OPIOID-RELATED OVERDOSES & ENCOUNTERS IN SAN DIEGO COUNTY 2015-2019

Overdose Data to Action (OD2A) Strategy 3: Surveillance

Epidemiology and Immunization Services Branch

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY
PUBLIC HEALTH SERVICES

LIVE WELL SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

September 2021

BACKGROUND

- The County of San Diego (CoSD) Health and Human Services Agency (HHSA) is one of the recipients of the 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

- A baseline describing the most recent trends of opioid-related fatal overdoses and nonfatal encounters at the emergency departments and hospitals in San Diego County is needed to understand where to focus efforts

METHODS

- Retrospective analysis of unintentional fatal overdoses and nonfatal drug encounters among San Diego County residents from 2015 to 2019
- 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'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

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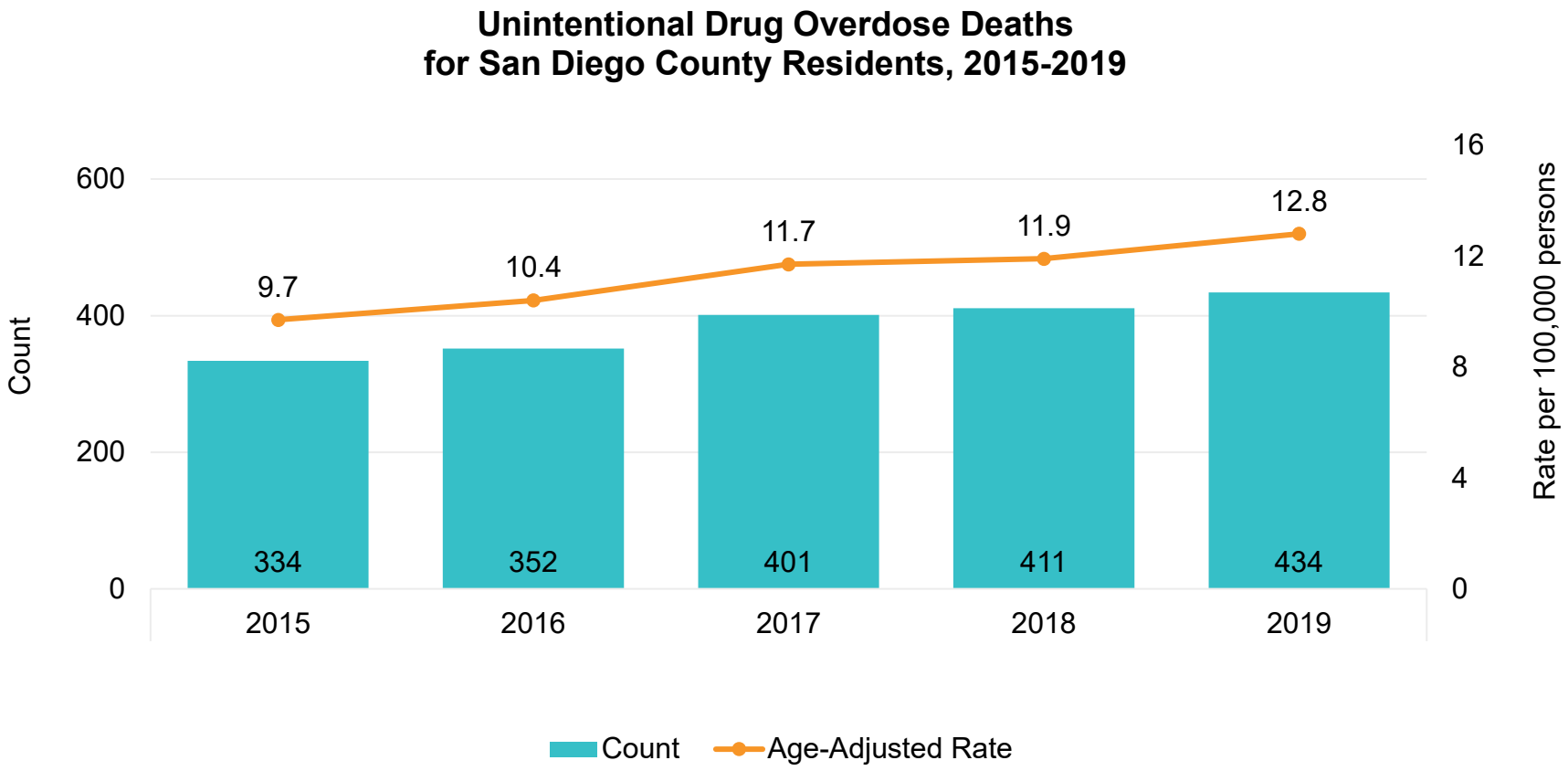
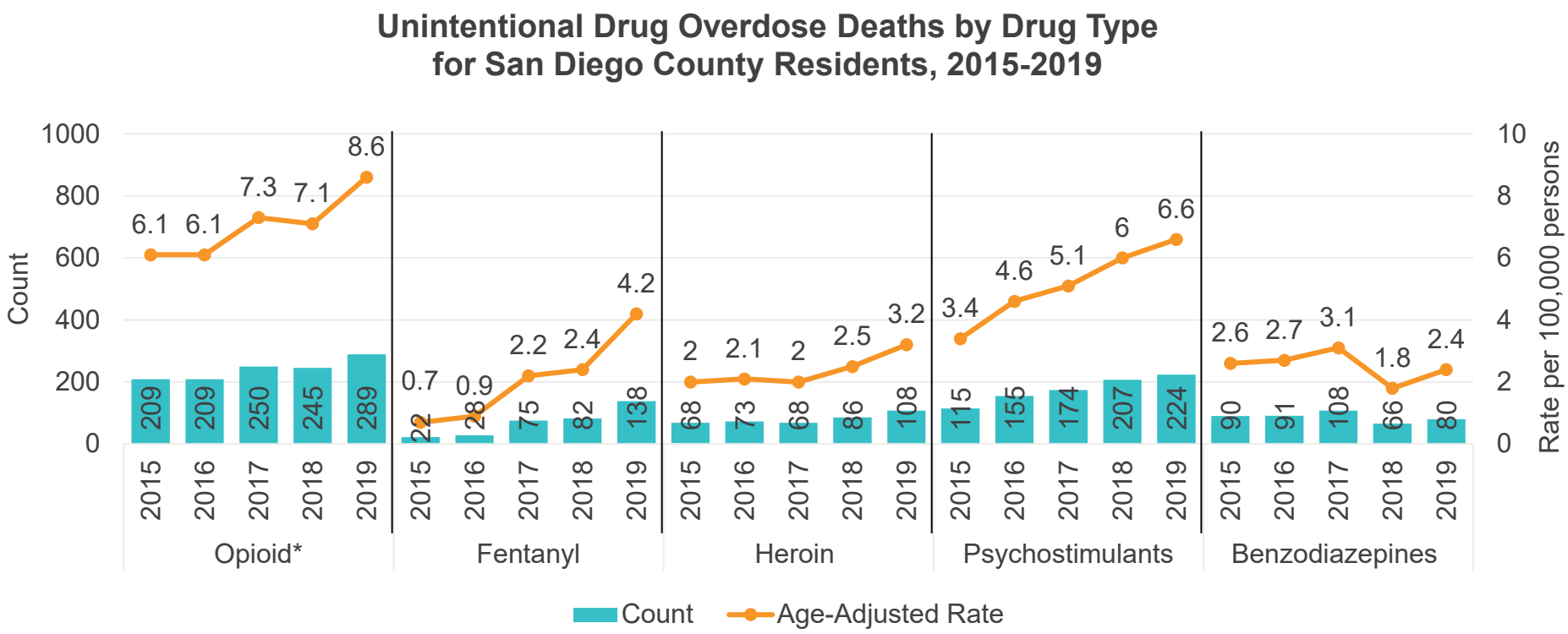
MORTALITY – OVERALL



- Since 2015, there has been an increase in the number of unintentional drug overdose deaths in San Diego County

Data Source: Vital Records Business Intelligence System (VRBIS)

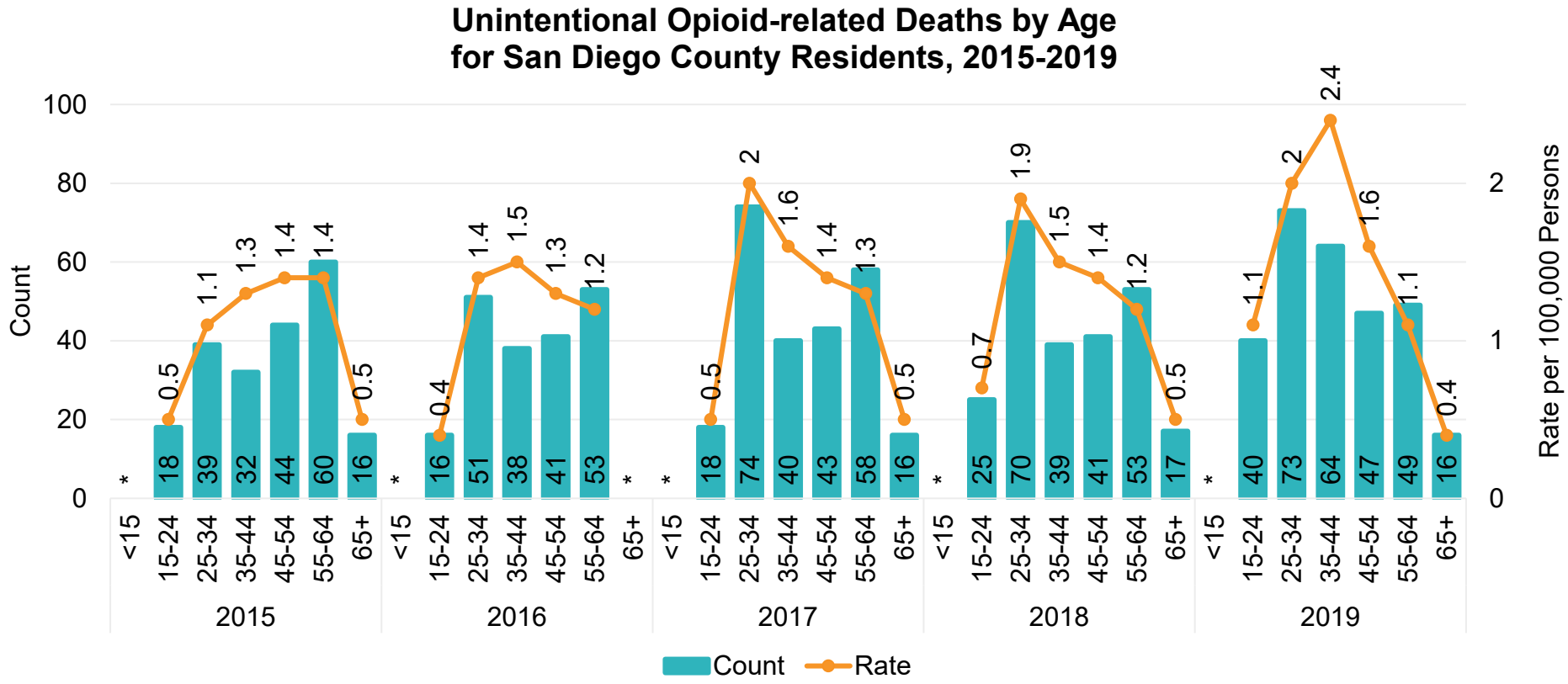
MORTALITY – BY DRUG



- Most unintentional overdose deaths were opioid-related and have increased from 2015 to 2019
- Unintentional overdose deaths related to Fentanyl and Psychostimulant use have increased dramatically from 2015 to 2019

*Opioid includes fentanyl, heroin, and other opioids.
Data Source: Vital Records Business Intelligence System (VRBIS)

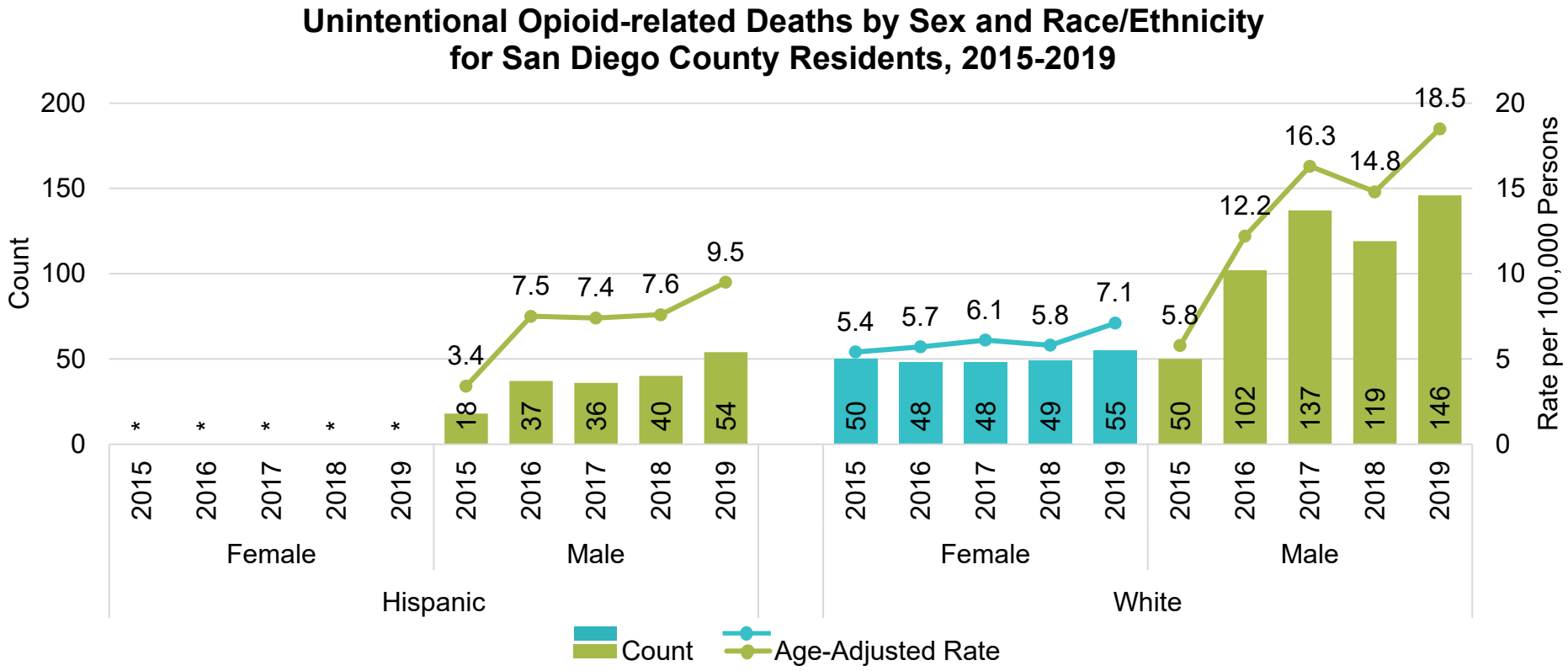
MORTALITY – BY AGE



- Opioid-related unintentional overdose deaths increased in the 25-34-year age group starting in 2016, then had a dramatic increase in the 35-44-year age group in 2019

*Counts missing or less than 15 are suppressed.
Data Source: Vital Records Business Intelligence System (VRBIS)

MORTALITY – BY SEX & RACE/ETHNICITY

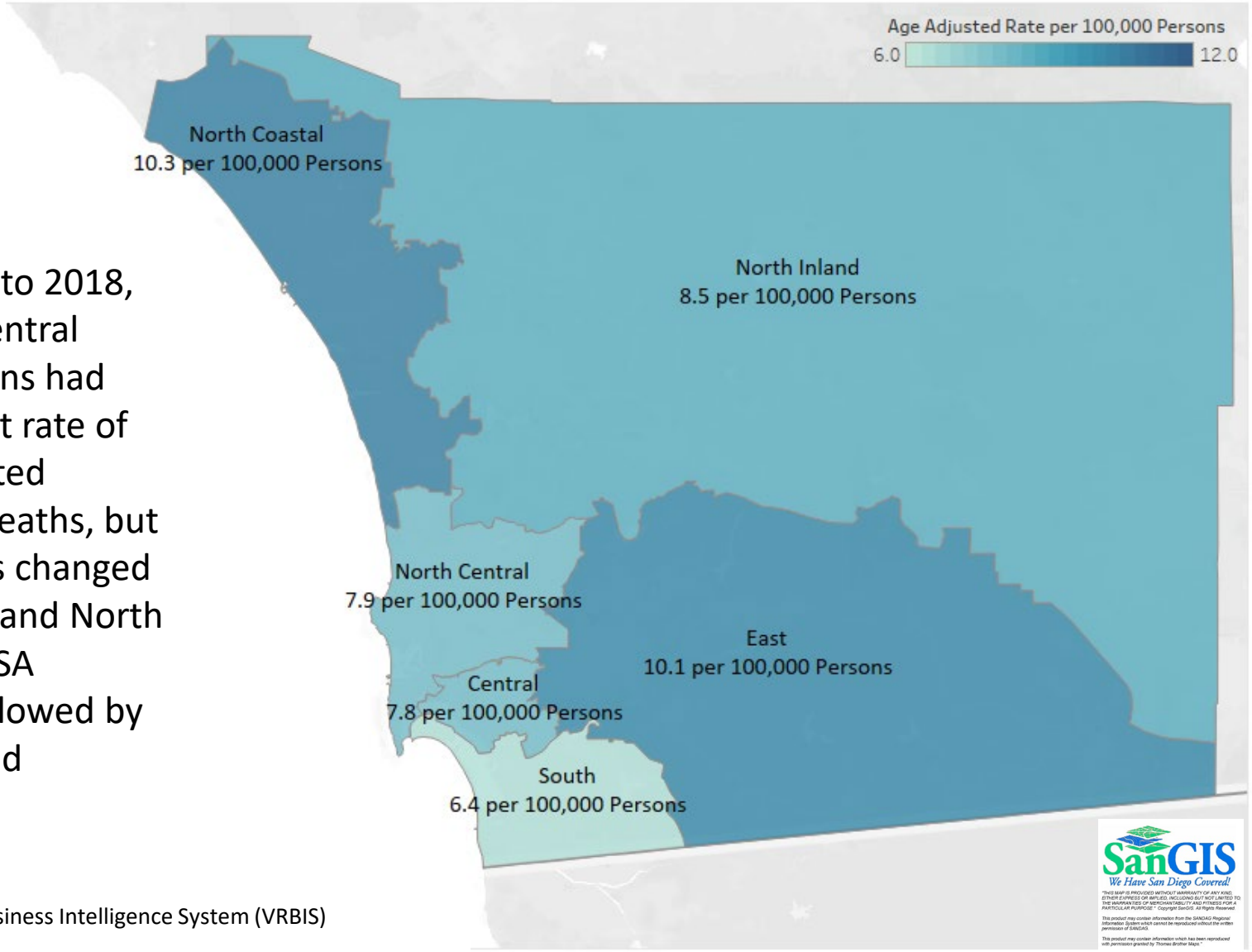


- Most opioid related unintentional overdose deaths were among white men; deaths in this group increased from 2015 to 2019
- Other race/ethnicities are not shown because counts less than 15 are suppressed

*Counts missing or less than 15 are suppressed.
Data Source: Vital Records Business Intelligence System (VRBIS)

MORTALITY 2019 – BY HHSA REGION OF RESIDENCE

- From 2015 to 2018, East and Central HHSA regions had the greatest rate of opioid-related overdose deaths, but in 2019 this changed to the East and North Coastal HHSA regions, followed by North Inland



Data Source: Vital Records Business Intelligence System (VRBIS)
Map created in Tableau

HOSPITALIZATION INPATIENT ENCOUNTERS

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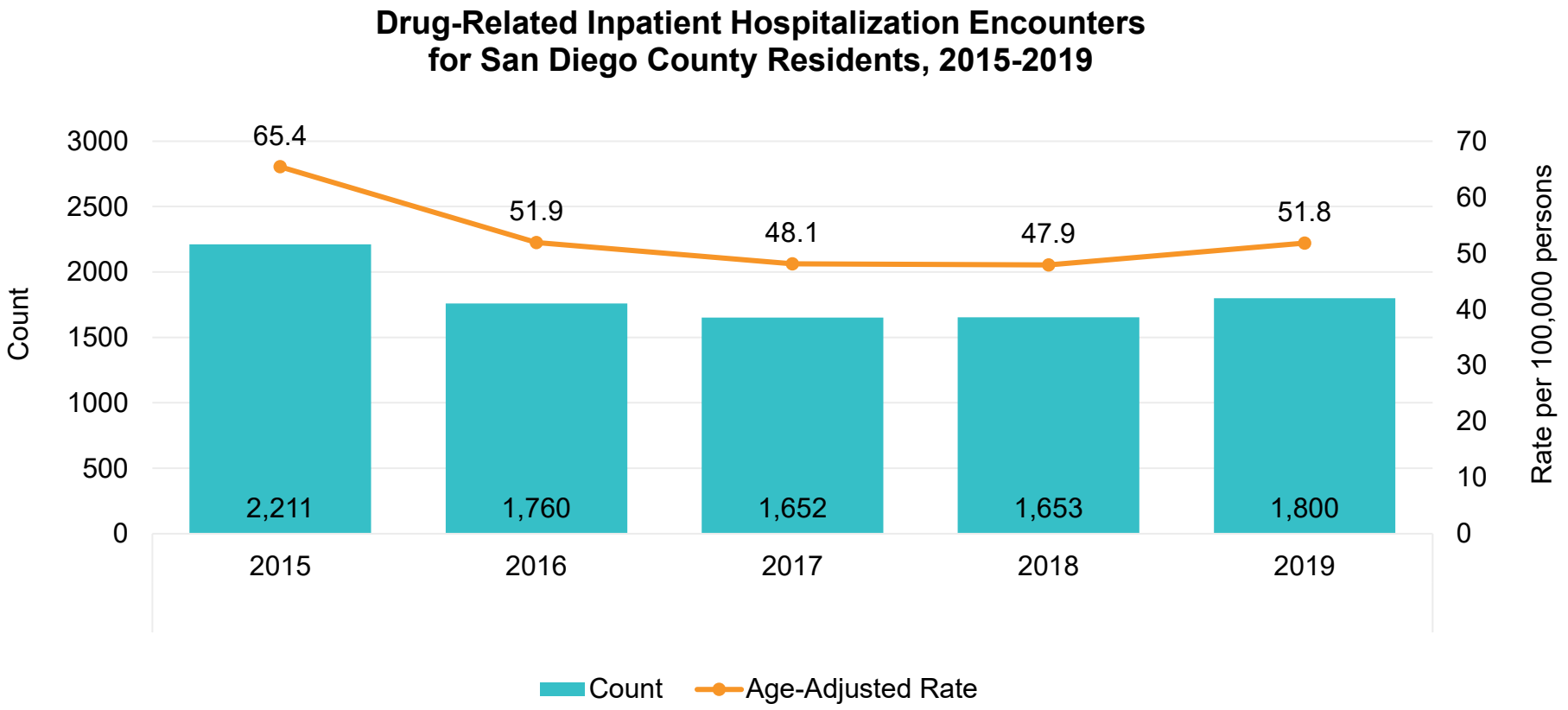
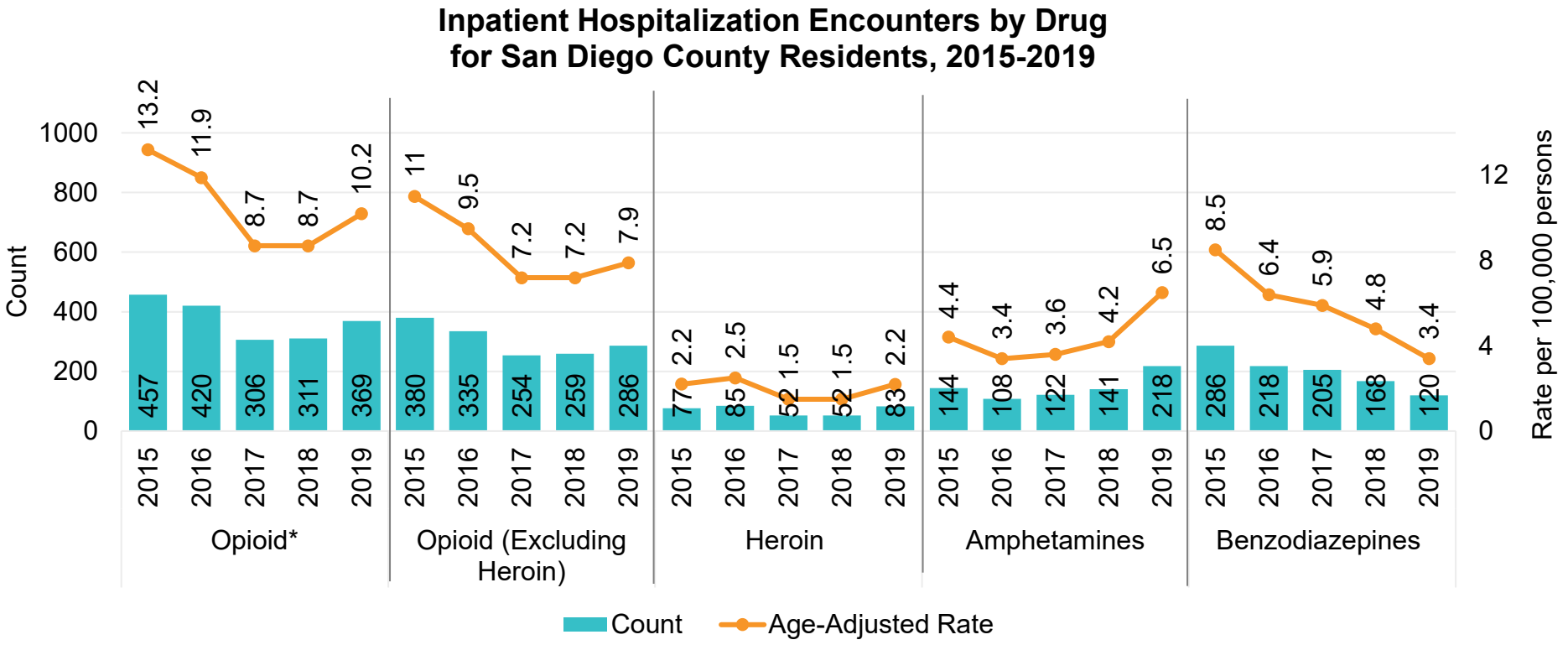
HOSPITALIZATION – OVERALL



- There was a decrease in the rate of drug-related encounters at hospitals in San Diego County from 2015 to 2018, followed by a slight increase in 2019.

Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

HOSPITALIZATION – BY DRUG

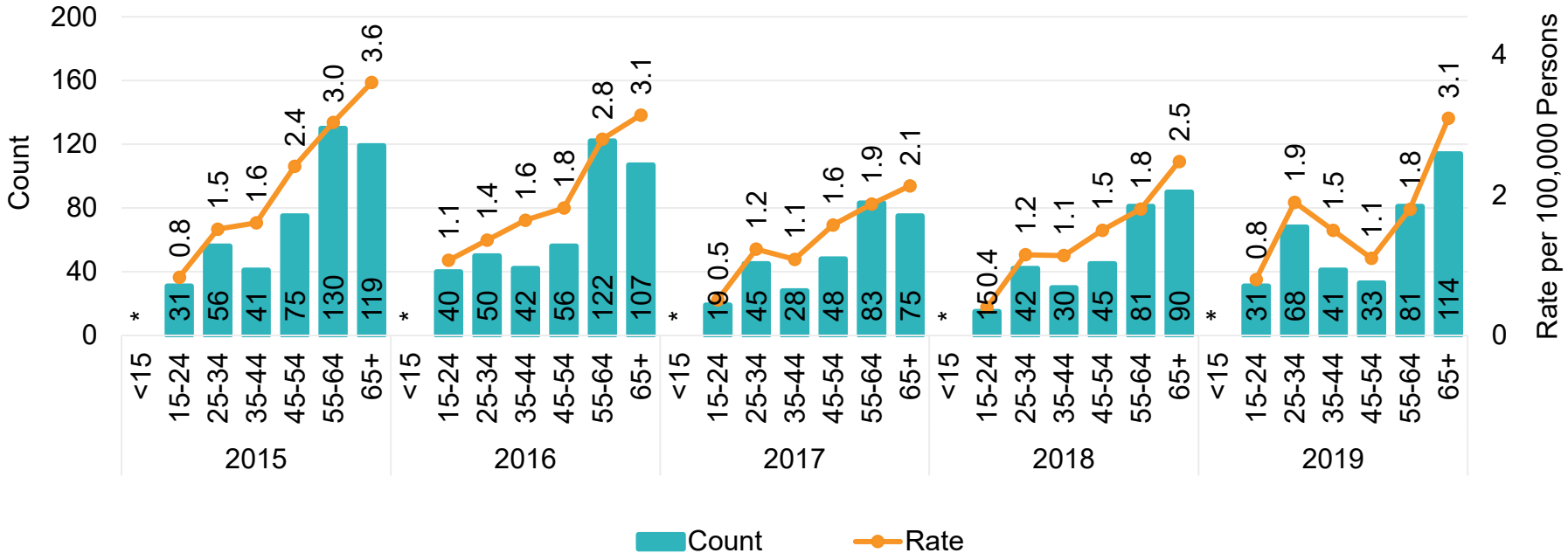


- From 2015-2018, there was a decreasing trend in the number of hospital encounters for:
  - Opioids
  - Benzodiazepines
- In 2019, there was an increased in hospitalization for opioids and amphetamines

*Opioid includes fentanyl, heroin, and other opioids.
Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

HOSPITALIZATION – BY AGE

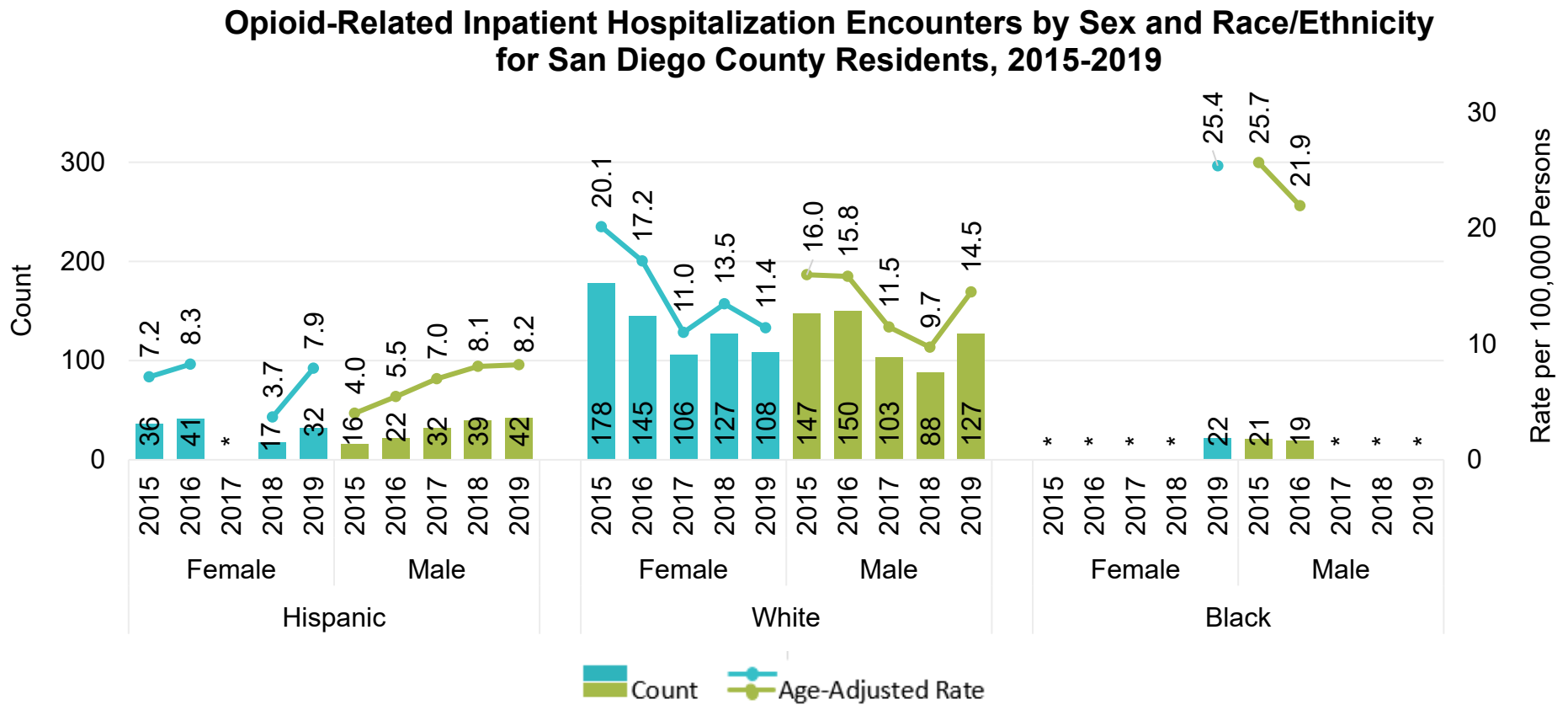
Opioid-Related Inpatient Hospitalization Encounters by Age for San Diego County Residents, 2015-2019



- Most opioid-related encounters at the hospital were among older cohorts (i.e., 55 years and older)
- In 2019, there was a rate increase in the 25–34-year-old age group

*Counts missing or less than 15 are suppressed.
Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

HOSPITALIZATION – BY SEX & RACE/ETHNICITY

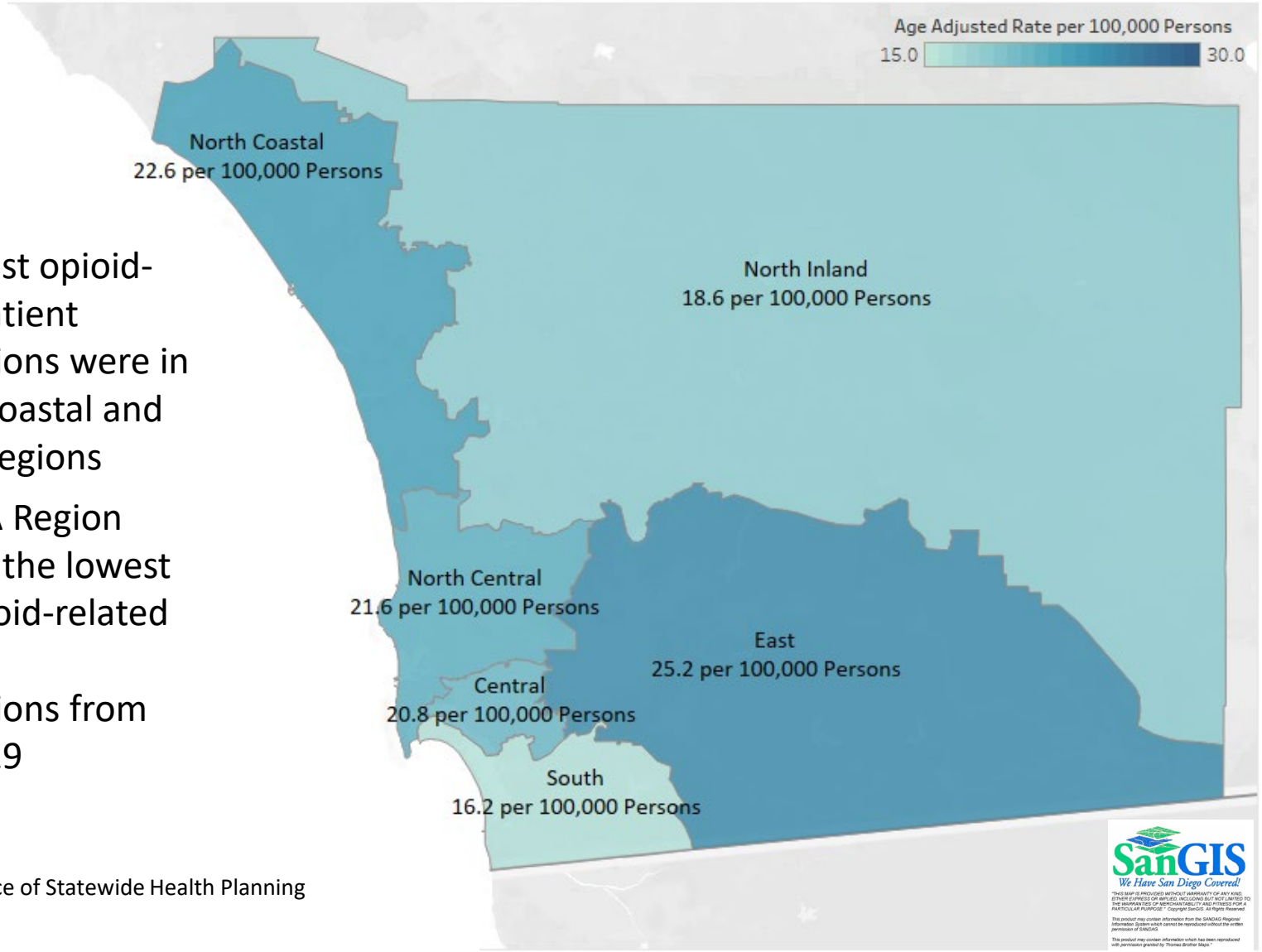


- Whites showed higher rates of opioid-related encounters at the hospital compared to Hispanics

*Counts missing or less than 15 are suppressed.
Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

HOSPITALIZATION 2019- BY HHSA REGION OF RESIDENCE

- In 2019, most opioid-related inpatient hospitalizations were in the North Coastal and East HHSA regions
- South HHSA Region kept one of the lowest rates of opioid-related inpatient hospitalizations from 2015 to 2019



Data Source: California's Office of Statewide Health Planning and Development (OSHPD)
Map created in Tableau

EMERGENCY DEPARTMENT VISITS

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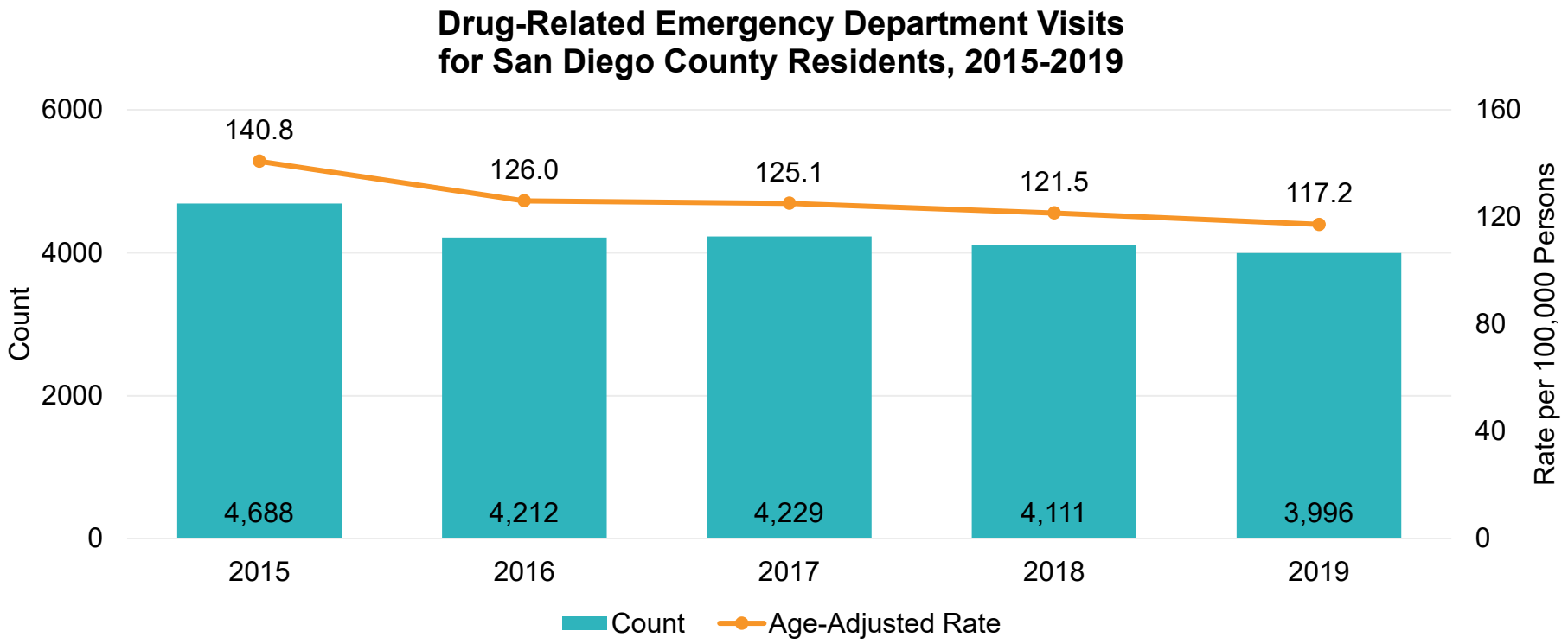
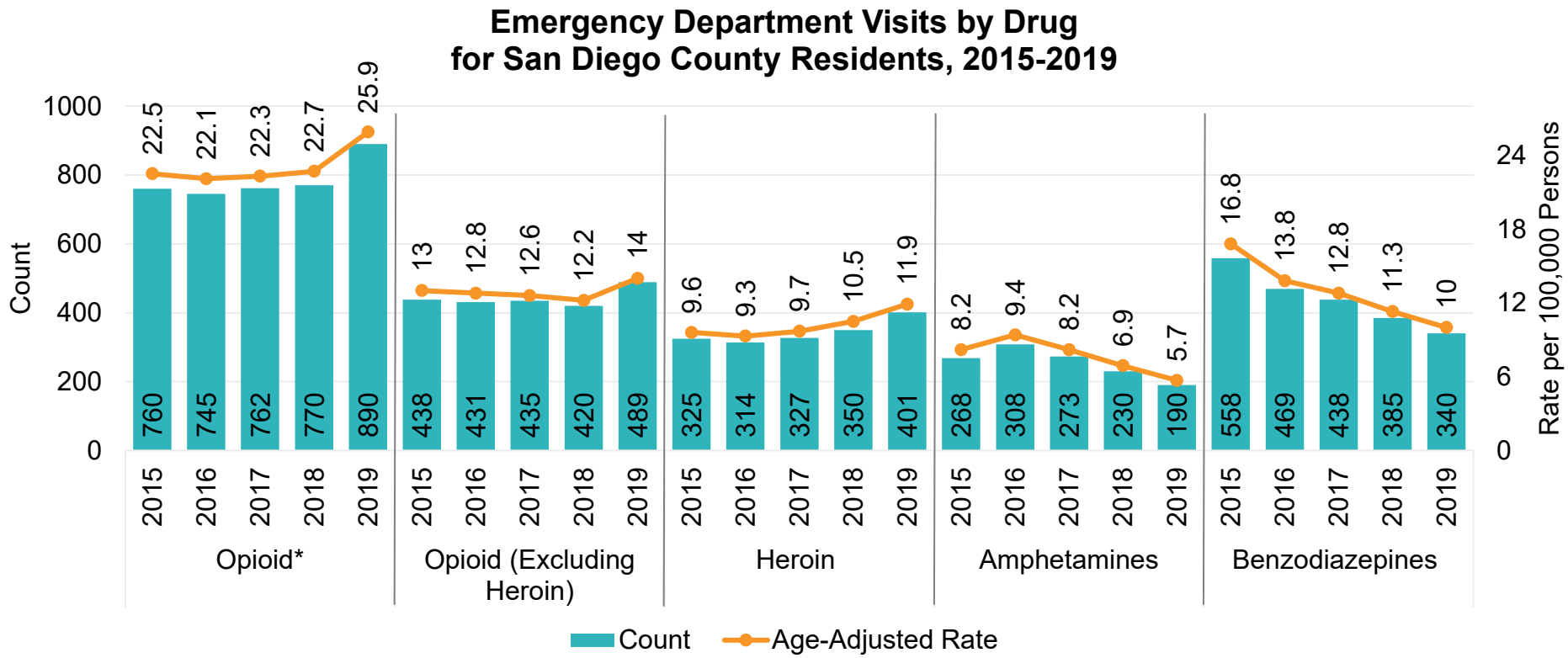
EMERGENCY DEPARTMENT VISITS– OVERALL



- There has been a decrease in the rate of drug-related encounters at Emergency Departments in San Diego County since 2015

Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

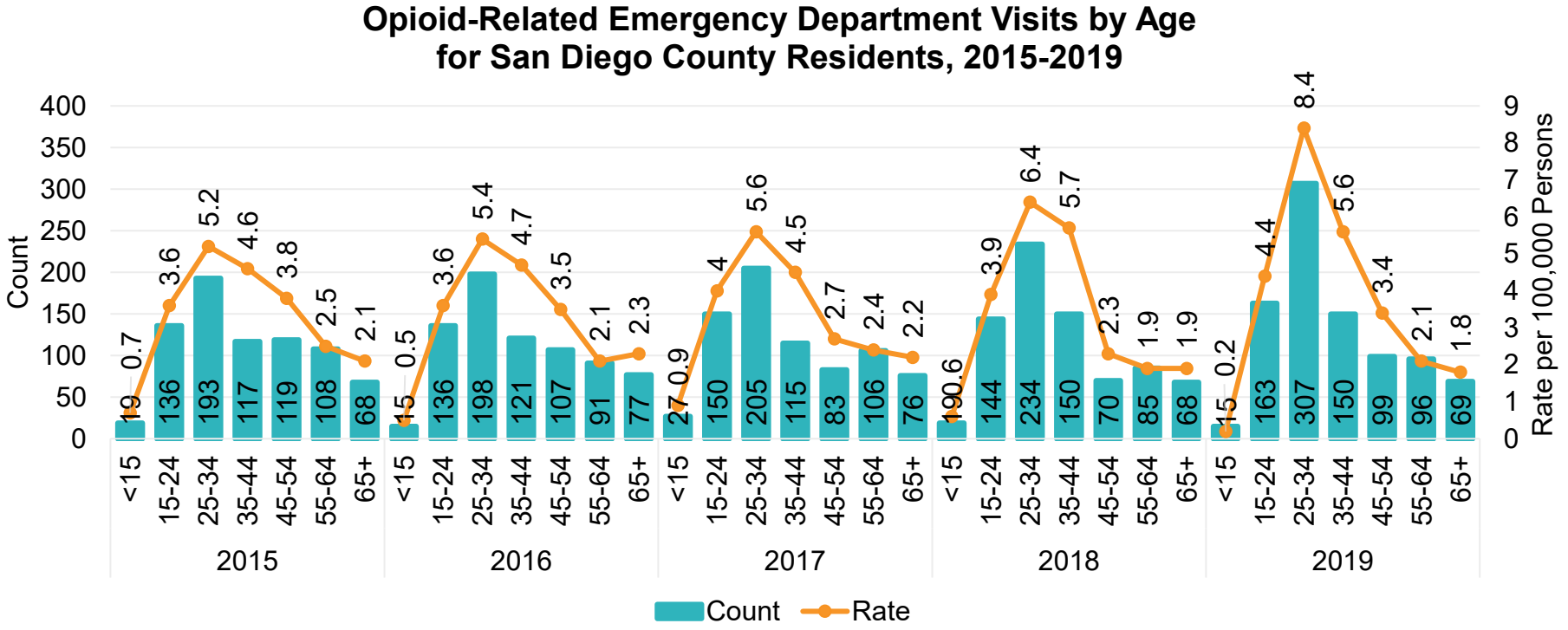
EMERGENCY DEPARTMENT VISITS – BY DRUG



- The counts of opioid-related emergency department encounters were relatively steady between 2015 and 2018, followed by a 16% increase in 2019
- There was a decrease in the number of Amphetamine and Benzodiazepine related encounters at the emergency department from 2016 to 2019

*Opioid includes fentanyl, heroin, and other opioids.
Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

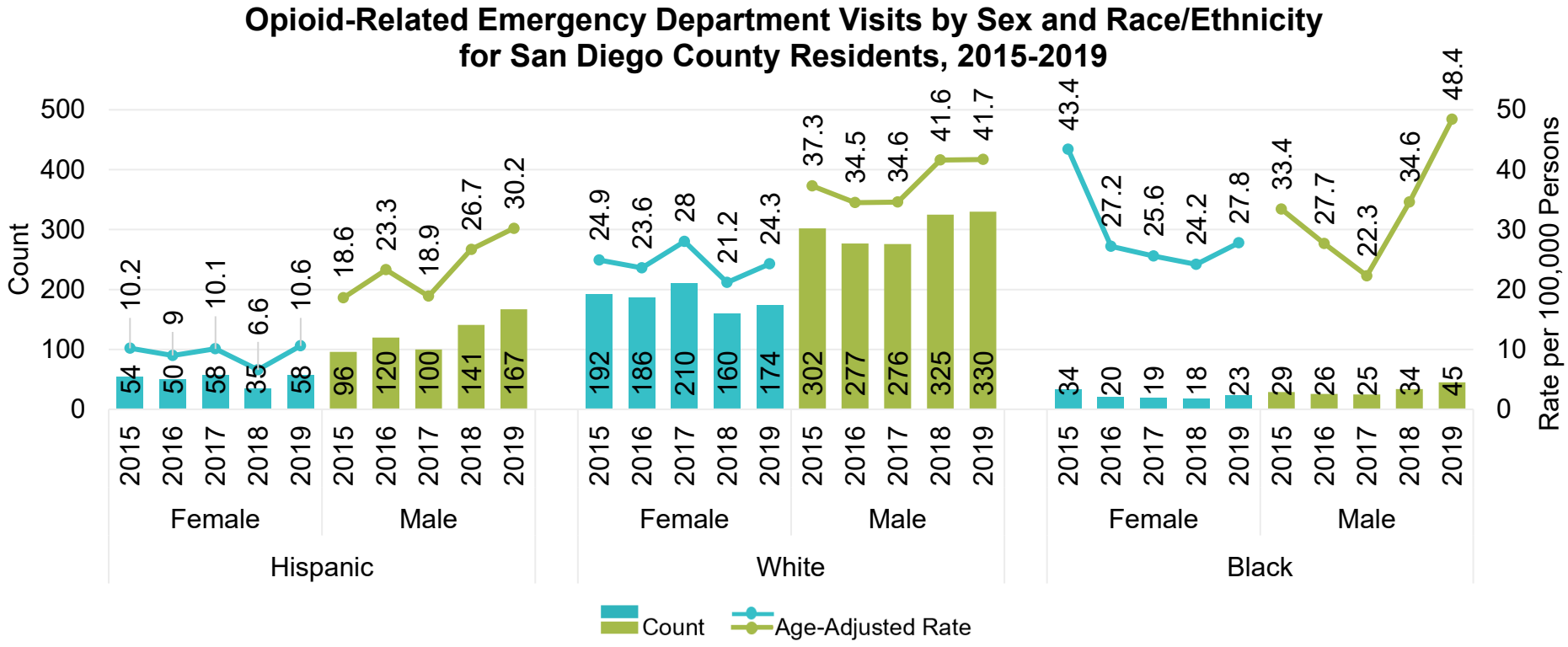
EMERGENCY DEPARTMENT VISITS – BY AGE



- Most opioid-related encounters at the emergency department were among younger cohorts (i.e., 25-34 years old)
- In 2019, the 15-24-year-old and 24-34-year-old age groups both reached their highest rates during this 5-year period and together accounted for over 50% of the total encounters

*Counts missing or less than 15 are suppressed.
Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

EMERGENCY DEPARTMENT VISITS – BY SEX & RACE/ETHNICITY

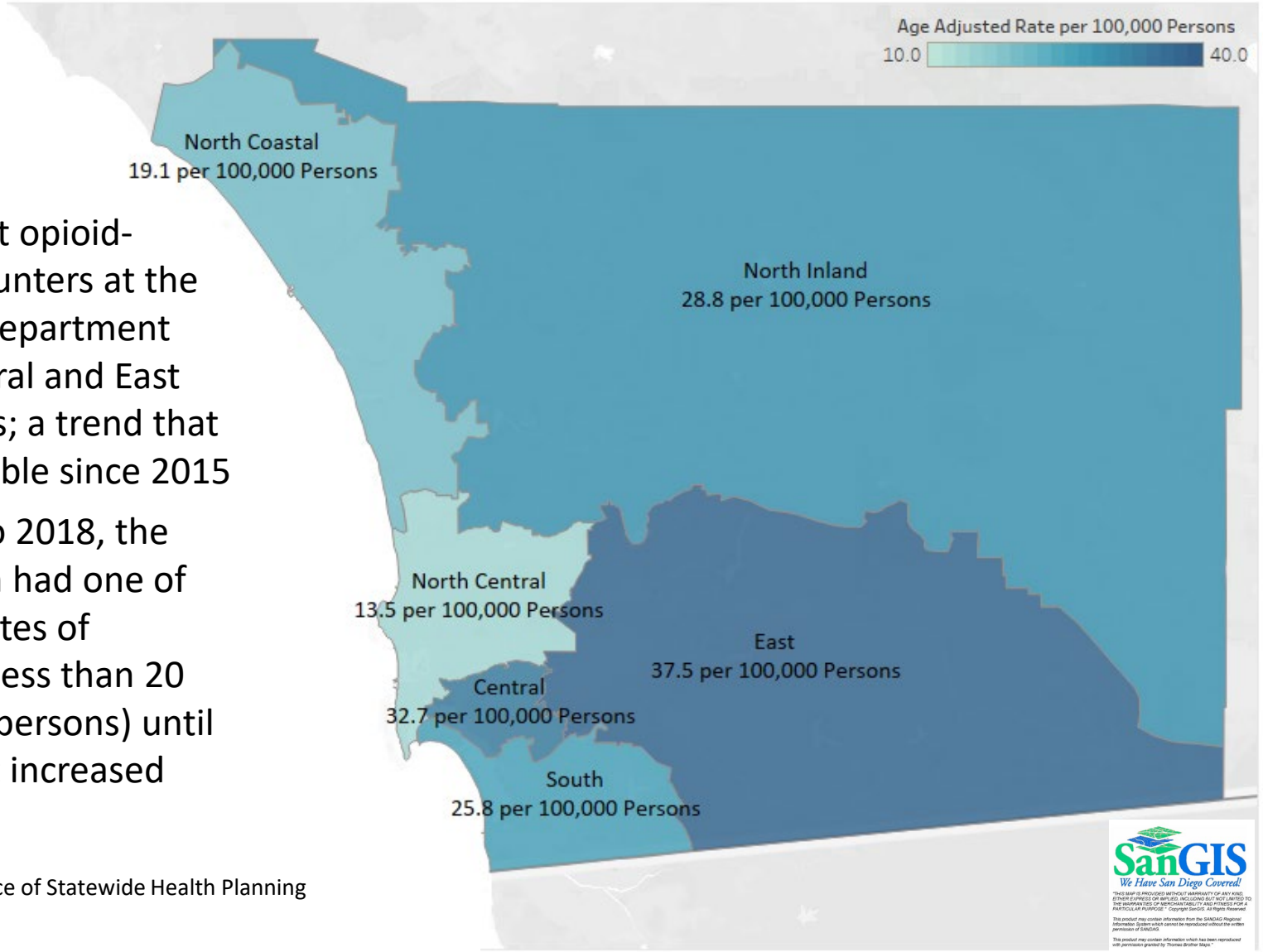


- Most opioid-related emergency department encounters in San Diego were among men
- Men showed higher rates of encounters than females among Whites and Hispanics
- There was an increase in the rate of opioid-related emergency department encounters across most groups from 2018 to 2019

Data Source: California's Office of Statewide Health Planning and Development (OSHPD)

EMERGENCY DEPARTMENT VISITS 2019 – BY HHSA REGION OF RESIDENCE

- In 2019, most opioid-related encounters at the emergency department were in Central and East HHSA regions; a trend that remained stable since 2015
- From 2015 to 2018, the South Region had one of the lowest rates of encounters (less than 20 per 100,000 persons) until 2019 when it increased



Data Source: California's Office of Statewide Health Planning and Development (OSHPD)
Map created in Tableau

CONCLUSIONS

- 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 an older population.
  - 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 hospitalization encounters and deaths were observed in North Coastal and East HHSA regions in 2019; East and Central HHSA regions had the highest rates of emergency department encounters.
- There was an increase in opioid-related mortality from 2015 to 2019, with the greatest increase in deaths attributed to fentanyl.
  - Most opioid-related deaths occurred among younger adults, White race/ethnicity, and men.
- Nonfatal opioid-related encounters in the emergency department increased from 2015 to 2019.
  - Most emergency department encounters were among younger adults (25-34 years old), White race/ethnicity, and men.
- Hospitalization encounters decreased from 2015 to 2018 but rebounded in 2019.
  - Most hospital encounters were among older adults.