of the regions.





# EMERGENCY DEPARTMENT VISITS

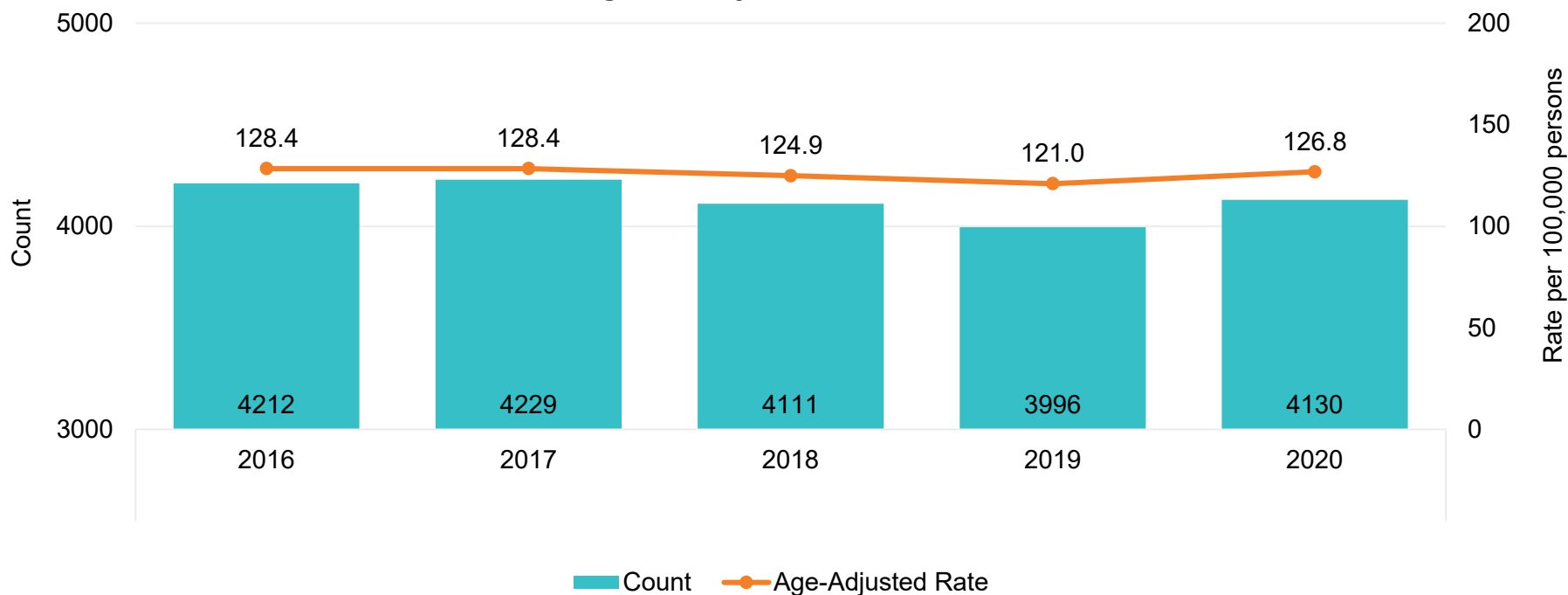




# ALL DRUG-RELATED EMERGENCY DEPARTMENT VISITS



**Drug-Related Emergency Department Visits  
San Diego County Residents, 2016-2020**

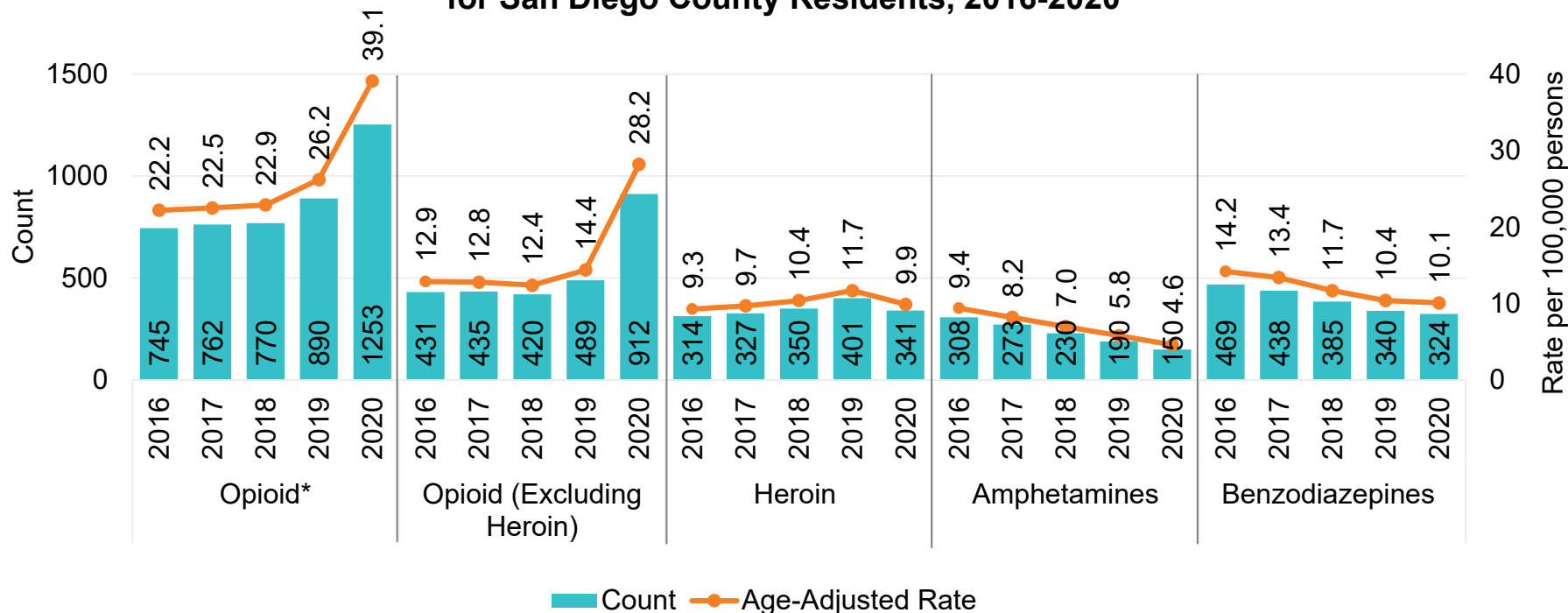


- From 2016 to 2020, there was little variation in drug-related encounters at emergency departments in San Diego County.

# EMERGENCY DEPARTMENT VISITS BY DRUG



**Emergency Department Visits by Drug  
for San Diego County Residents, 2016-2020**



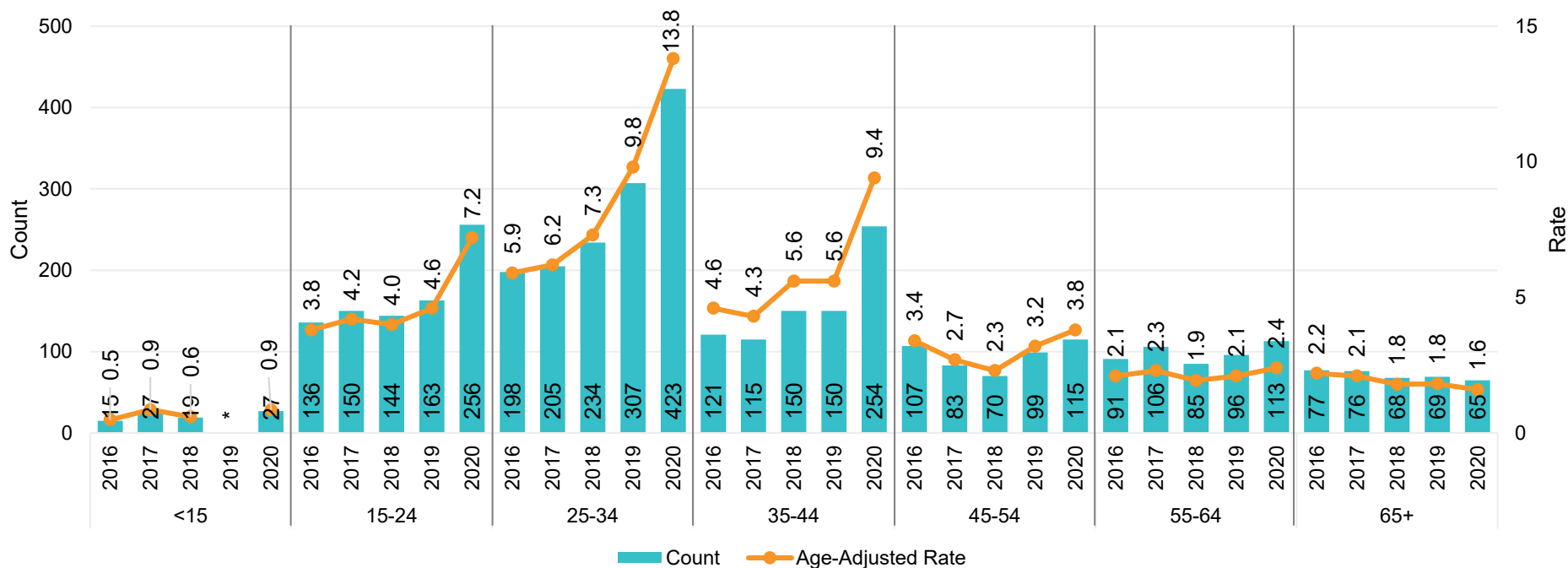
- Opioid-related emergency department encounters remained steady from 2016-2018, followed by increases in 2019 and particularly in 2020.
- Amphetamine- and benzodiazepine-related emergency department encounters decreased, from 2016 to 2020.

\* Opioid includes heroin, and other opioids.

# OPIOID-RELATED EMERGENCY DEPARTMENT VISITS BY AGE



**Opioid-Related Emergency Department Visits by Age  
for San Diego County Residents, 2016-2020**



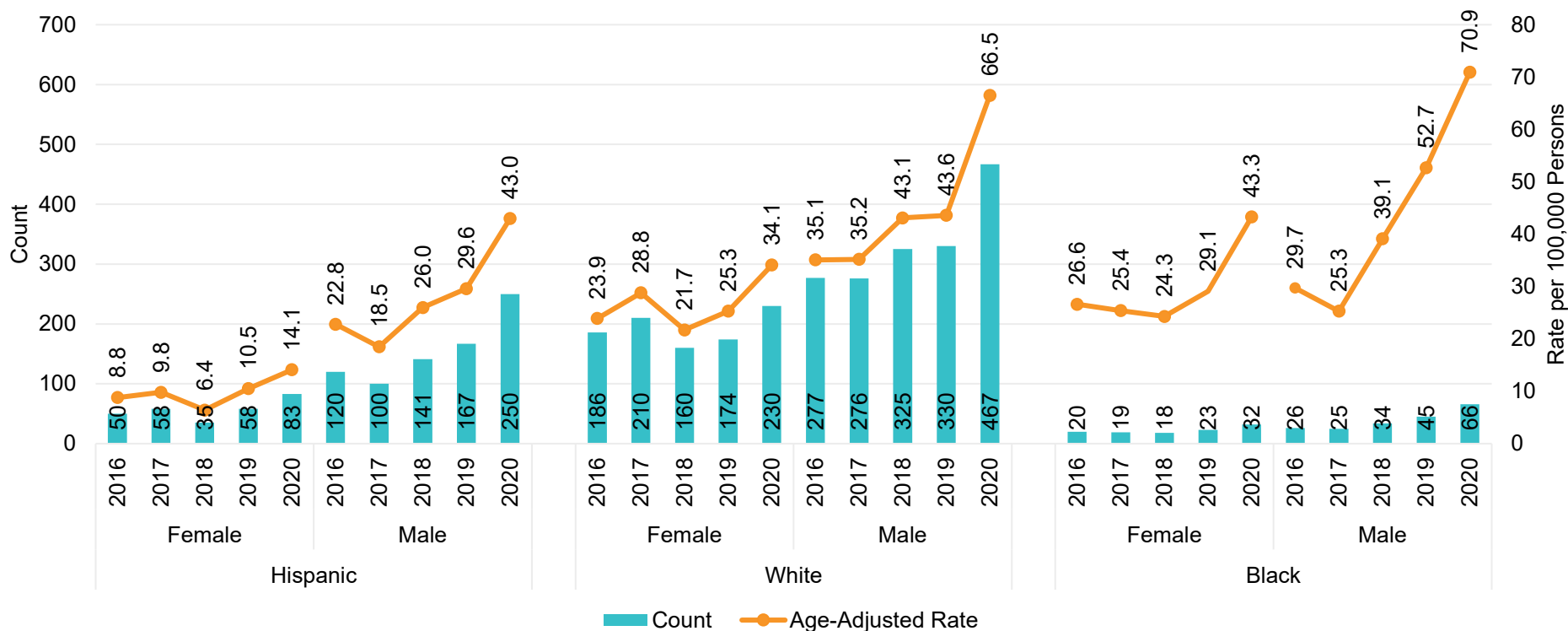
- The highest rates of opioid-related emergency department encounters across all years were among persons aged 15-44 years.
- Encounters and rates in age groups between 15-44 years increased from 2016 to 2020, with the largest increase in 2020.
- Rates in the other groups fluctuated but remained largely steady.

\*Counts missing or less than 15 are suppressed.

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



**Opioid-Related Emergency Department Visits by Sex and Race/Ethnicity  
for San Diego County Residents, 2016-2020**

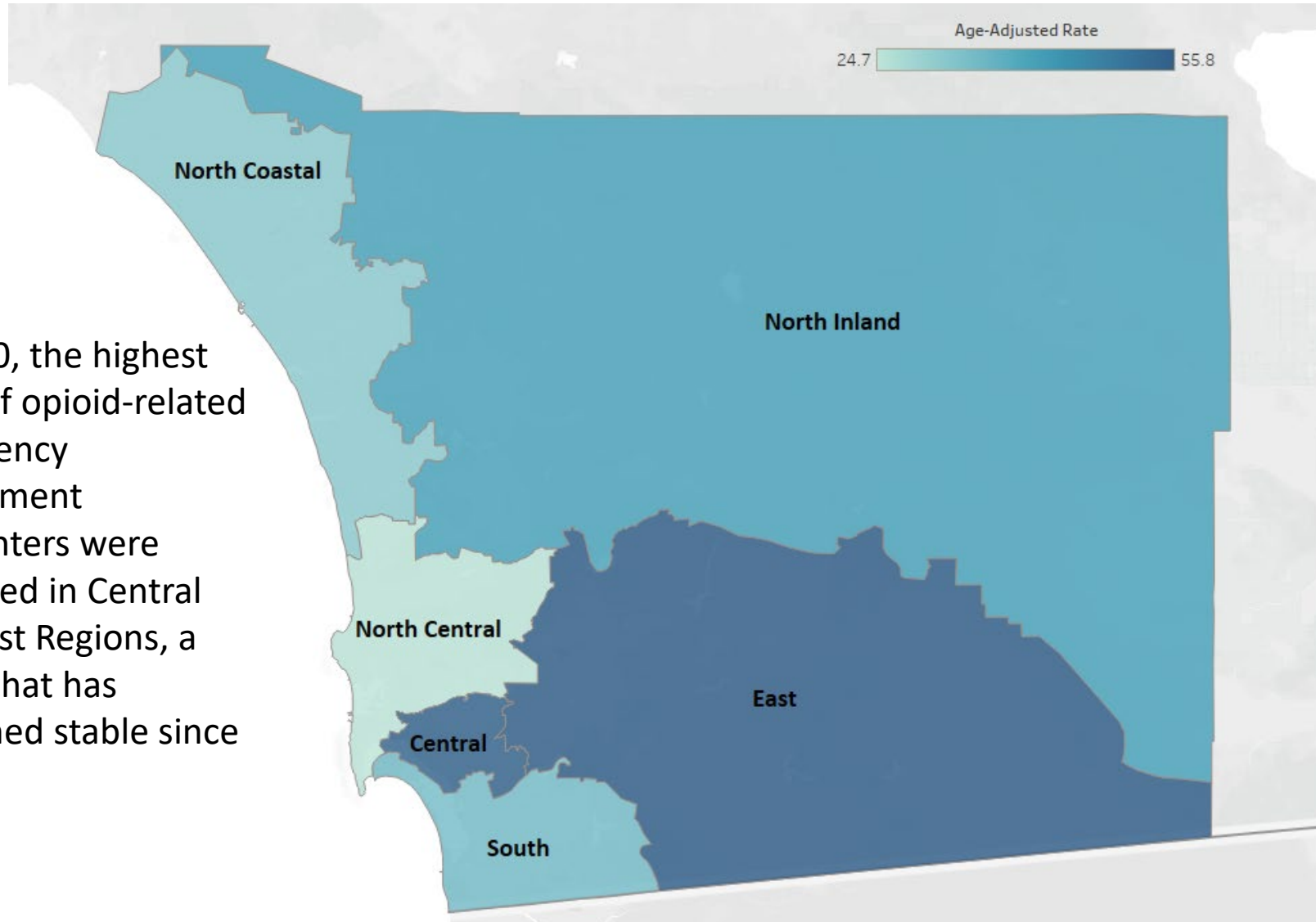


- Rates of opioid-related emergency department encounters were higher among males in the Hispanic, Black, and White populations, in San Diego County.
- The rate of opioid-related emergency department encounters increased across all groups, from 2018 to 2020.

# OPIOID-RELATED EMERGENCY DEPARTMENT VISITS IN 2020 BY HHSA REGION OF RESIDENCE



- In 2020, the highest rates of opioid-related emergency department encounters were observed in Central and East Regions, a trend that has remained stable since 2016.



# CONCLUSIONS



LIVE WELL  
SAN DIEGO

- The demographic profile for opioid-related events differs between ED visits, hospitalizations, and deaths.
  - Higher opioid-related mortality and ED visits were observed in younger populations, whereas hospitalizations were highest in older populations.
  - Males tended to have higher rates of ED visits and deaths; the rates of hospitalization were similar for males and females.
  - The highest rates of opioid-related deaths were observed in the Central HHSA Region, the highest rates of hospital inpatient encounters were in the East HHSA Region, and the highest rates of emergency department encounters were in the East and Central HHSA Regions.
- There was an increase in opioid-related mortality from 2016 to 2020, with the greatest increase in deaths attributed to fentanyl.
  - Higher rates were observed among younger adults, White race/ethnicity, and males.
- Overall, opioid-related hospitalizations fluctuated from 2016 to 2020. Older adults and persons of White race/ethnicity had greater numbers of encounters.
- Nonfatal opioid-related emergency department encounters increased slightly between 2016 and 2019, then increased more dramatically in 2020.
  - Greater numbers of emergency department encounters were among younger adults (25-34 years old), persons of White race/ethnicity, and males.



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