

Alameda County

Examining the Increase in Mortality from 2018-2019 to 2020-2021

Alameda County Health Care Services Agency

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**ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
PUBLIC HEALTH DEPARTMENT**



Alameda County
Health Care Services Agency

Table of contents

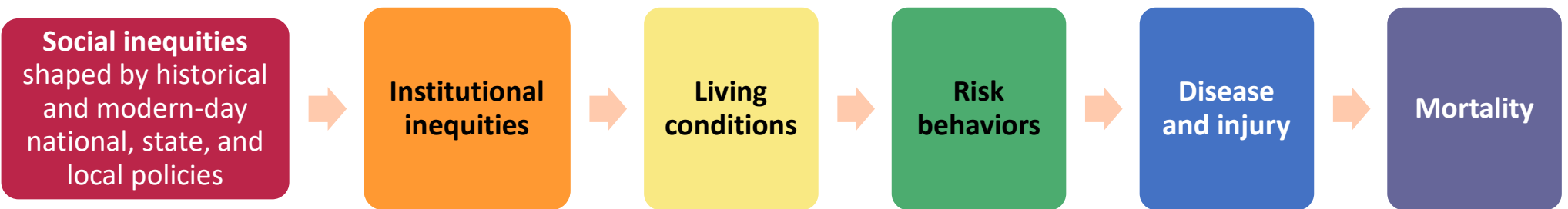
1. Key points
2. Context
3. Growing disparities in life expectancy
4. The unequal toll of COVID-19 and other communicable diseases
5. Non-communicable diseases as a leading cause of mortality and rising deaths due to external causes
6. Persistent disparities for mothers, pregnant people, and infants
7. Summary

Key points

- Disparities in mortality are driven by historical and present-day national, state, and local public policy choices and institutional practices that shape inequities in the conditions in which people live, work, learn, and play in Alameda County. Disparities in mortality are not primarily the result of individual choices or behaviors.
- There was a decline in life expectancy in Alameda County in 2020-2021, during the COVID-19 pandemic. Existing racial and ethnic disparities in mortality and life expectancy increased in 2020-2021 relative to 2018-2019. Disparities in life expectancy by neighborhood poverty level also increased during this time.
- Alameda County's age-adjusted COVID-19 mortality rate in 2020-2021 was less than half that of California and the United States. Alameda County prioritized equitable vaccination and testing and layered mitigation with mask policies during the Delta and Omicron BA.1 surges. We are grateful to the residents of Alameda County for their contributions to protecting themselves and their community.
- There were increases in deaths at young ages in Alameda County in 2020-2021 that mirror increases across the United States. The main causes of increased deaths at young ages in Alameda County and across the United States were increases in unintentional overdose, homicide, and unintentional motor vehicle crash fatalities.
- Chronic diseases remain the leading causes of death among those 45 years old and older in Alameda County, though at lower rates than in California and the United States. Structural inequities have driven longstanding racial and ethnic disparities in chronic disease mortality rates, especially for Pacific Islander and African American/Black populations in Alameda County.

Context:

Bay Area Health Inequities Initiative (BARHII) Framework

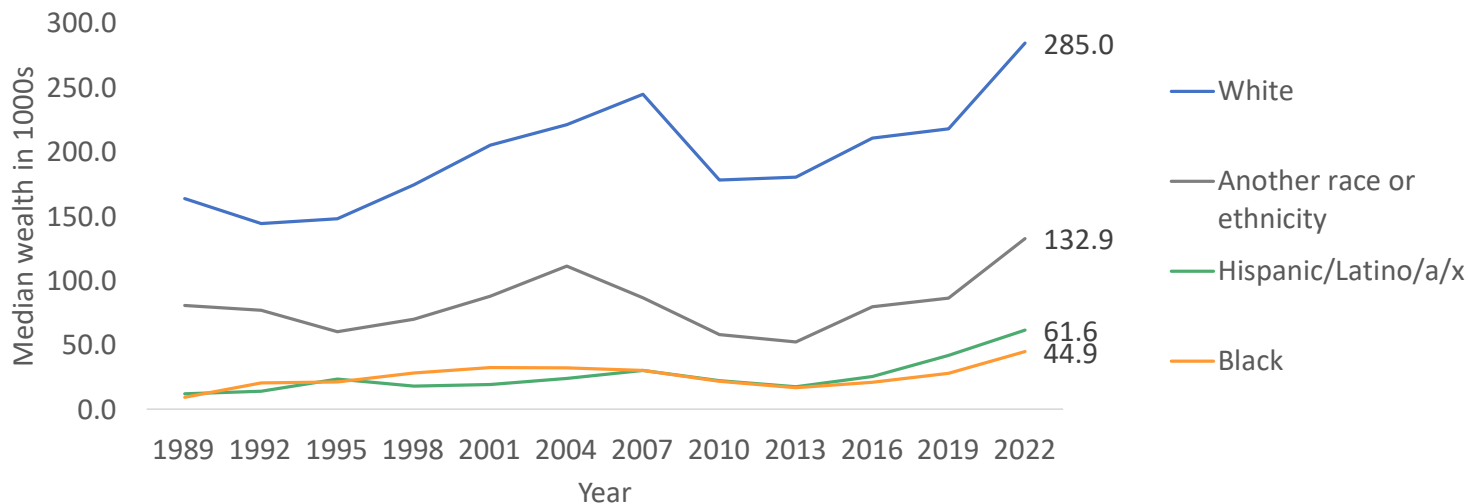


Disparities in mortality are driven by historical and present-day public policy choices and institutional practices that shape inequities in the conditions in which people live, work, learn, and play. Disparities in mortality are not primarily the result of individual choices or behaviors.

Context: Wealth inequities grew during the pandemic

Historical policies and practices have shaped large racial and ethnic disparities in wealth, poverty, and health in the United States and in Alameda County. These disparities shape where people live, work, learn, and play, as well as vulnerability to disasters such as the COVID-19 pandemic.

Median wealth by race and ethnicity in the United States, 1989 to 2022



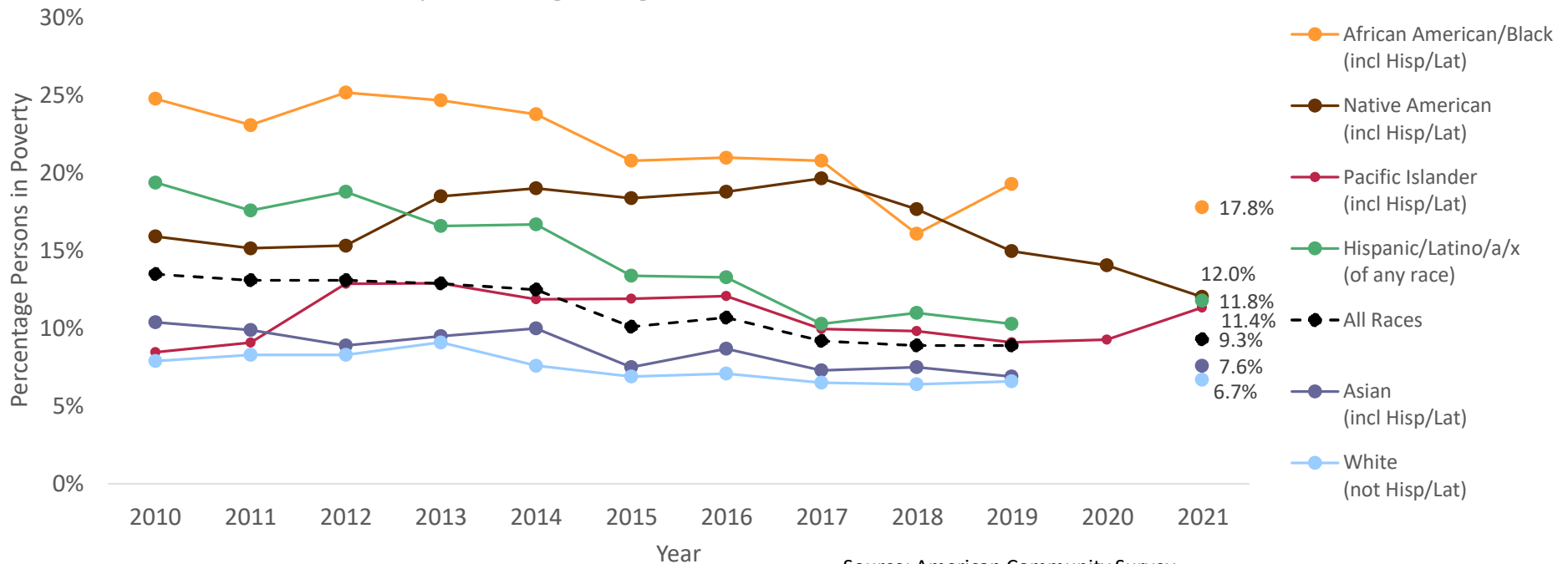
Racial and ethnic disparities in wealth in the United States are large and grew in absolute magnitude from 2019 to 2022

Source: Board of Governors of the Federal Reserve System. (2023). Greater Wealth, Greater Uncertainty: Changes in Racial Inequality in the Survey of Consumer Finances, Accessible Data. <https://www.federalreserve.gov/econres/notes/feds-notes/greater-wealth-greater-uncertainty-changes-in-racial-inequality-in-the-survey-of-consumer-finances-accessible-20231018.htm#fig1>
Note: Other races and ethnicities were not reported in the analysis. 5

Context: Persistent racial and ethnic disparities in poverty

Poverty was on the decline in Alameda County leading up to the COVID-19 pandemic. There was a pause in data collection due to the pandemic in 2020. Then poverty increased in 2021. There are persistent disparities in poverty by race/ethnicity.

Temporal trends in the percent of Alameda County residents in poverty, by race and ethnicity
(5-year moving averages for Native American and Pacific Islander)



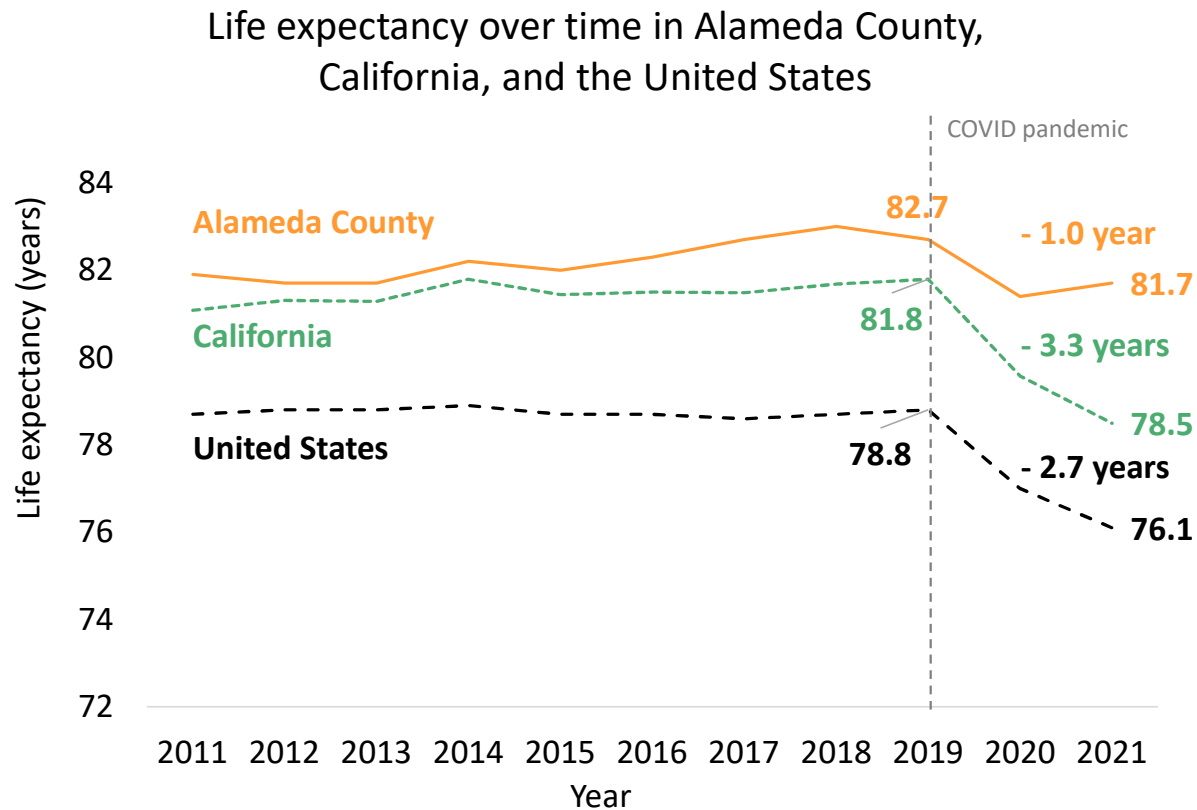
Source: American Community Survey
Notes: Single-year 2020 data not available due to the pandemic. The ACS does not break out the races mutually exclusive of Hispanic/Latino/a/x except for White.

Context

- Learning about how mortality changed during the first two years of the COVID-19 pandemic can inform work to improve health and reduce health disparities in times of crisis and in all times.
- As the 2022-2025 Alameda County Health Needs Assessment highlights, there is a need to improve economic security and opportunities, access to care, and community safety to improve health and well-being and reduce mortality.

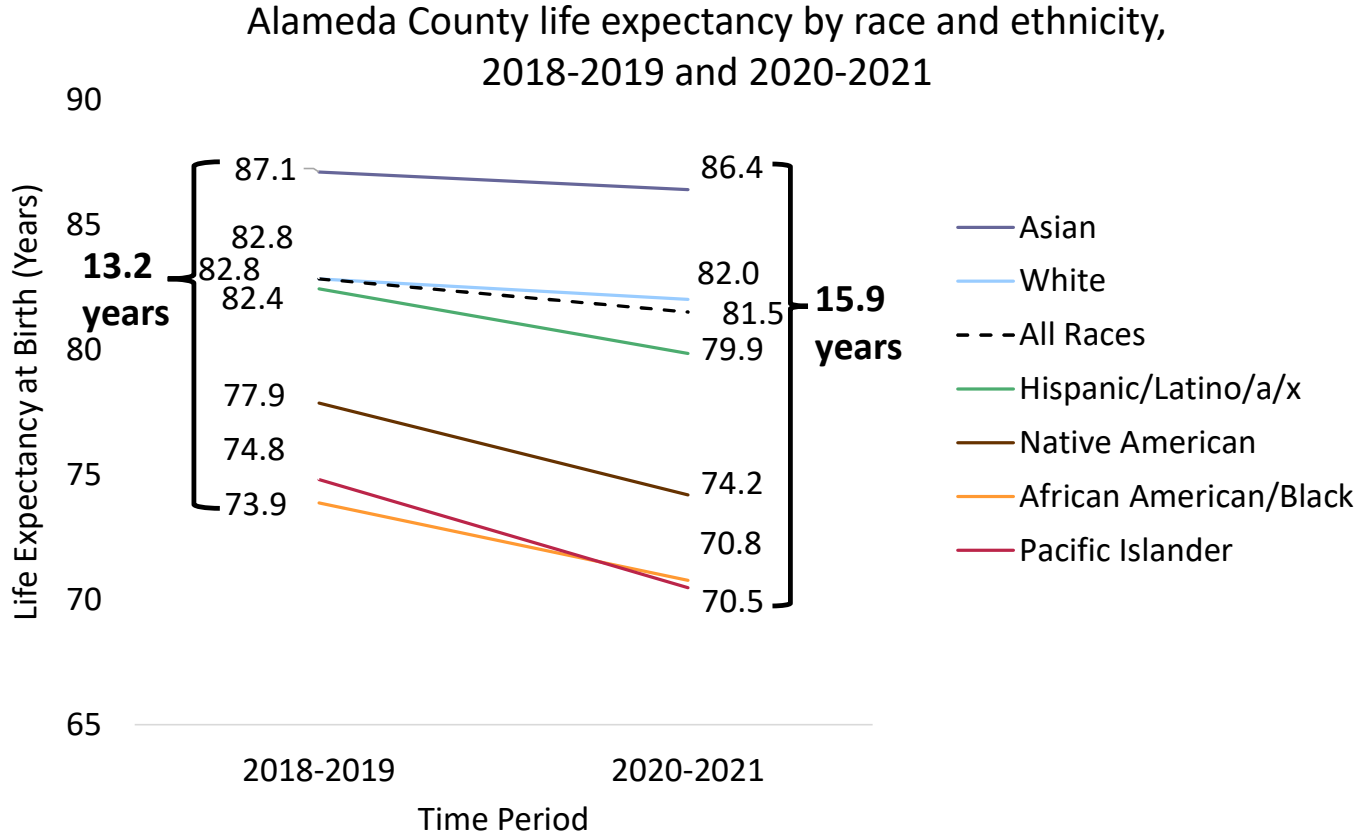
1. Growing disparities in life expectancy

Alameda County has a higher life expectancy relative to the United States, and experienced less of a decline in 2020-2021



Life expectancy in Alameda County was longer than life expectancy in California and the United States prior to the COVID-19 pandemic. In 2020, there was less of a decline in life expectancy in Alameda County than in California and the United States. While life expectancy continued to decline in 2021 in California and the United States, life expectancy began to recover in Alameda County.

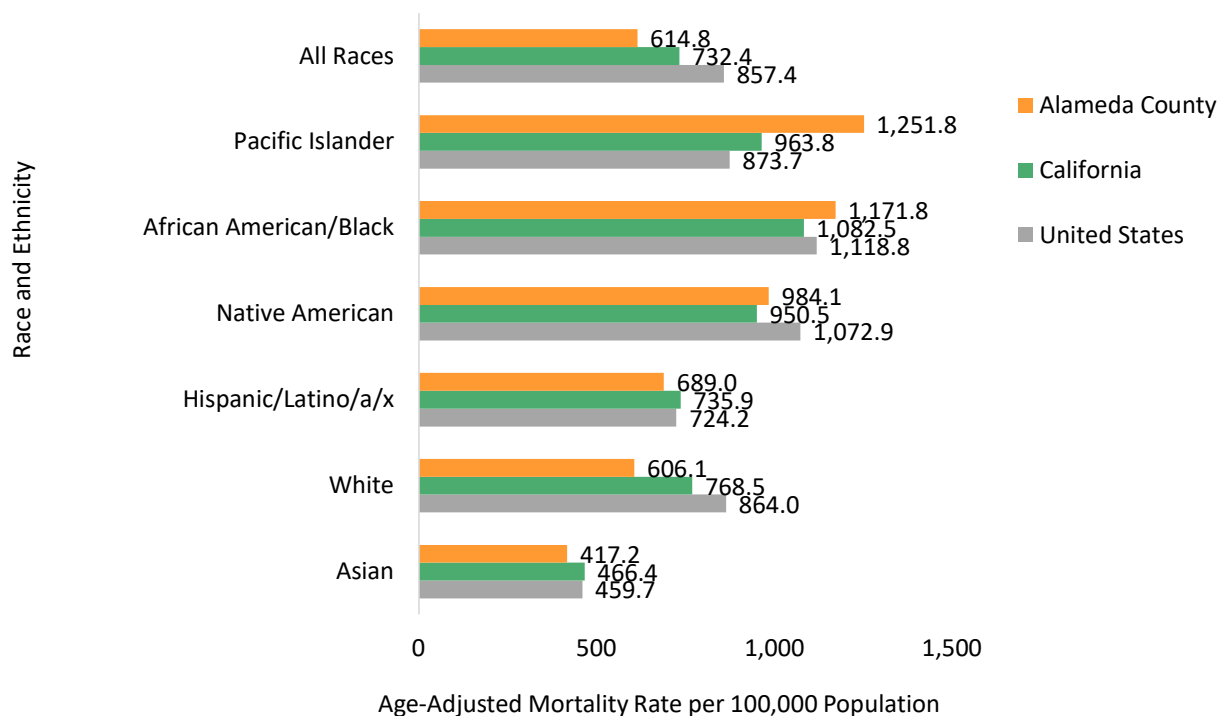
Already large racial and ethnic disparities in life expectancy grew worse in 2020-2021



The already-large gap in life expectancy by race and ethnicity grew from 13.2 years in 2018-2019 to 15.9 years in 2020-2021

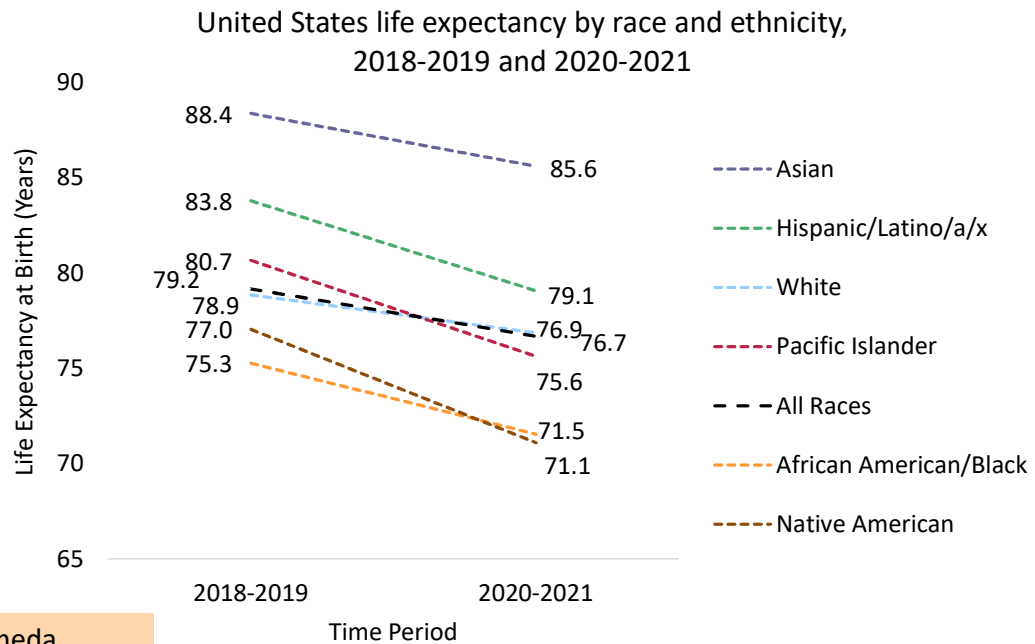
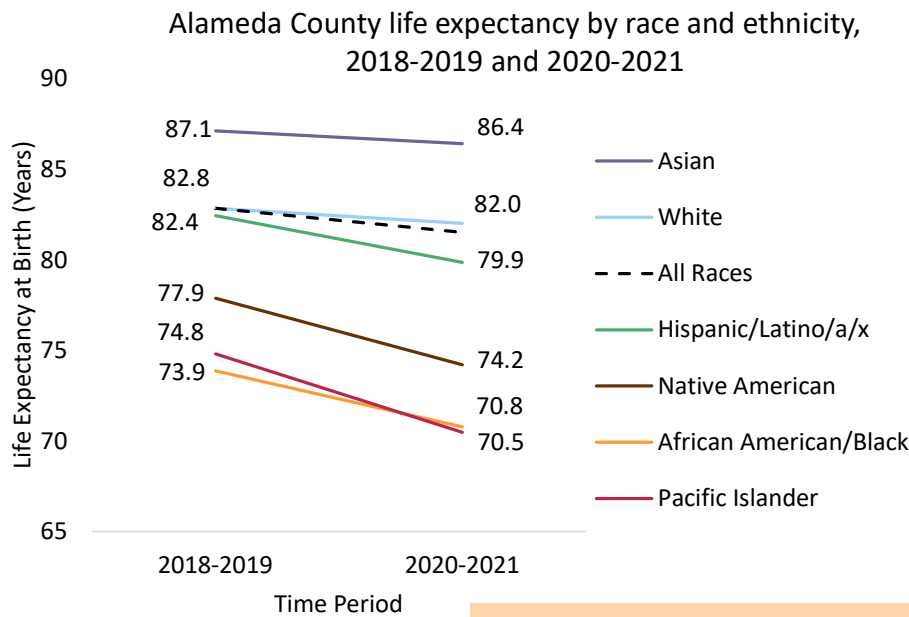
Racial and ethnic disparities in Alameda County relative to California and the United States

All-Cause Mortality Rates in Alameda County, California, and the United States, by Race and Ethnicity, 2020-2021



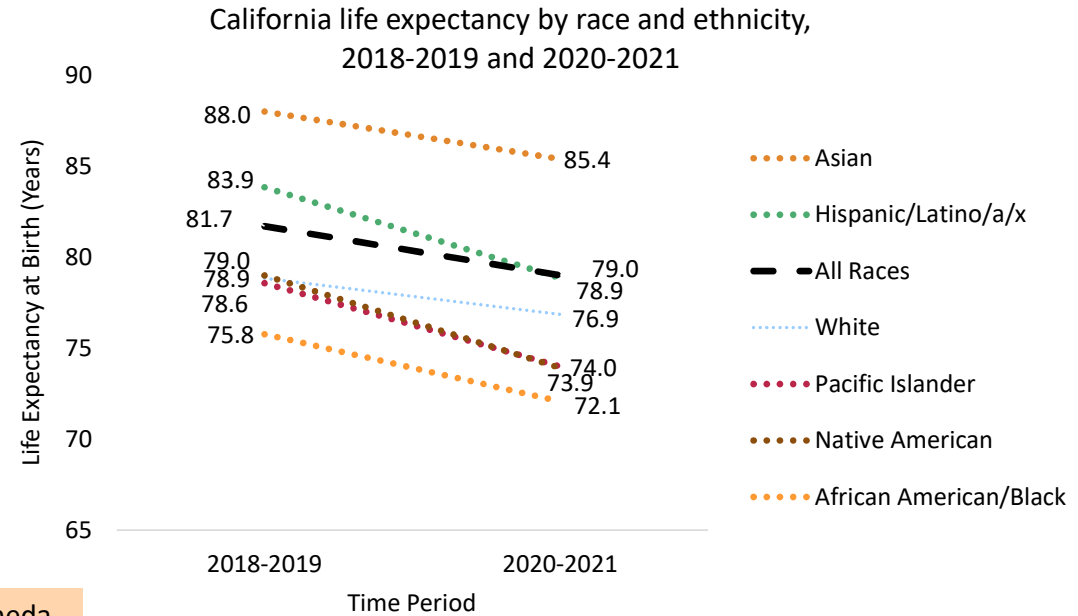
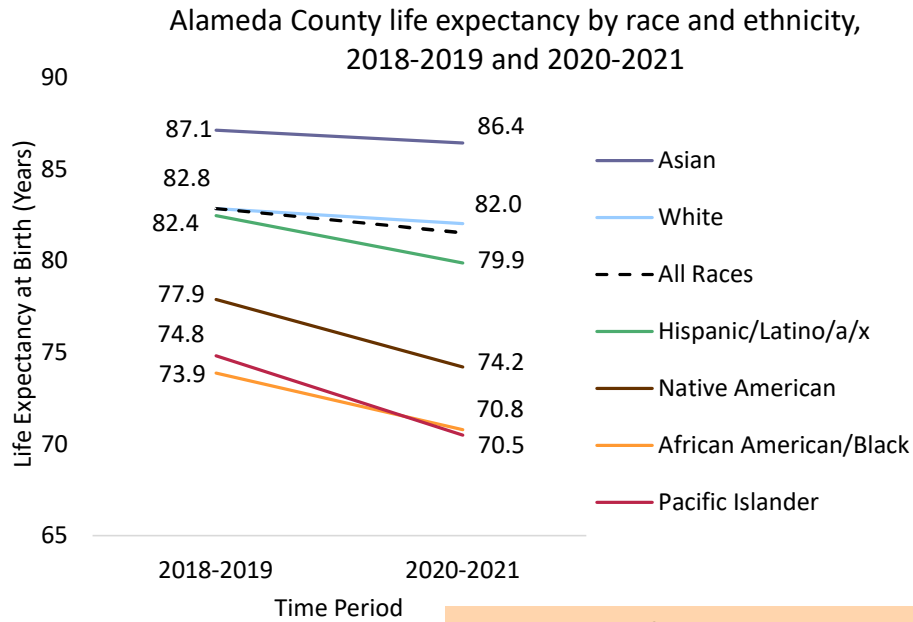
While overall mortality in Alameda County is lower than in the United States and California, mortality for African American/Black and Pacific Islander people in Alameda County was higher than for African American/Black and Pacific Islander people in California and the United States

Life expectancy disparities in Alameda County relative to the United States



While overall life expectancy in Alameda County is higher than in the United States, the life expectancy for African American/Black and Pacific Islander people in Alameda County was lower than for African American/Black and Pacific Islander people in the United States

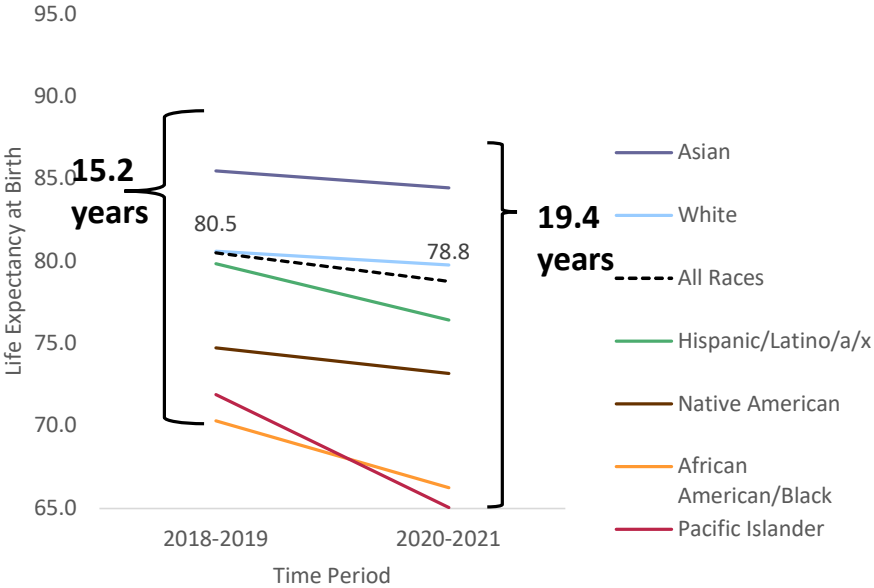
Life expectancy disparities in Alameda County relative to California



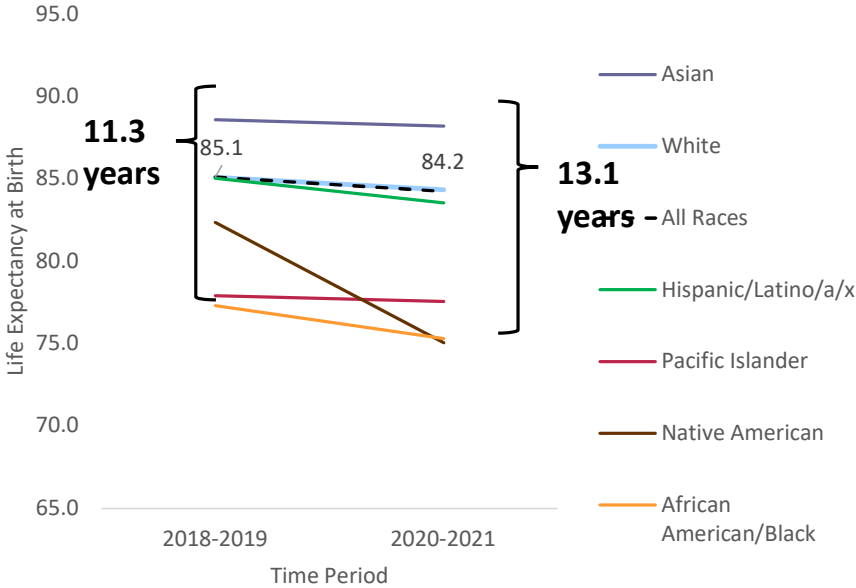
While overall life expectancy in Alameda County is higher than in California, the life expectancy for African American/Black and Pacific Islander people in Alameda County was lower than for African American/Black and Pacific Islander people in California

Life expectancy by sex: Racial and ethnic disparities in life expectancy were larger and grew further for males in 2020-2021

Alameda County male life expectancy by race/ethnicity, 2018-2019 and 2020-2021

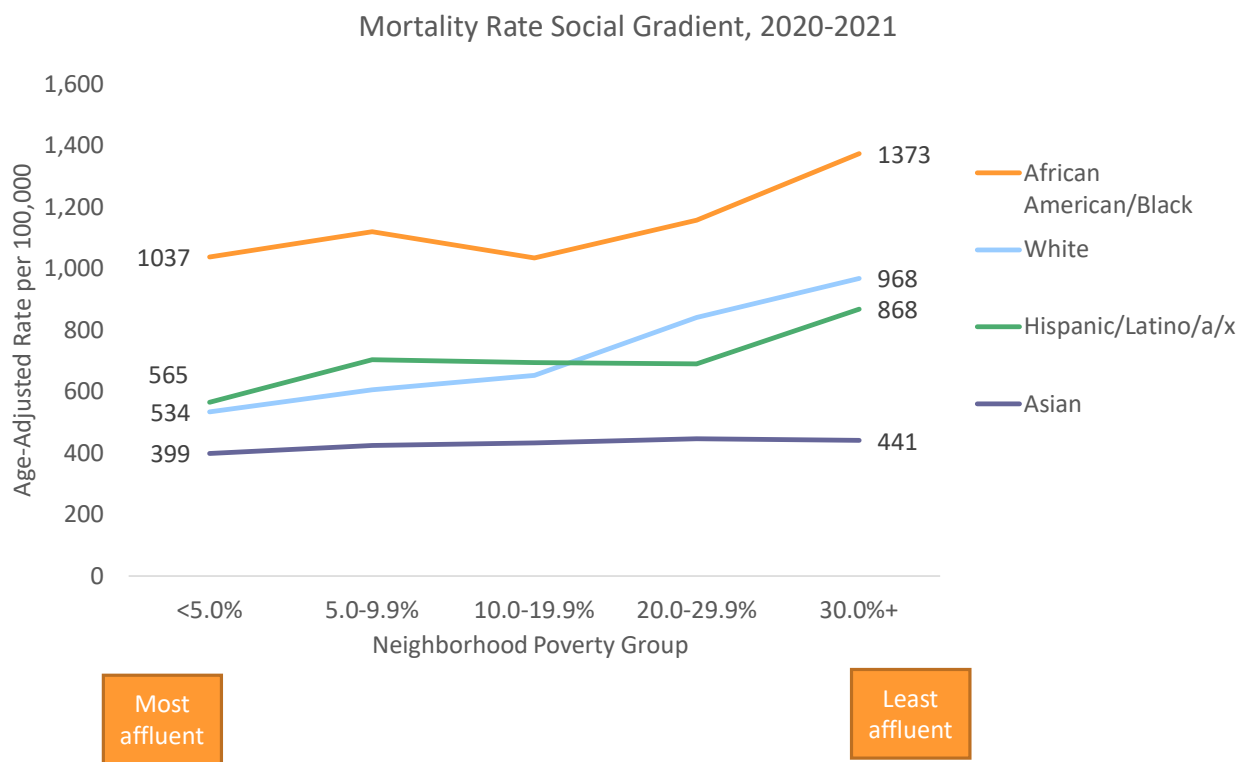


Alameda County female life expectancy by race/ethnicity, 2018-2019 and 2020-2021



Life expectancy is longer for females than males in Alameda County. Racial and ethnic disparities in life expectancy are especially large for males in Alameda County.

Racial and ethnic disparities persisted across neighborhood poverty level

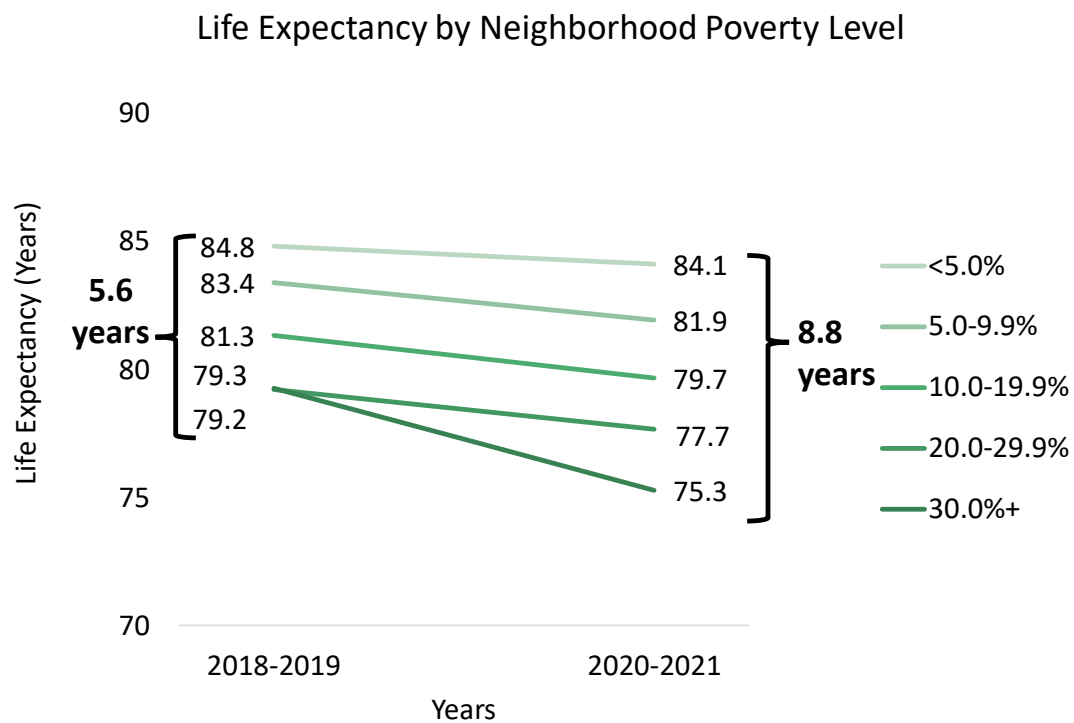


	Mortality Rate
Pacific Islander	1,251.8
African American/Black	1,171.8
Native American	984.1
Hispanic/Latino	689.0
White	606.1
Asian	417.2

African American/Black people in neighborhoods with high poverty rates experience the worst mortality, but African American /Black people in the lowest-poverty neighborhoods still experience worse mortality than people of other races and ethnicities, even in high-poverty neighborhoods.

Neighborhood poverty is the percent of individuals in poverty by census tract. Native American and Pacific Islander averages are depicted in the table rather than the figure by neighborhood poverty due to small population size.

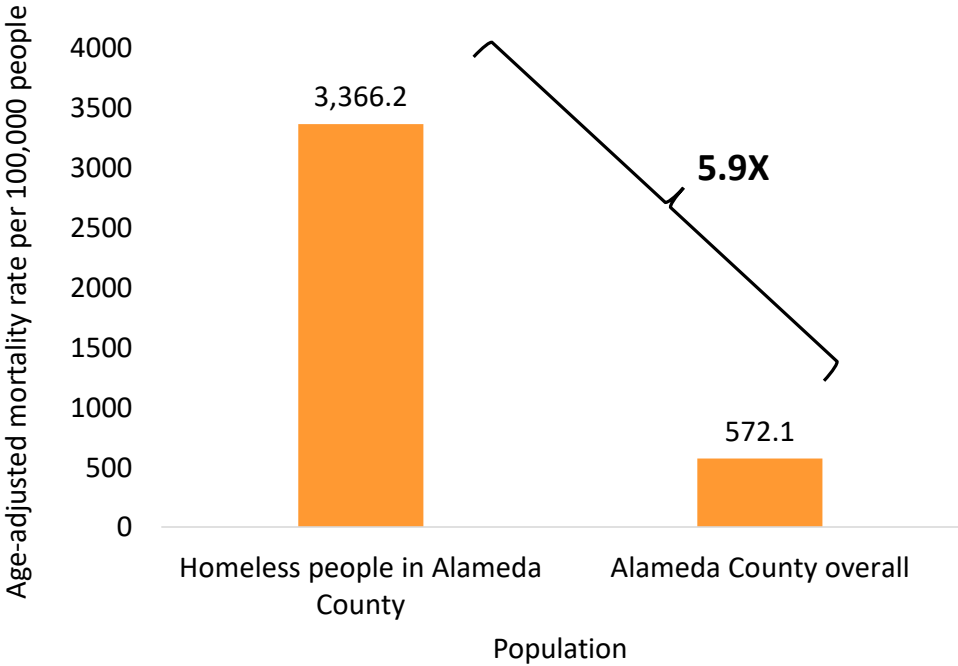
Disparities in life expectancy by neighborhood poverty grew worse in 2020-2021



The gap in life expectancy in the highest and lowest poverty neighborhoods grew from 5.6 years in 2018-2019 to 8.8 years in 2020-2021

The mortality rate for homeless people in Alameda County is nearly 6 times that of the general population

Mortality rate in the homeless population relative to the general population in Alameda County, 2021

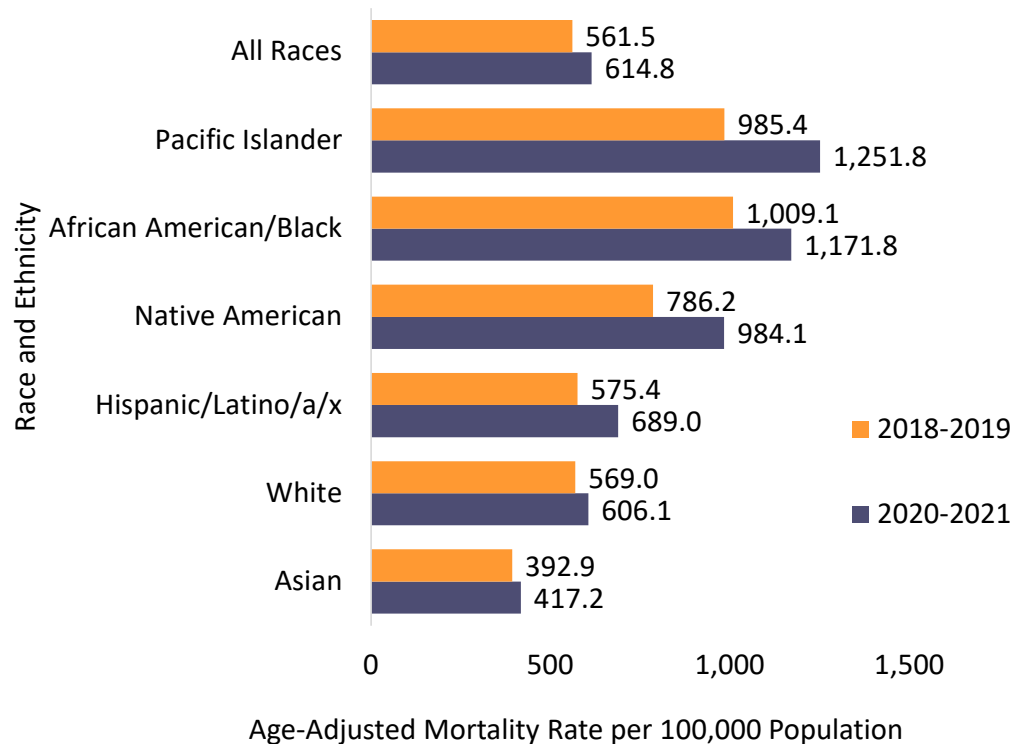


Rising homelessness is a threat to population health

Source: Alameda County 2021 Homeless Mortality Report
[Alameda County Homeless Mortality 2021](#)

Mortality increased in 2020-2021, exacerbating racial/ethnic disparities

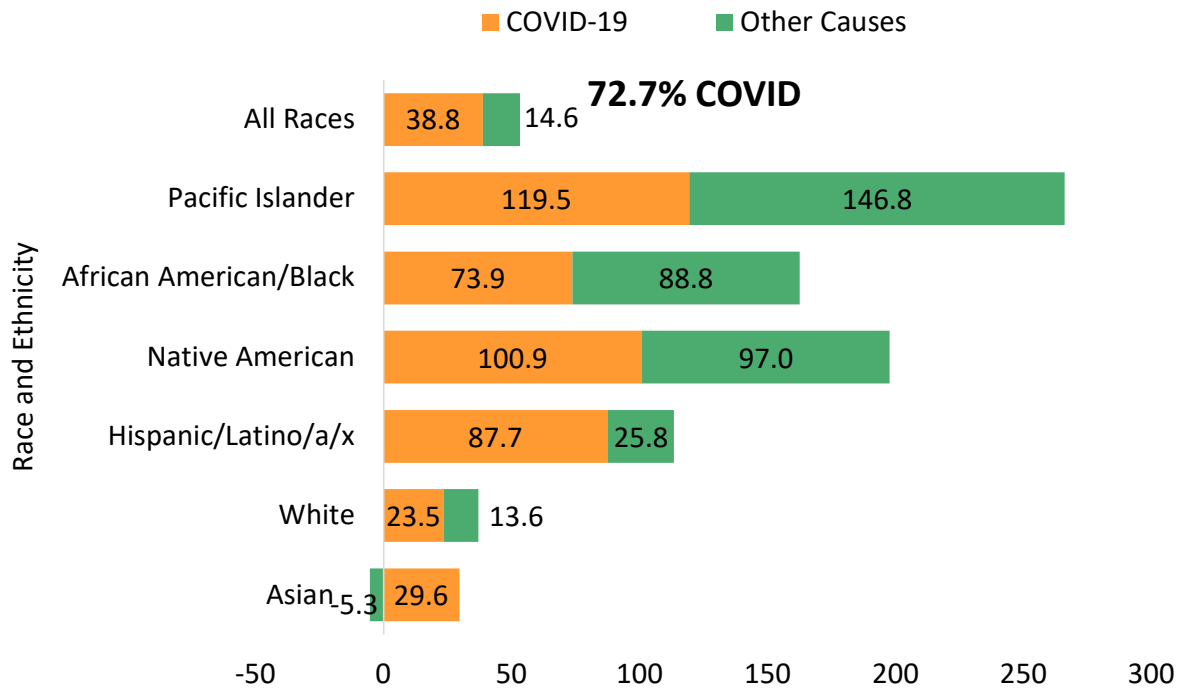
All-Cause Mortality Rate by Race and Ethnicity in Alameda County, 2018-2019 and 2020-2021



Mortality increased, and racial and ethnic disparities in mortality increased

Mortality increased in 2020-2021, exacerbating racial/ethnic disparities

Change in Mortality Rates due to COVID-19 vs Other Causes by Race and Ethnicity, 2018-2019 to 2020-2021



Most (73%) of the overall increase in the death rate in Alameda County was due to COVID-19. Pacific Islander, African American/Black, and Native American people had large increases in mortality due to COVID-19 and due to other causes.

Change in Mortality Rate for Leading Causes and Statistically Significant Changes, 2018-2019 to 2020-2021

		Age-Adjusted Mortality Rate per 100,000 Population		
		2018-2019	2020-2021	Change
Five leading causes				
	Cancer	124.0	121.4	-2.1%
	Heart disease	113.0	113.1	0.0%
	Stroke	39.6	42.8	8.2%
	COVID-19*	NA	38.8	NA
	Alzheimer's disease	35.0	31.7	-9.4%
Statistically significant change in rate				
	All causes	561.5	614.8	9.5%
	COVID-19*	NA	38.8	NA
	Unintentional overdose	11.6	19.3	65.6%
	Chronic liver disease and cirrhosis	8.9	11.2	25.5%
	Homicide	5.1	9.2	80.4%

* The percentage increase could not be calculated for COVID-19 because there were no COVID-19 deaths in the 2018-2019 period.

Alameda County leading causes of death by age group, 2020-2021 average number of deaths

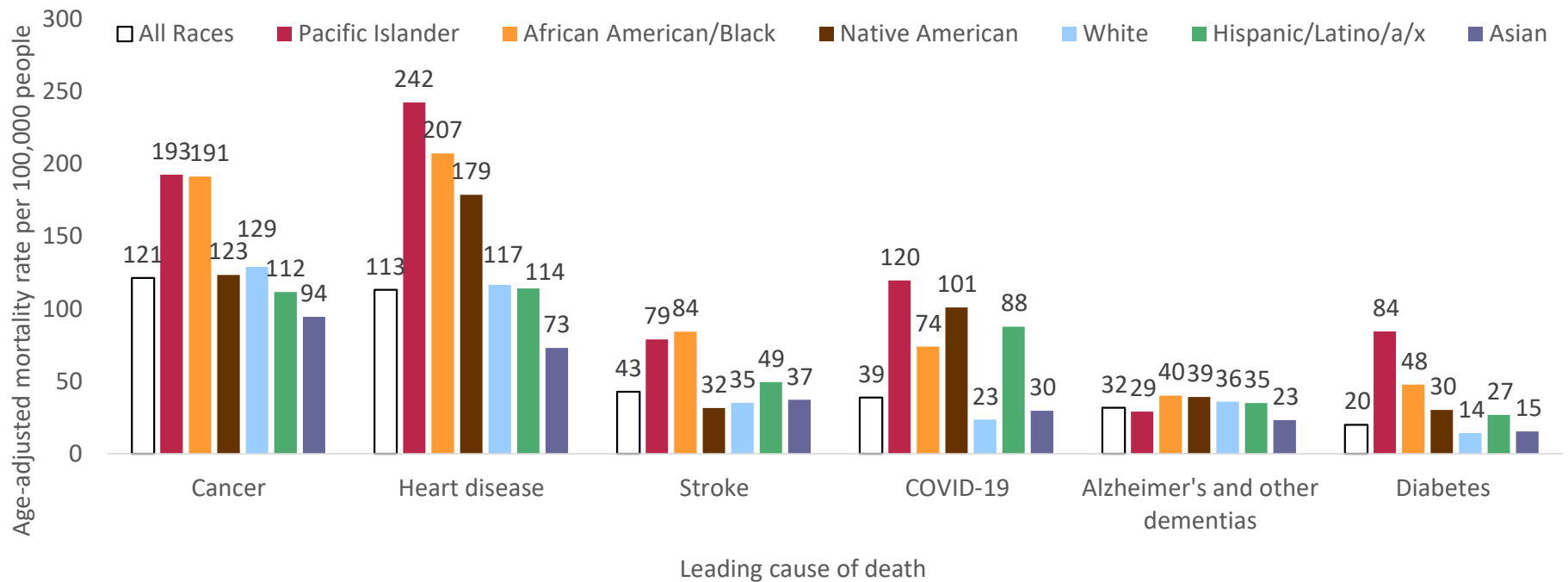
Rank	<18	18-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
1	Perinatal complications	Unintentional overdose	Unintentional overdose	Cancer	Cancer	Cancer	Cancer	Heart disease	Cancer
	30	101	70	148	358	621	622	828	2,277
2	Congenital conditions	Homicide	Cancer	Heart disease	Heart disease	Heart disease	Heart disease	Cancer	Heart disease
	15	70	41	102	252	392	479	458	2,111
3	Abnormal clinical findings ^a	Motor vehicle crash	Heart disease	Unintentional overdose	COVID-19	COVID-19	Stroke	Alzheimer's disease	Stroke
	11	48	36	68	99	152	196	429	786
4	Homicide	Suicide	Homicide	COVID-19	Unintentional overdose	Stroke	COVID-19	Stroke	COVID-19
	<10	38	36	47	75	111	164	378	725
5	Cancer	Other injury ^b	Suicide	Chronic liver disease & cirrhosis	Diabetes	Diabetes	Alzheimer's disease	COVID-19	Alzheimer's disease
	<10	24	28	39	74	88	121	236	578

a. Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)

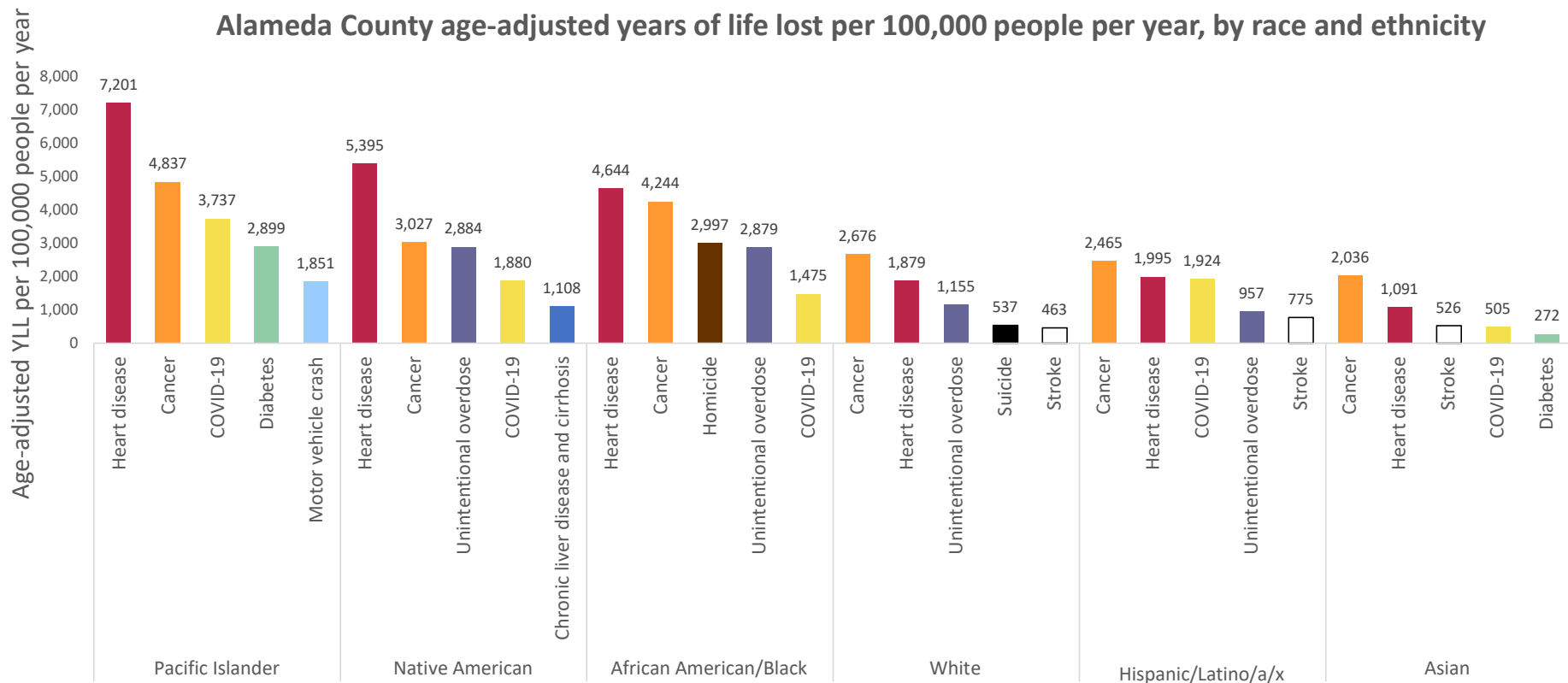
b. Injury other than homicide, suicide, unintentional motor vehicle crash, and unintentional overdose

There are large racial and ethnic disparities across leading causes of death, 2020-2021

Age-adjusted mortality rate for leading causes of death in 2020-2021, overall and by race and ethnicity



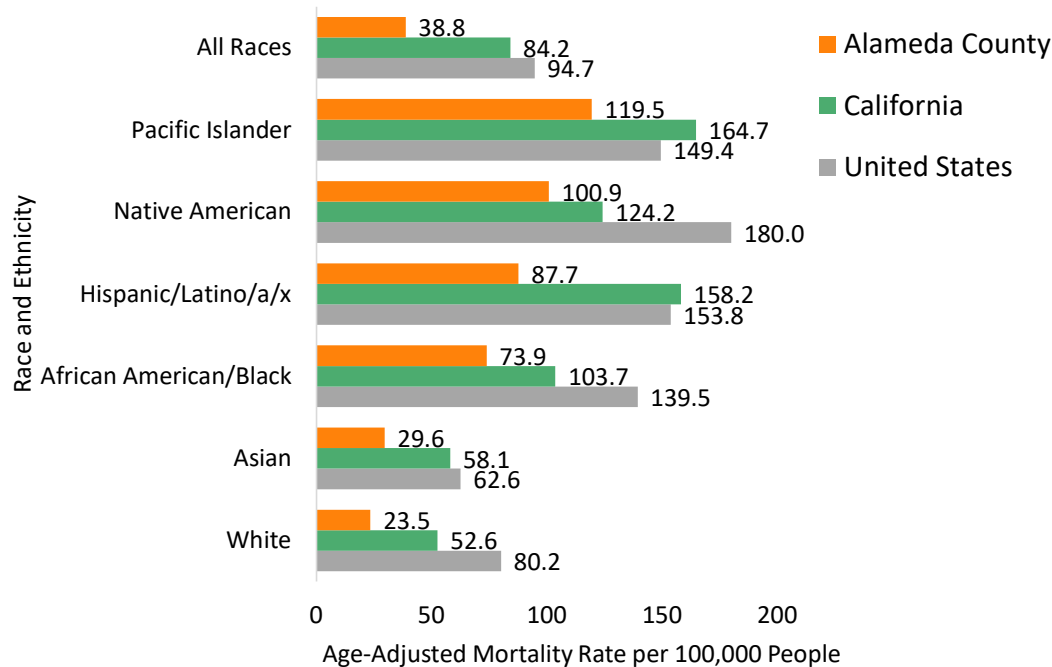
There were large racial and ethnic disparities in premature mortality for leading causes of death, 2020-2021



2. The unequal toll of COVID-19 and other communicable diseases

Alameda County had a lower rate of COVID-19 mortality relative to the US, overall and for each race and ethnicity

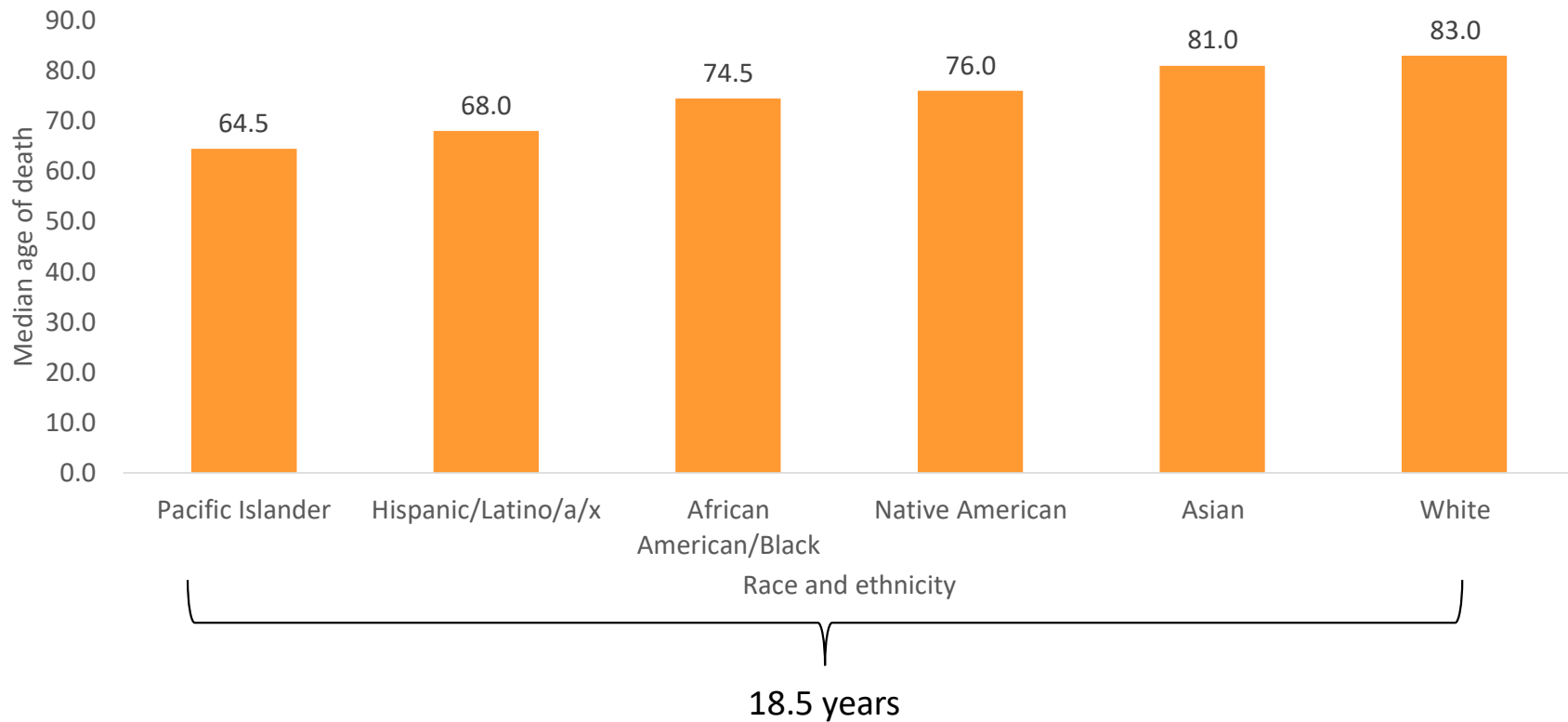
COVID-19 Mortality Rates in Alameda County, California, and the United States, by Race and Ethnicity



Alameda County had an age-adjusted COVID-19 death rate that was 41% the age-adjusted COVID-19 death rate in the United States and 46% the age-adjusted COVID-19 death rate in California. The age-adjusted COVID-19 death rate was lower in Alameda County than in California and the United States for each race and ethnicity.

There was an 18 year gap in the median age of death due to COVID-19 by race and ethnicity

Alameda County median age of death due to COVID-19, 2020-2021



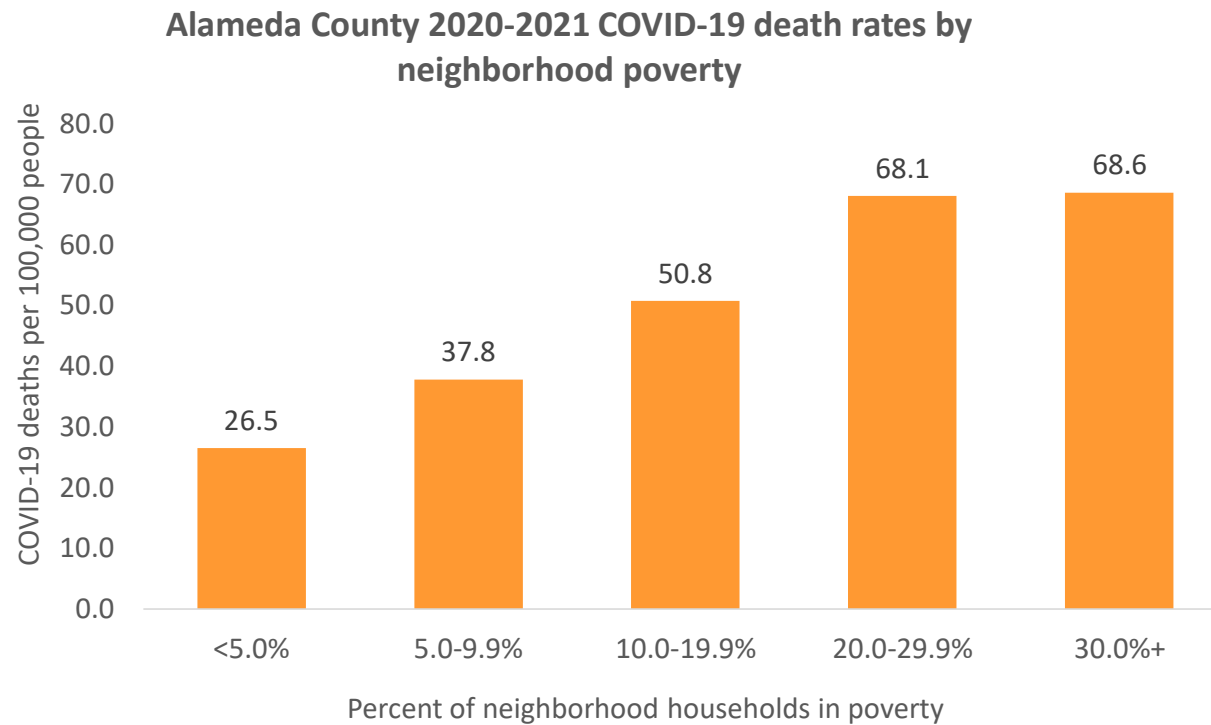
COVID was a top 5 cause of death in 2020-2021 for age groups 45 and older in Alameda County

Rank	<18	18-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
1	Perinatal complications	Unintentional overdose	Unintentional overdose	Cancer	Cancer	Cancer	Cancer	Heart disease	Cancer
	30	101	70	148	358	621	622	828	2,277
2	Congenital conditions	Homicide	Cancer	Heart disease	Heart disease	Heart disease	Heart disease	Cancer	Heart disease
	15	70	41	102	252	392	479	458	2,111
3	Abnormal clinical findings ^a	Motor vehicle crash	Heart disease	Unintentional overdose	COVID-19	COVID-19	Stroke	Alzheimer's disease	Stroke
	11	48	36	68	99	152	196	429	786
4	Homicide	Suicide	Homicide	COVID-19	Unintentional overdose	Stroke	COVID-19	Stroke	COVID-19
	<10	38	36	47	75	111	164	378	725
5	Cancer	Other injury ^b	Suicide	Chronic liver disease & cirrhosis	Diabetes	Diabetes	Alzheimer's disease	COVID-19	Alzheimer's disease
	<10	24	28	39	74	88	121	236	578

a. Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)

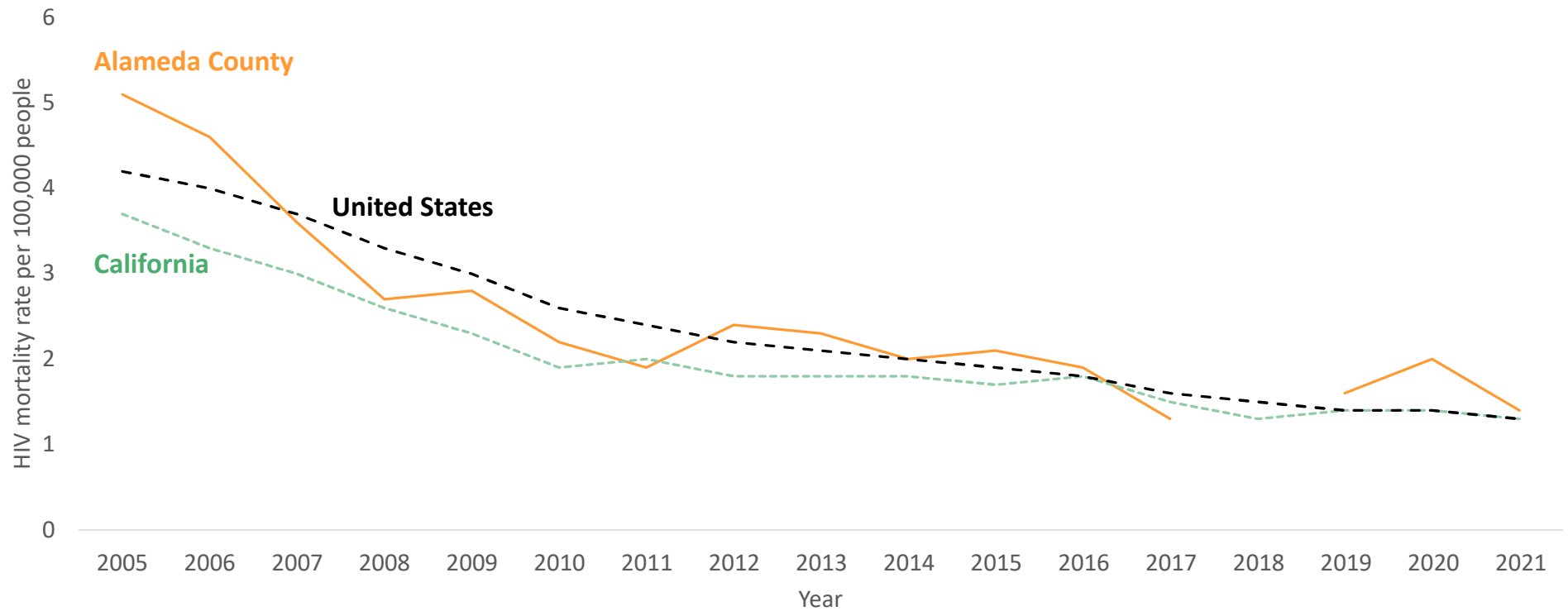
b. Injury other than homicide, suicide, unintentional motor vehicle crash, and unintentional overdose

COVID-19 mortality was higher in neighborhoods with more poverty



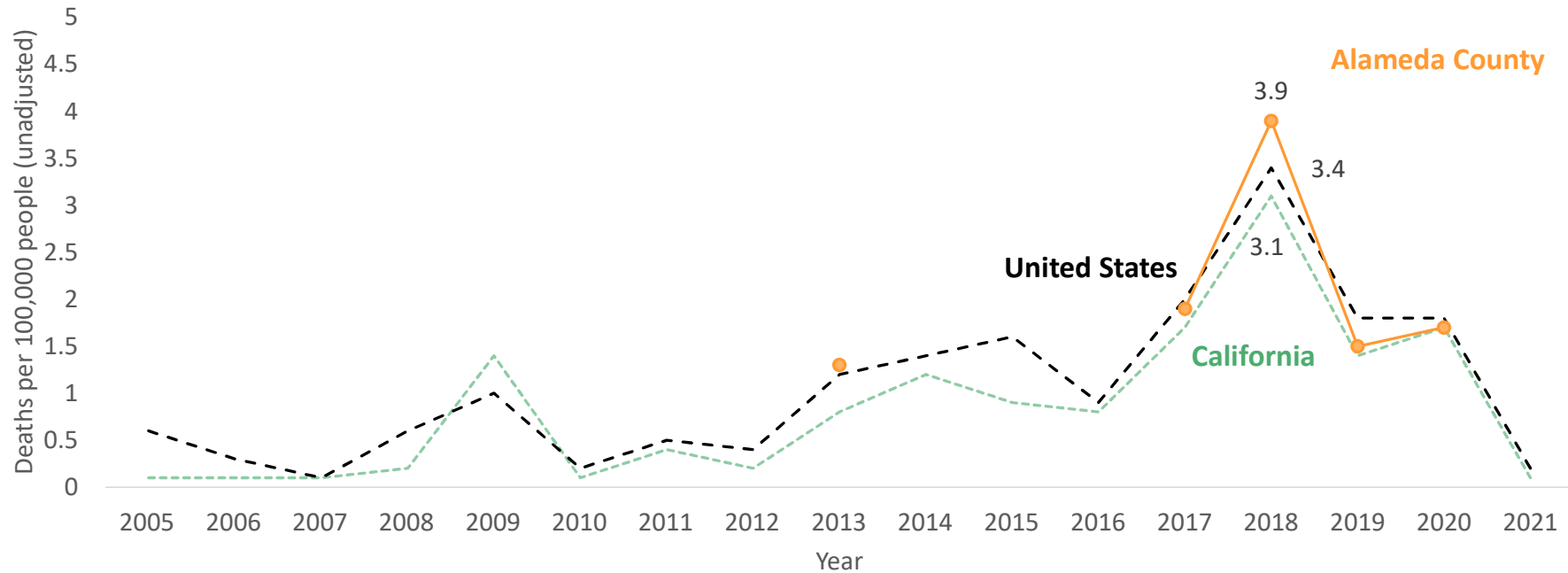
HIV mortality has declined over time in Alameda County, California, and the United States

Age Adjusted Mortality Rate due to HIV in Alameda County, California and USA



Death rates due to influenza vary by year in Alameda County, California, and the United States

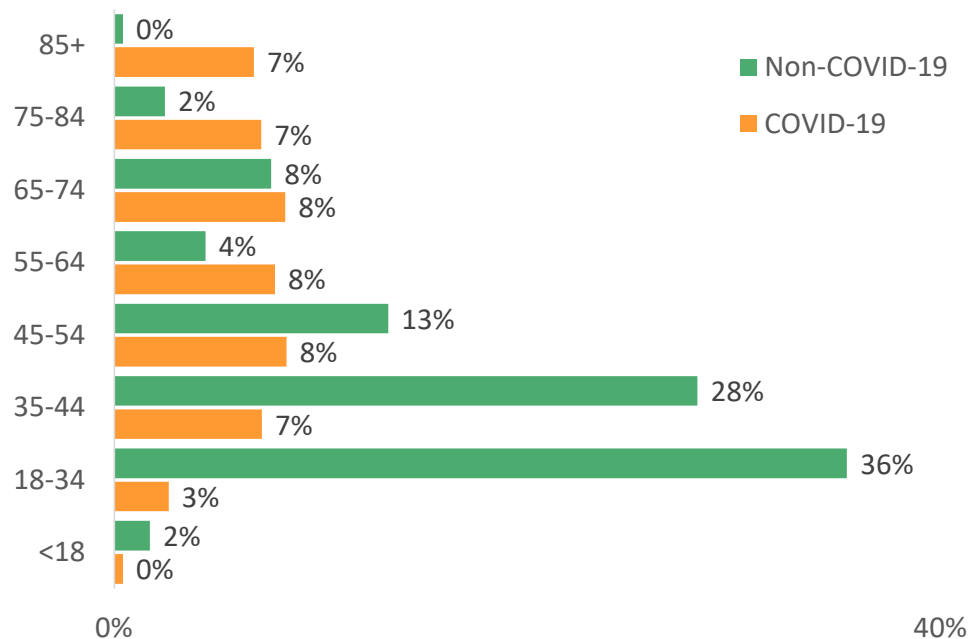
Influenza deaths per 100,000 people in Alameda County, California, and the United States



3. Rising deaths due to external causes and non-communicable diseases as a leading cause of mortality in middle and older ages

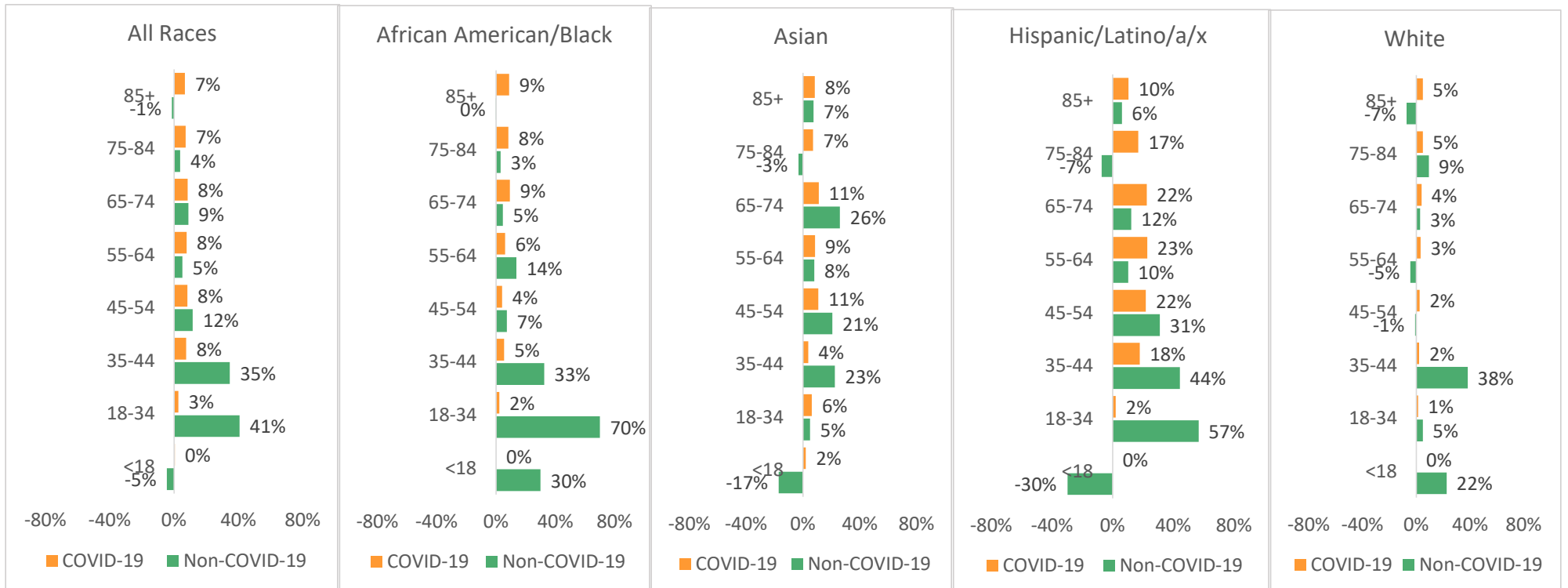
There were increases in deaths at young ages 2017-2019 to 2020-2021 in Alameda County, primarily due to non-COVID causes

Percent change in deaths due to COVID-19 and due to other causes from 2018-2019 to 2020-2021, by age group



Relative increases in mortality rates due to COVID-19 were consistent across all age groups over 35. There were large relative increases in mortality in younger age groups due to non-COVID causes, primarily overdose and homicide (following national trend)

The largest relative increases in mortality 2017-2019 to 2020-2021 were among Black/African American and Hispanic young people in Alameda County



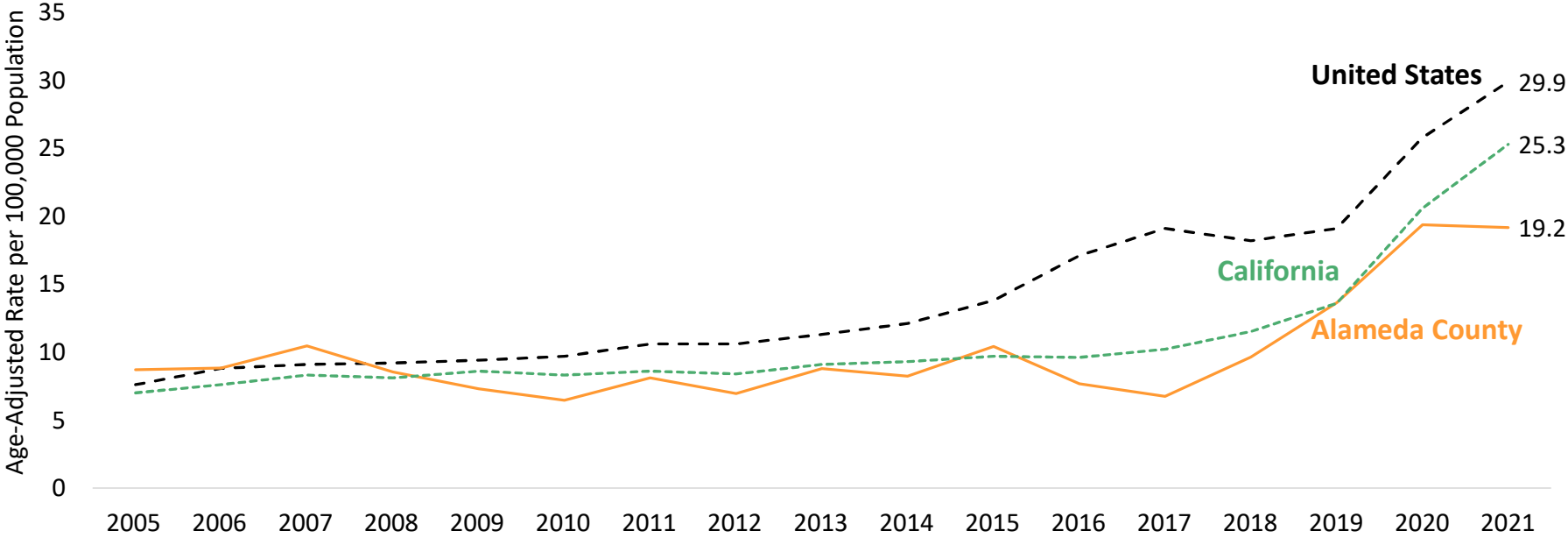
Overdose, homicide, and motor vehicle crashes were leading causes of death at young ages in Alameda County in 2020-2021 (and increased relative to 2018-2019)

Rank	<18	18-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
1	Perinatal complications	Unintentional overdose	Unintentional overdose	Cancer	Cancer	Cancer	Cancer	Heart disease	Cancer
	30	101	70	148	358	621	622	828	2,277
2	Congenital conditions	Homicide	Cancer	Heart disease	Heart disease	Heart disease	Heart disease	Cancer	Heart disease
	15	70	41	102	252	392	479	458	2,111
3	Abnormal clinical findings ^a	Motor vehicle crash	Heart disease	Unintentional overdose	COVID-19	COVID-19	Stroke	Alzheimer's disease	Stroke
	11	48	36	68	99	152	196	429	786
4	Homicide	Suicide	Homicide	COVID-19	Unintentional overdose	Stroke	COVID-19	Stroke	COVID-19
	<10	38	36	47	75	111	164	378	725
5	Cancer	Other injury ^b	Suicide	Chronic liver disease & cirrhosis	Diabetes	Diabetes	Alzheimer's disease	COVID-19	Alzheimer's disease
	<10	24	28	39	74	88	121	236	578

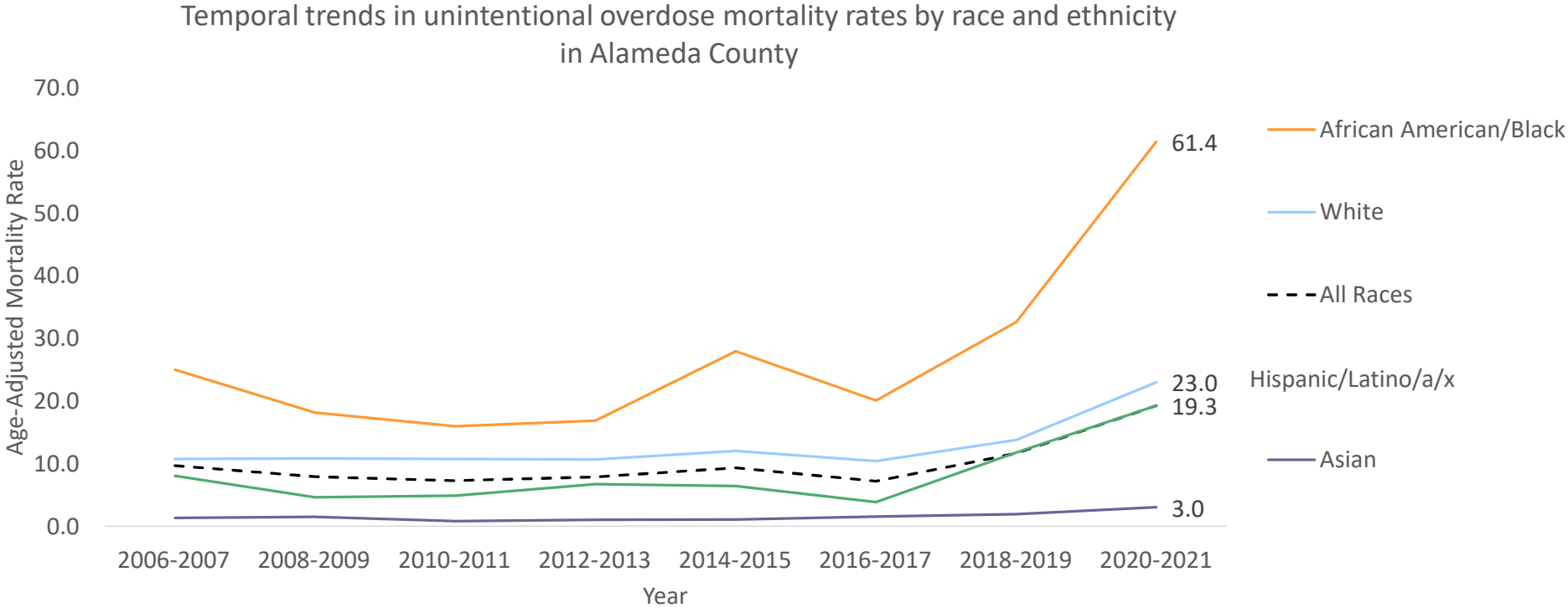
a. Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)
 b. Injury other than homicide, suicide, unintentional motor vehicle crash, and unintentional overdose

Overdose increased in Alameda County in 2020-2021, following state and national trends

Unintentional overdose mortality in Alameda County, California, and the United States, 2005-2021



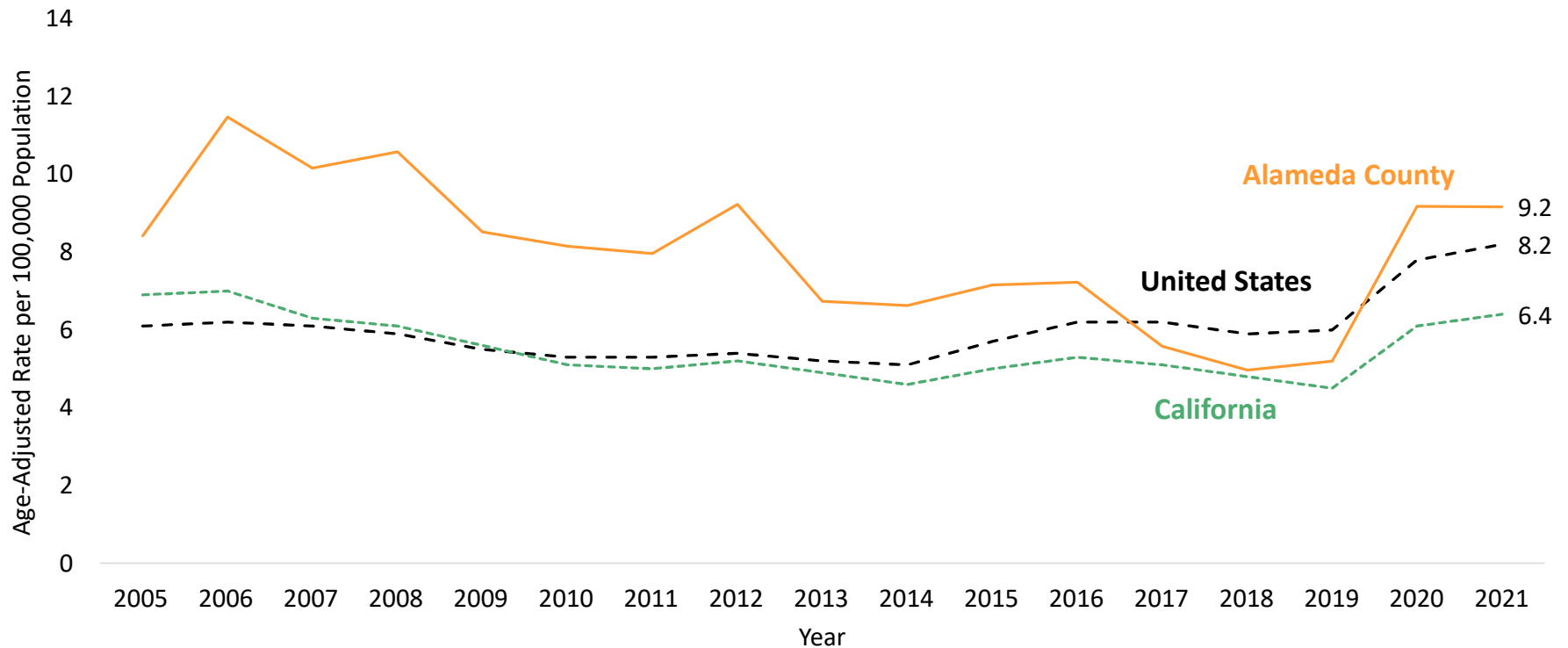
There are large and increasing racial and ethnic disparities in unintentional overdose mortality in Alameda County



* Since there are few unintentional overdose deaths among Native Americans and Pacific Islanders, we had to aggregate eight years of data for each. For 2014-2021, the Native American rate was 28.5/100,000 and the Pacific Islander rate was 12.4/100,000.

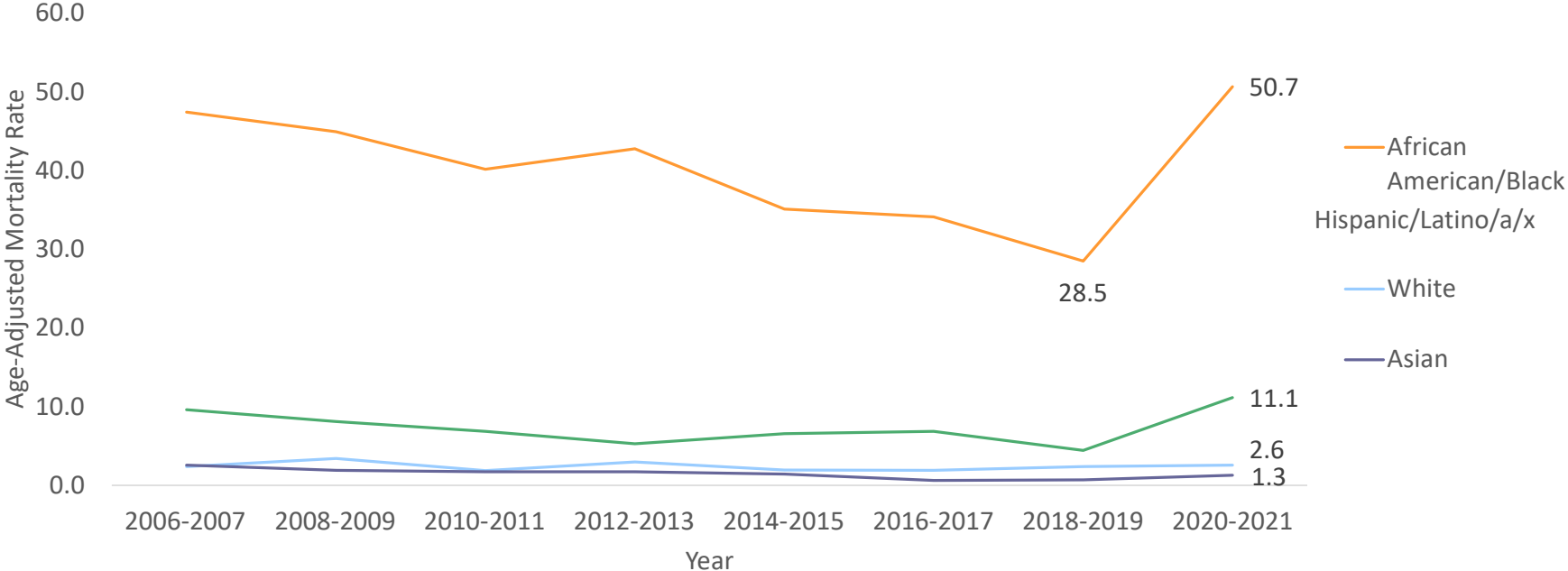
Homicide increased in Alameda County in 2020-2021, as aligned with a national trend

Homicide mortality in Alameda County, California, and the United States, 2005-2021



There are large racial and ethnic disparities in the homicide rate in Alameda County

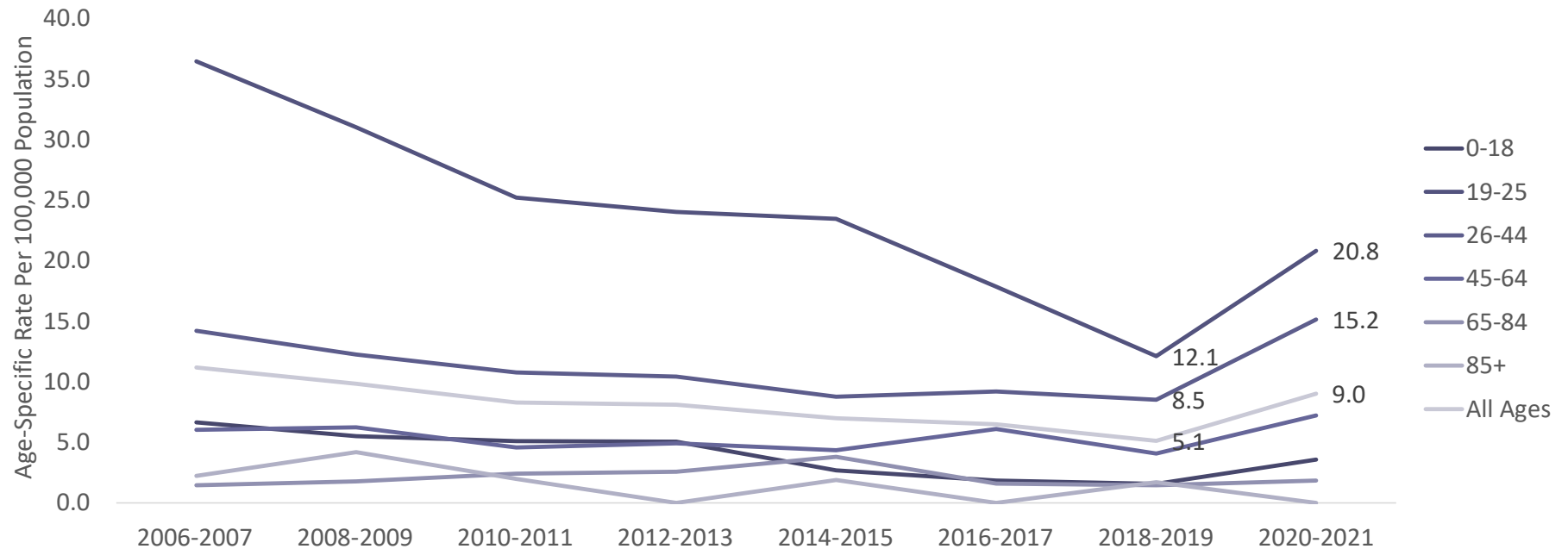
Temporal trends in homicide mortality rates by race and ethnicity in Alameda County



Note: The number of homicide deaths for Pacific Islander and Native American people were too low to include.

Increase in homicide at young ages in Alameda County in 2020-2021

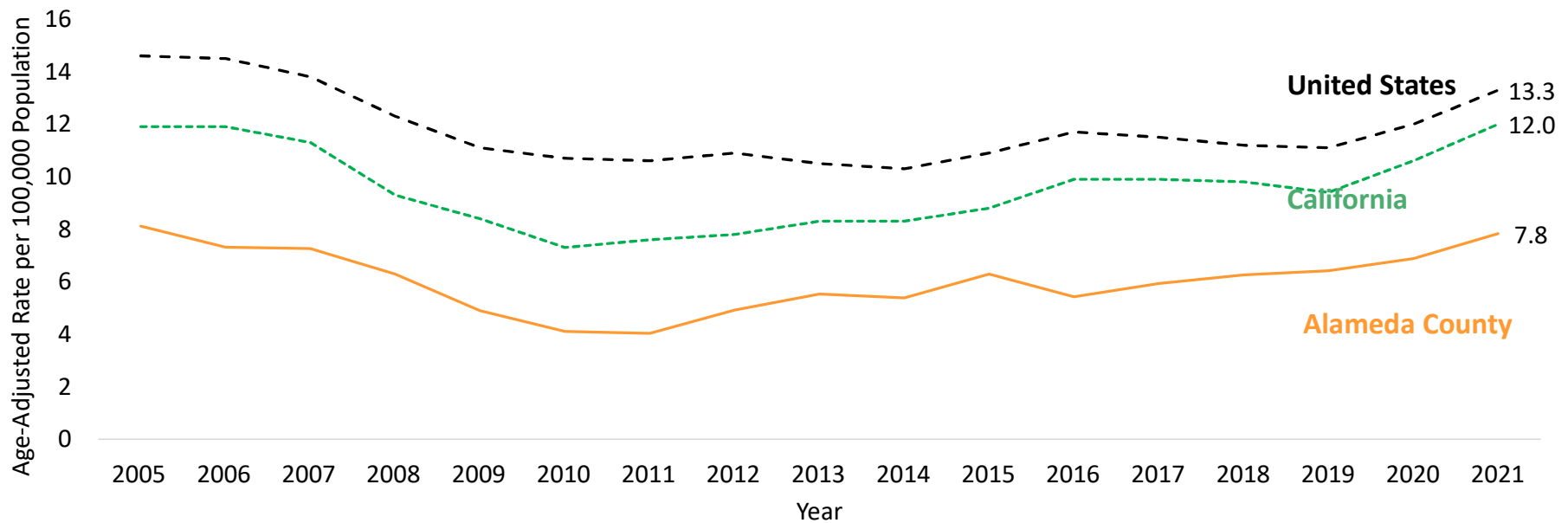
Homicide Rate by Age Group in Alameda County
2006-2021



Source: CAPE. Mortality data.

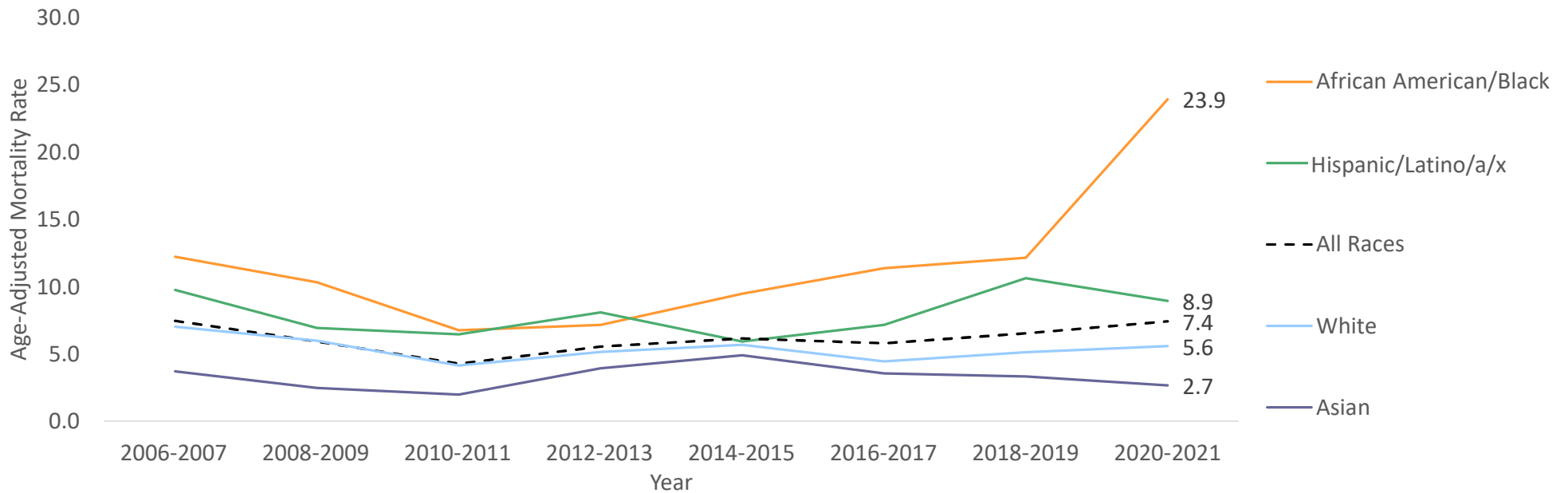
Motor vehicle fatalities were lower in Alameda County than in California and the United States and increasing across settings

Motor vehicle traffic mortality rate in Alameda County, California, and the United States, 2005-2021



There are large and increasing racial and ethnic disparities in motor vehicle crash mortality in Alameda County

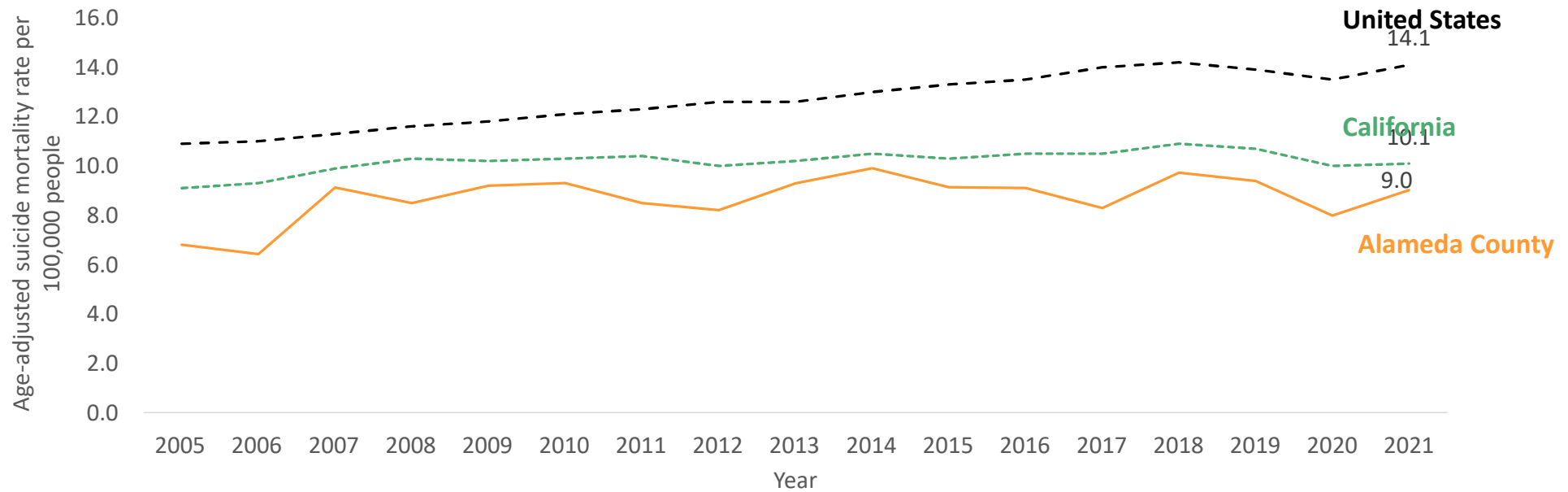
Temporal trends in motor vehicle crash mortality rates by race and ethnicity in Alameda County



* Since there are few motor vehicle crash deaths among Pacific Islanders, we had to aggregate eight years of data. For 2014-2021, the Pacific Islander rate was 18.4/100,000. There were too few deaths among Native American people to include in the figure.

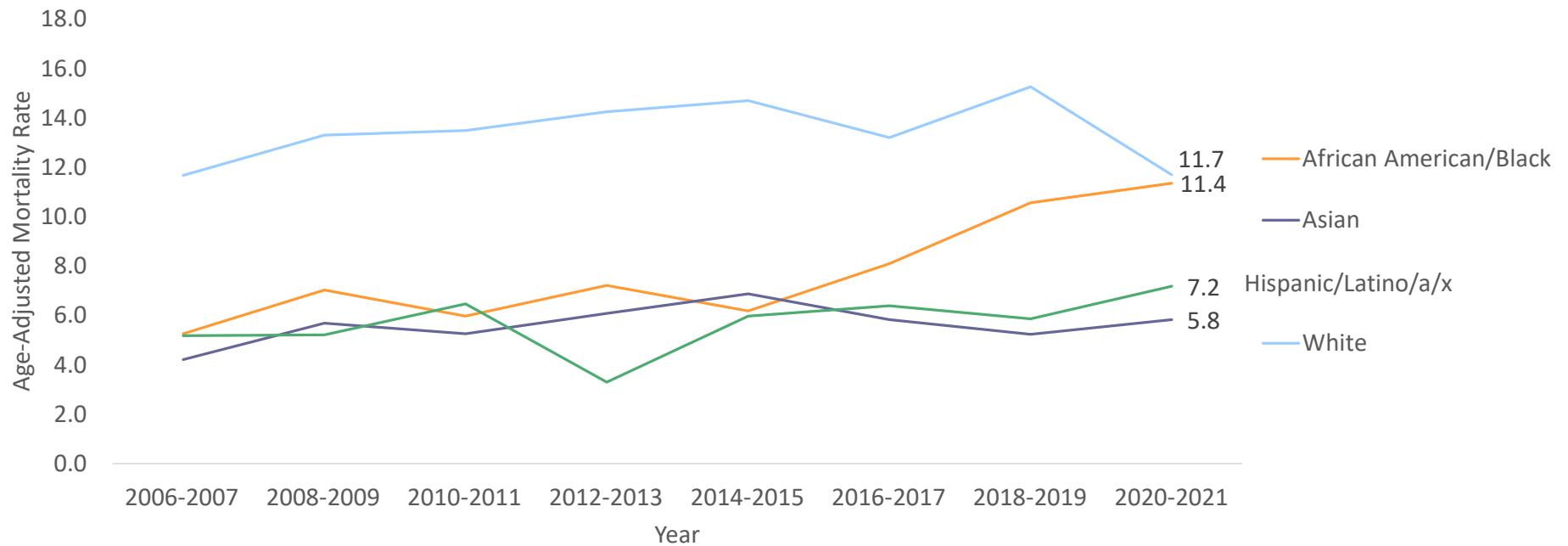
The suicide mortality rate is lower in Alameda County than in California and the United States and has remained constant over time

Temporal trends in suicide mortality rate in Alameda County, California, and the United States, 2005-2021



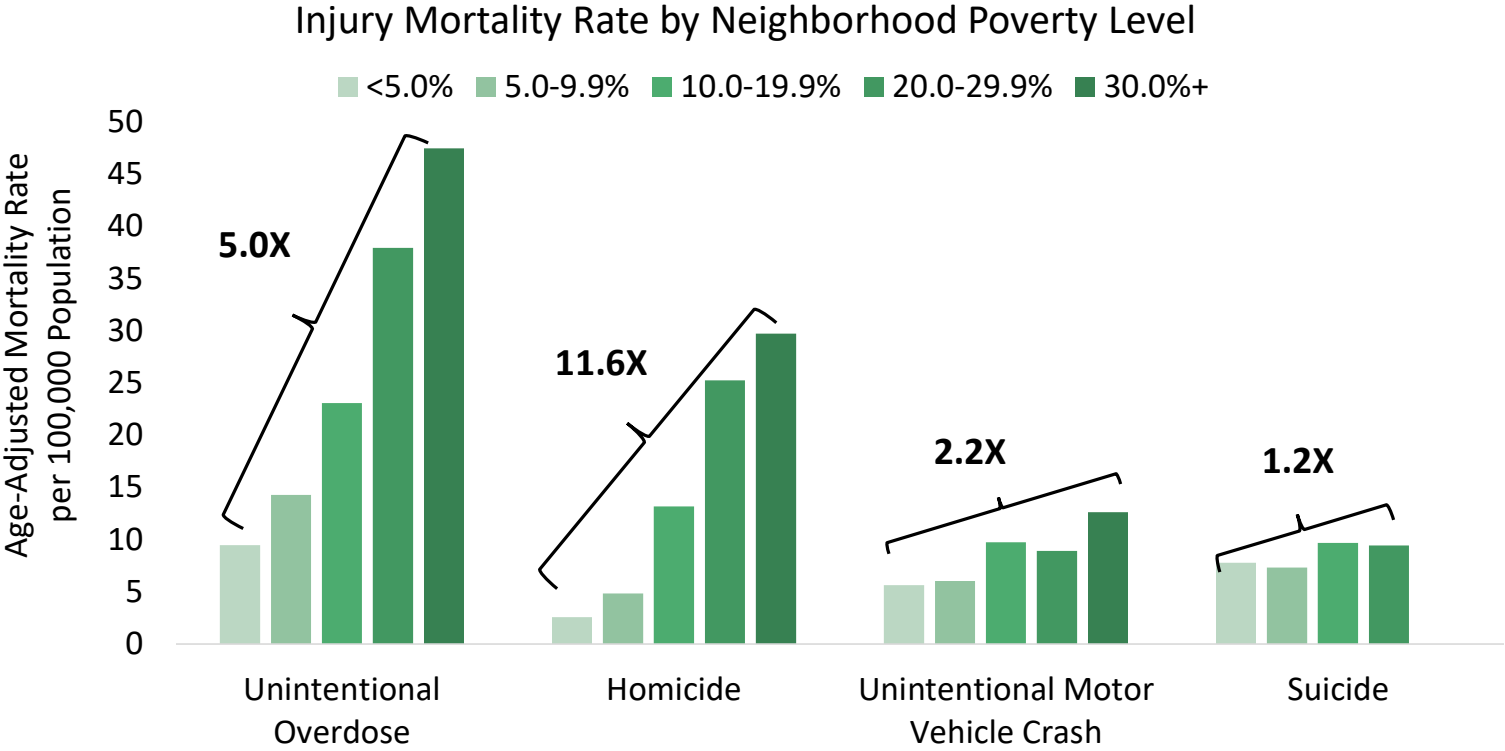
There are racial and ethnic disparities in suicide mortality in Alameda County

Temporal trends in suicide mortality rates by race and ethnicity in Alameda County



Note: The number of suicide deaths for Pacific Islander and Native American people were too low to include.

Neighborhood poverty is associated with mortality rates due to external causes



4. Chronic diseases remain leading causes of death in middle and older age

Chronic diseases remain leading causes of death in middle and older age in Alameda County

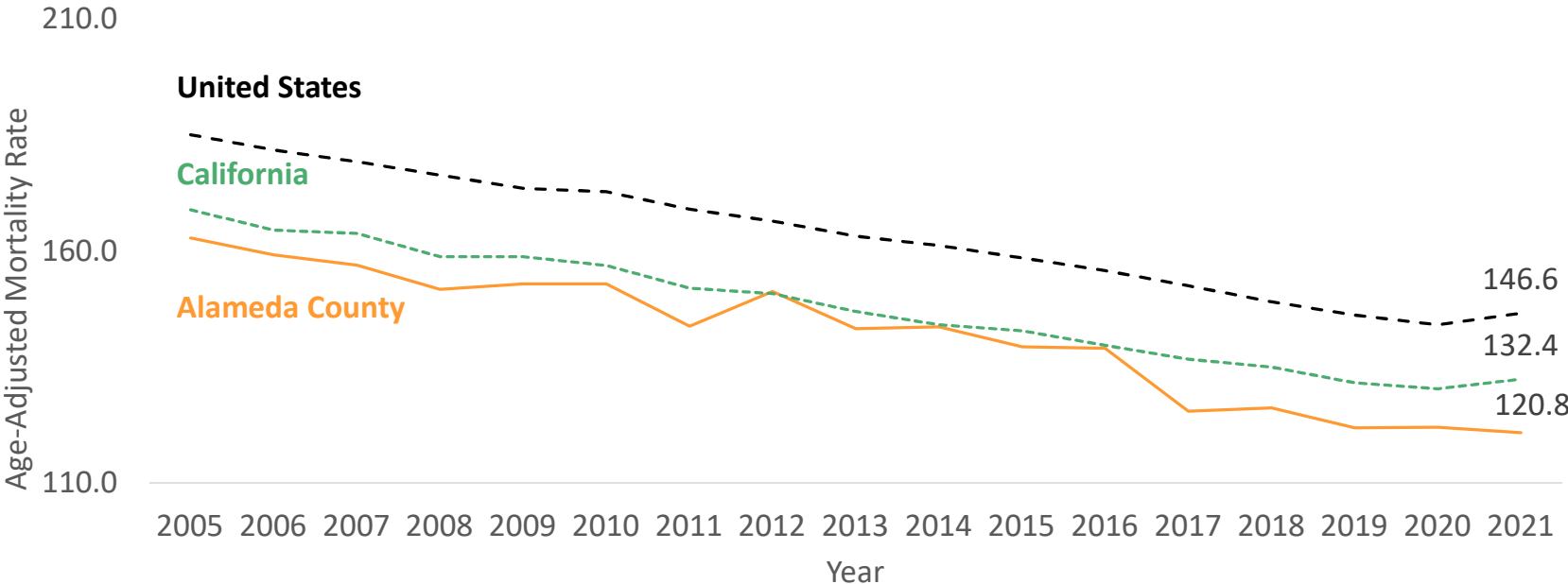
Rank	<18	18-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
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2	Congenital conditions	Homicide	Cancer	Heart disease	Heart disease	Heart disease	Heart disease	Cancer	Heart disease
	15	70	41	102	252	392	479	458	2,111
3	Abnormal clinical findings ^a	Motor vehicle crash	Heart disease	Unintentional overdose	COVID-19	COVID-19	Stroke	Alzheimer's disease	Stroke
	11	48	36	68	99	152	196	429	786
4	Homicide	Suicide	Homicide	COVID-19	Unintentional overdose	Stroke	COVID-19	Stroke	COVID-19
	<10	38	36	47	75	111	164	378	725
5	Cancer	Other injury ^b	Suicide	Chronic liver disease & cirrhosis	Diabetes	Diabetes	Alzheimer's disease	COVID-19	Alzheimer's disease
	<10	24	28	39	74	88	121	236	578

a. Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)

b. Injury other than homicide, suicide, unintentional motor vehicle crash, and unintentional overdose

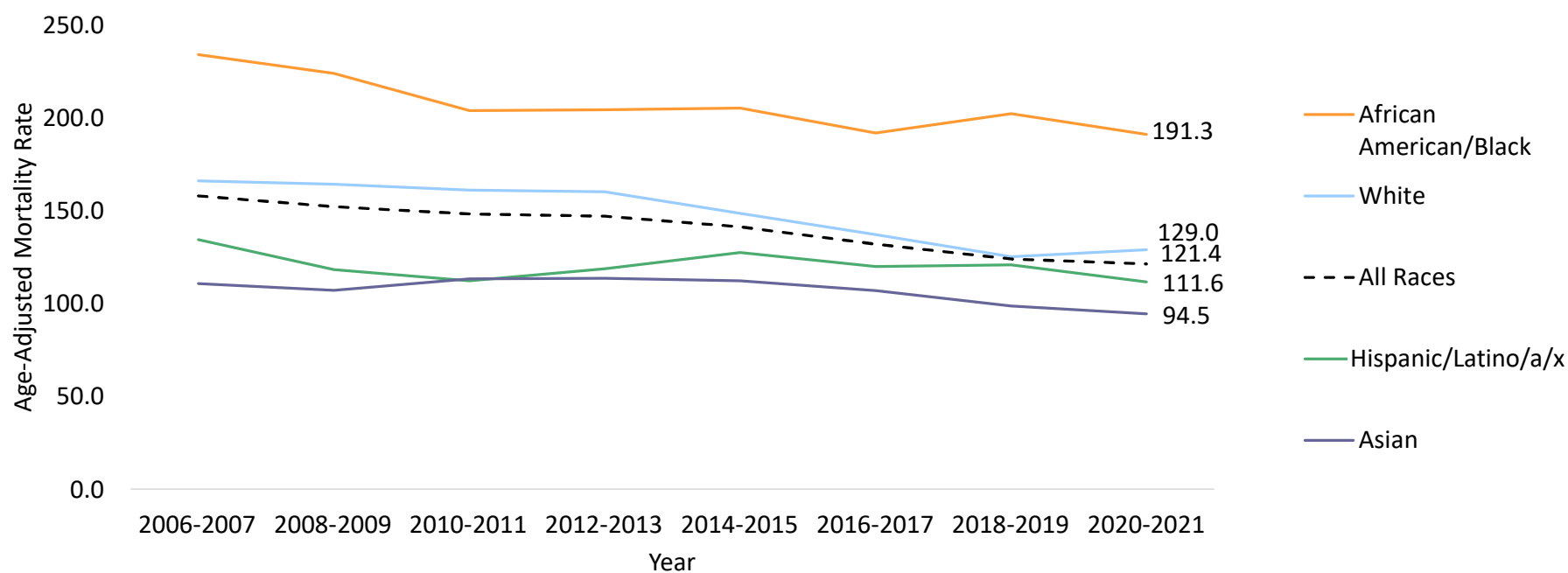
Cancer mortality is lower in Alameda County than in California and the United States and is declining across settings

Temporal trends in age-adjusted cancer mortality rates in Alameda County, California and the United States, 2005-2021



While cancer mortality is declining over time in Alameda County, racial and ethnic disparities in cancer mortality persist

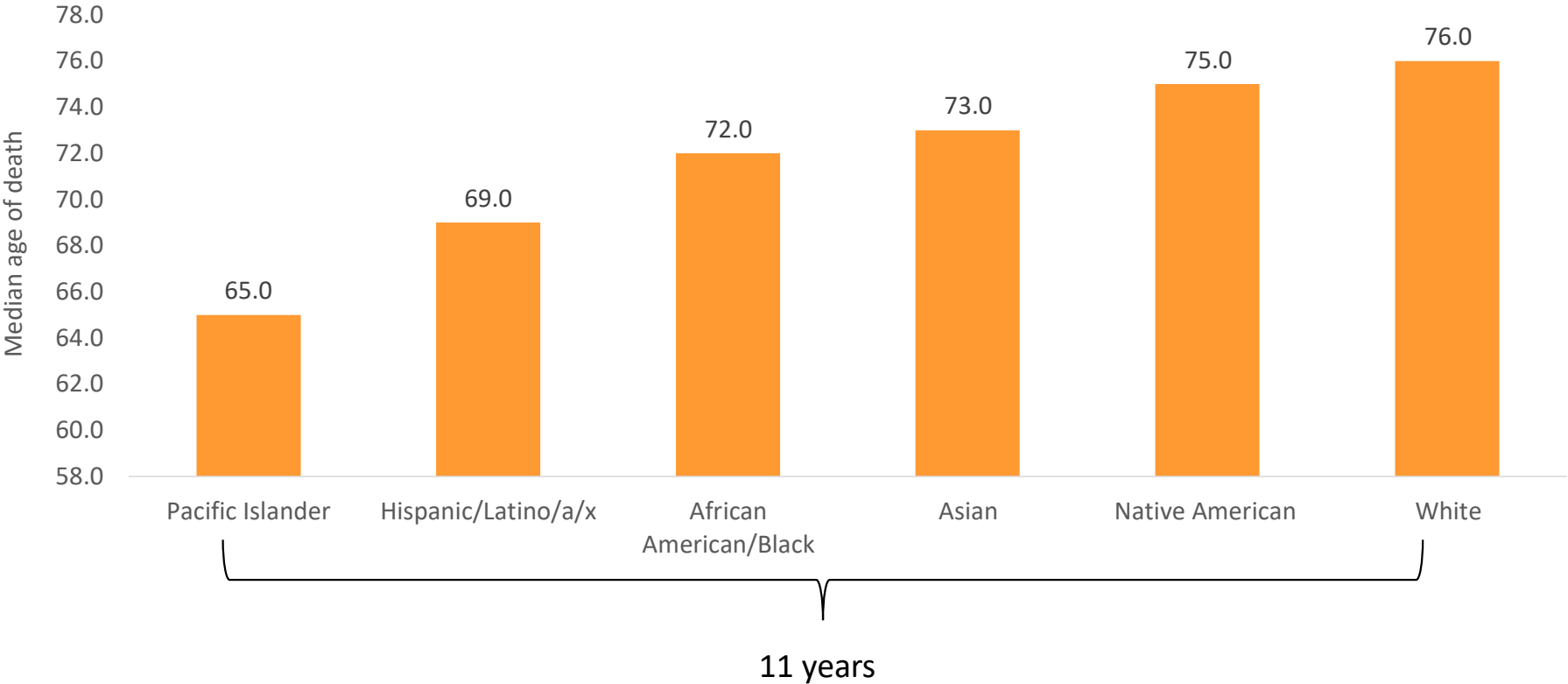
Temporal trends in cancer mortality rates by race and ethnicity in Alameda County



* Since there are few cancer deaths among Native Americans and Pacific Islanders, we had to aggregate eight years of data for each. For 2014-2021, the Native American rate was 123.4/100,000 and the Pacific Islander rate was 191.3/100,000.

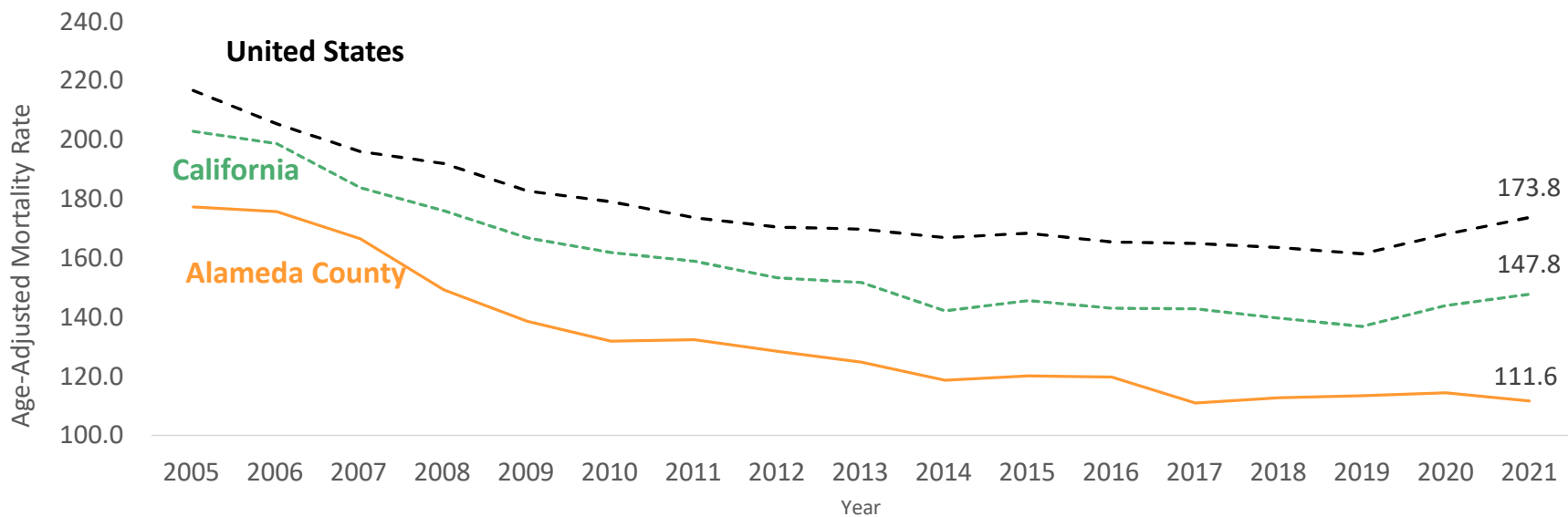
There are racial and ethnic disparities in the median age of death due to cancer

Racial and ethnic disparities in median age of death due to cancer



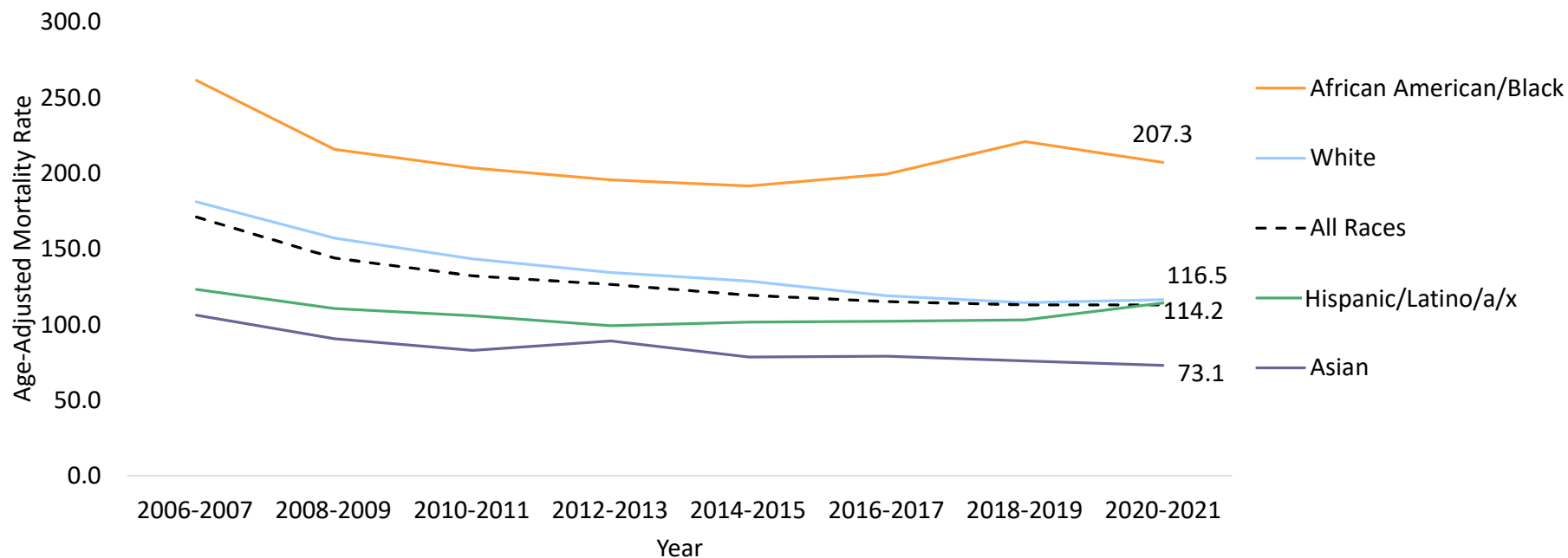
Heart disease mortality is lower in Alameda County than in California and the United States and stable over time in Alameda County

Temporal trends in age-adjusted heart disease mortality in Alameda County, California and the United States, 2005-2021



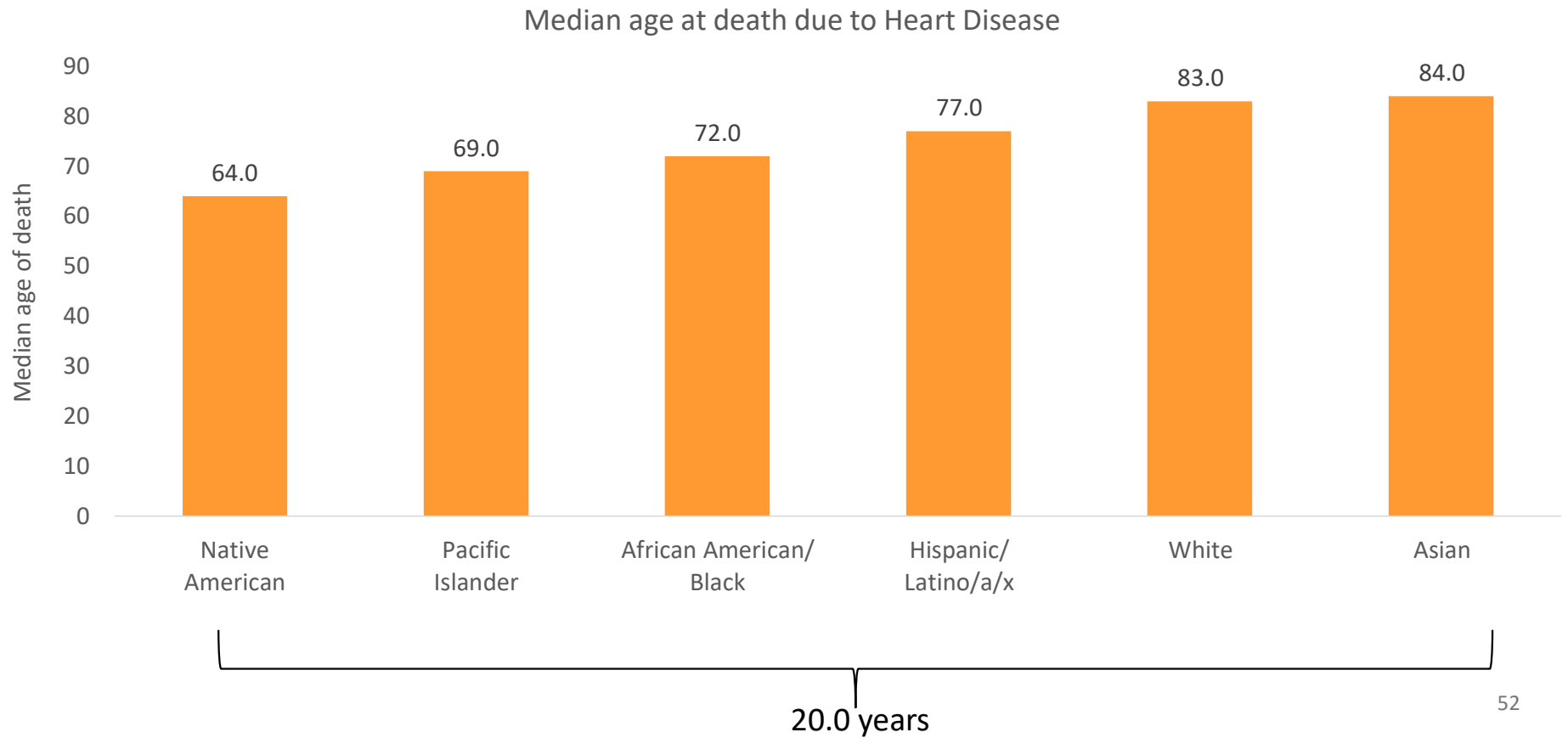
While heart disease mortality is declining over time in Alameda County, racial and ethnic disparities in heart disease mortality persist

Temporal trends in heart disease mortality rates by race and ethnicity in Alameda County



* Since there are few heart disease deaths among Native Americans and Pacific Islanders, we had to aggregate eight years of data for each. For 2014-2021, the Native American rate was 178.8/100,000 and the Pacific Islander rate was 242.5/100,000.

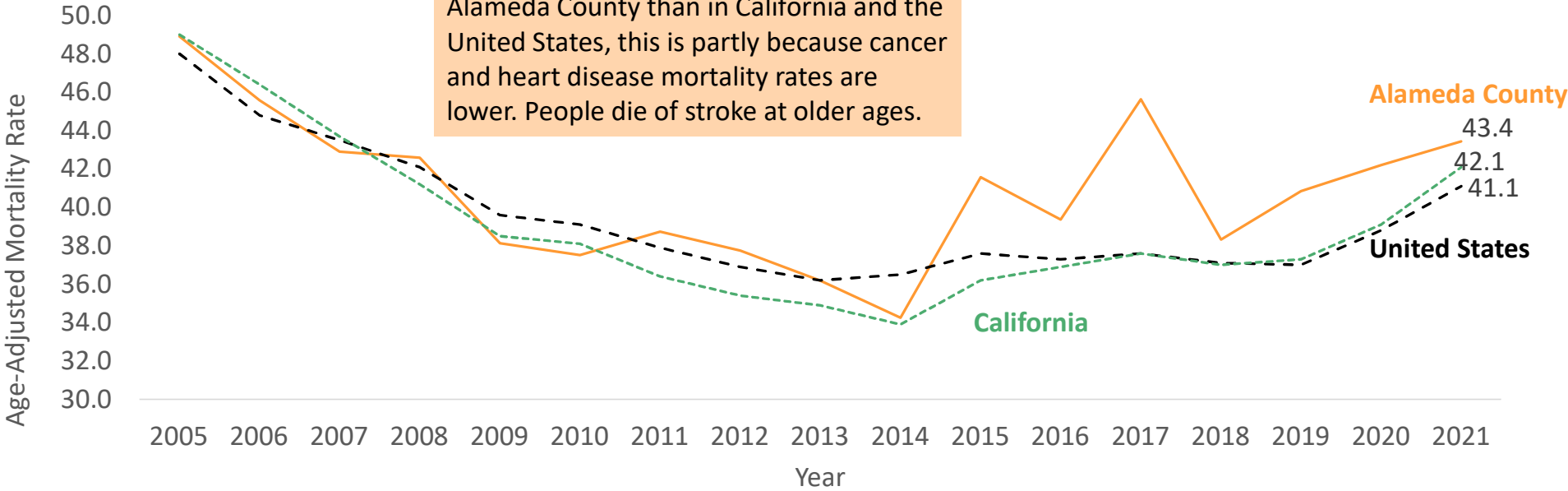
There are racial and ethnic disparities in the median age of death due to heart disease



Stroke mortality is slightly higher in Alameda County than in California and the United States, and increasing across settings

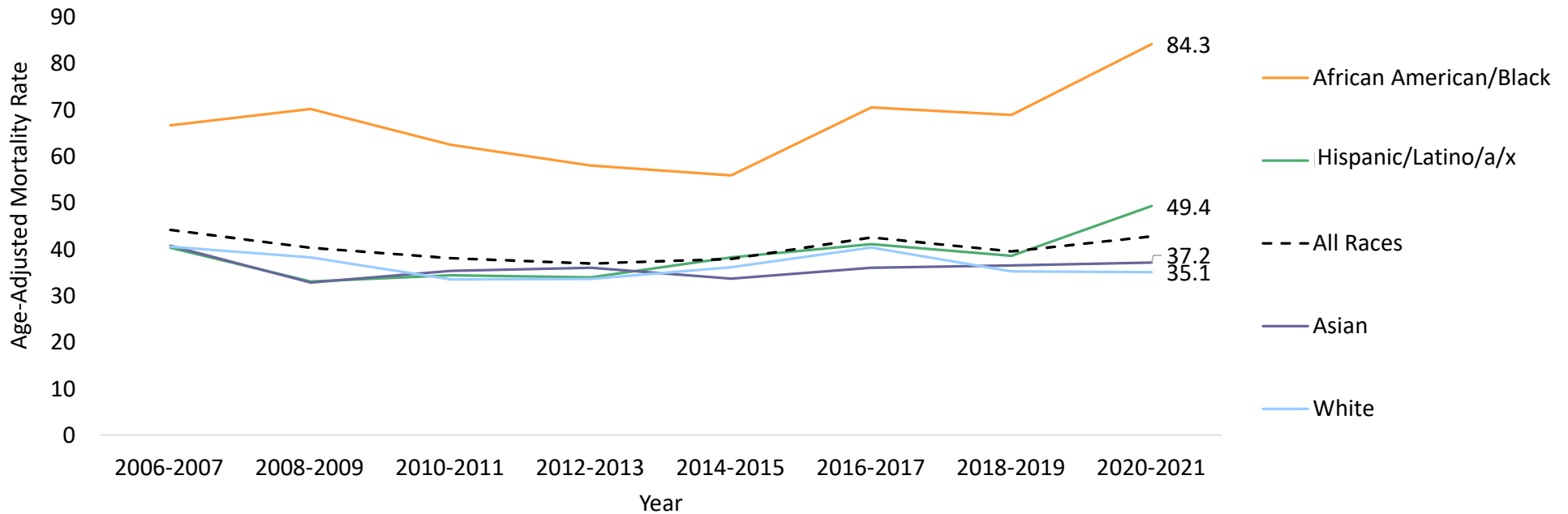
Temporal trends in stroke mortality in Alameda County, California, and the United States,

While stroke mortality rates are higher in Alameda County than in California and the United States, this is partly because cancer and heart disease mortality rates are lower. People die of stroke at older ages.



While stroke mortality is consistent over time in Alameda County, racial and ethnic disparities in stroke mortality persist and African American/Black stroke mortality is increasing

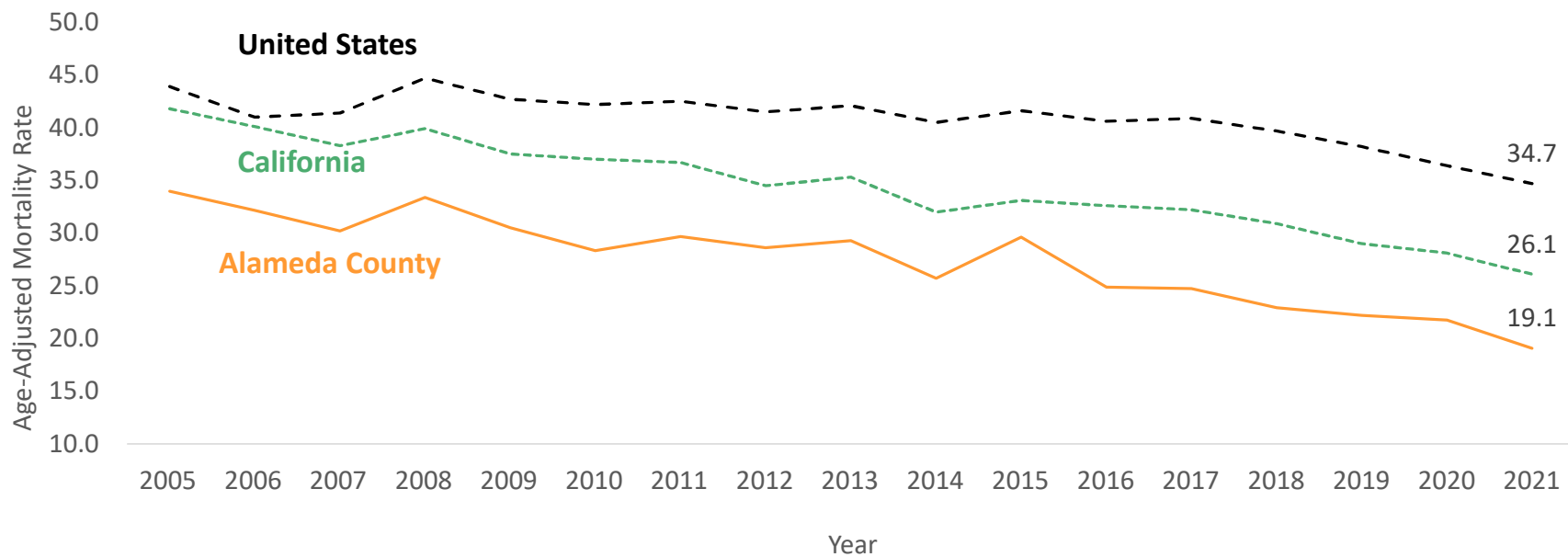
Temporal trends in stroke mortality rates by race and ethnicity in Alameda County



* Since there are few stroke deaths among Native Americans and Pacific Islanders, we had to aggregate eight years of data for each. For 2014-2021, the Native American rate was 31.6/100,000 and the Pacific Islander rate was 79.0/100,000.

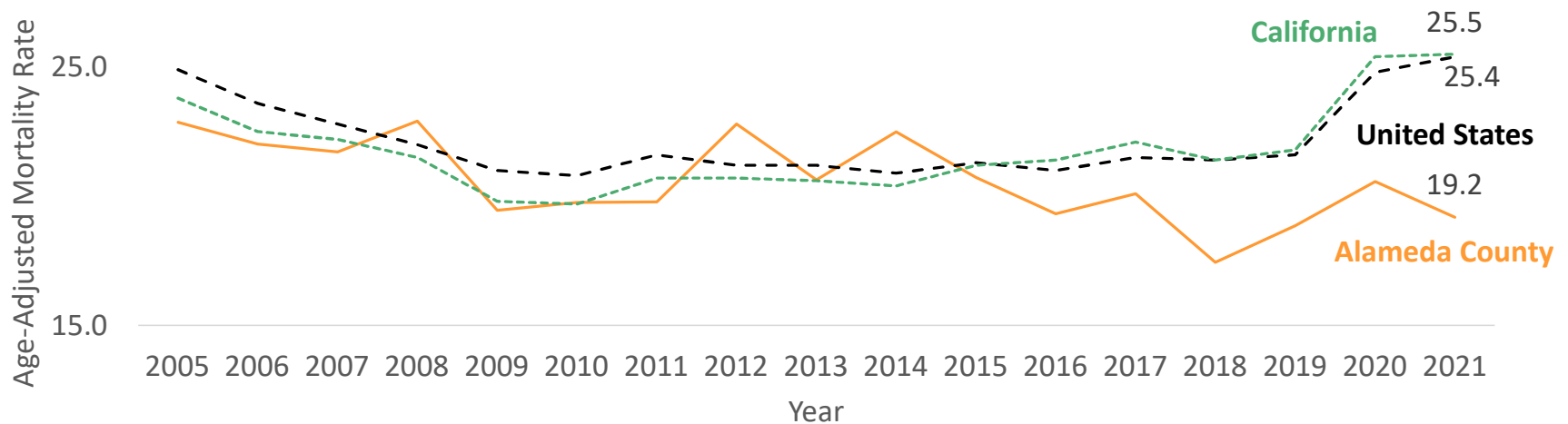
Chronic lower respiratory disease mortality is lower in Alameda County than in California and the United States, and declining across settings

Temporal trends in age-adjusted chronic lower respiratory disease mortality in Alameda County, California and the United States, 2005-2021



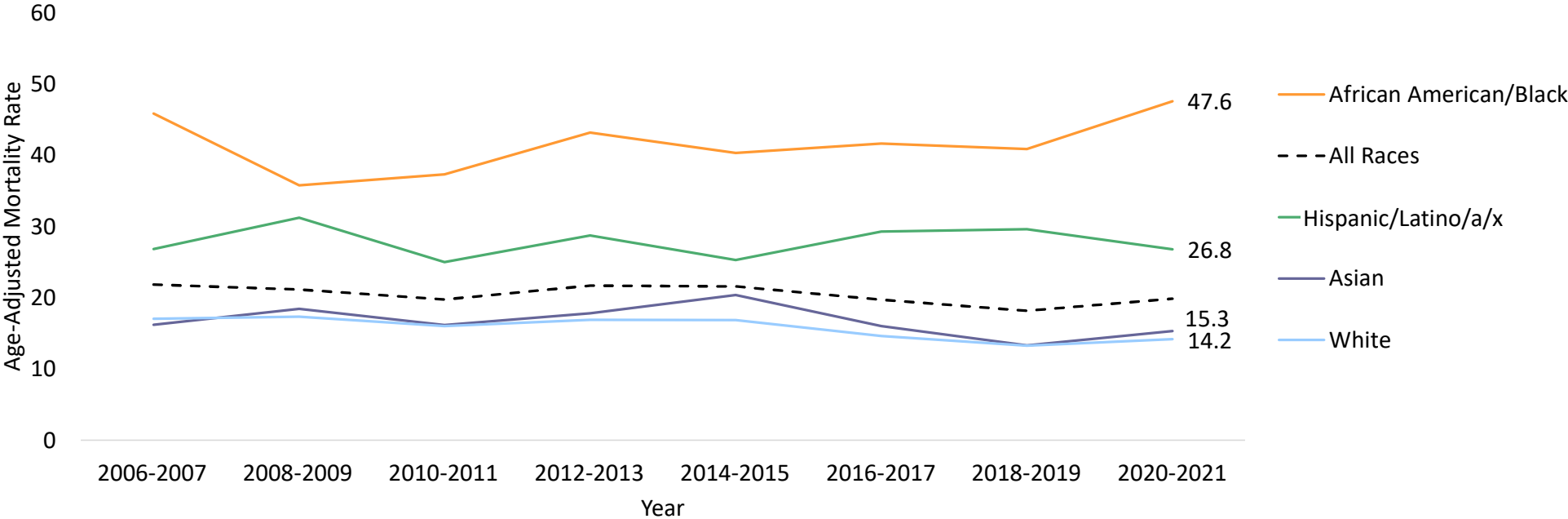
Diabetes mortality is lower in Alameda County than in California and the United States

Diabetes Mortality in Alameda County, California and United States
2005-2021



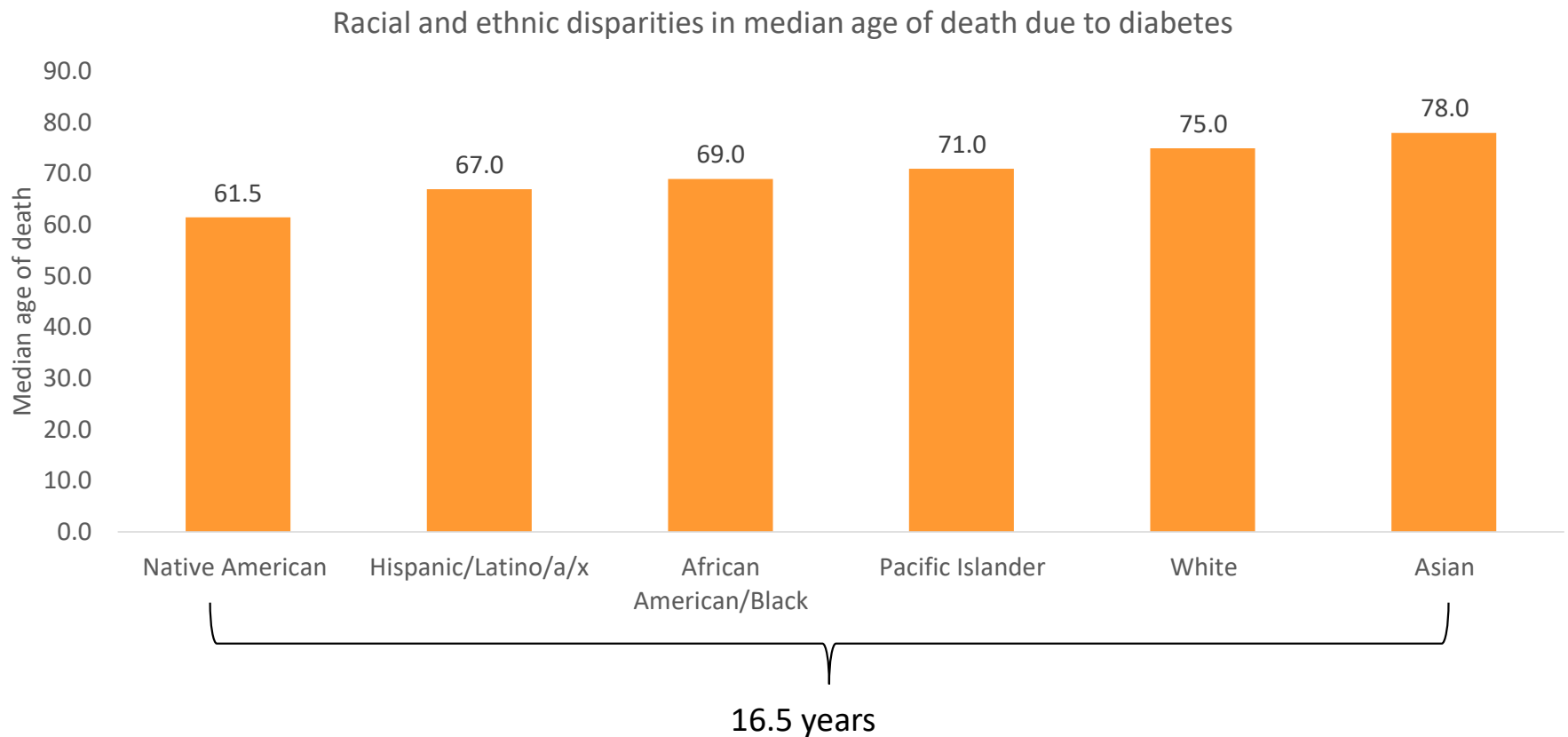
While diabetes mortality is consistent over time in Alameda County, racial and ethnic disparities in stroke mortality persist

Temporal trends in diabetes mortality rates by race and ethnicity in Alameda County

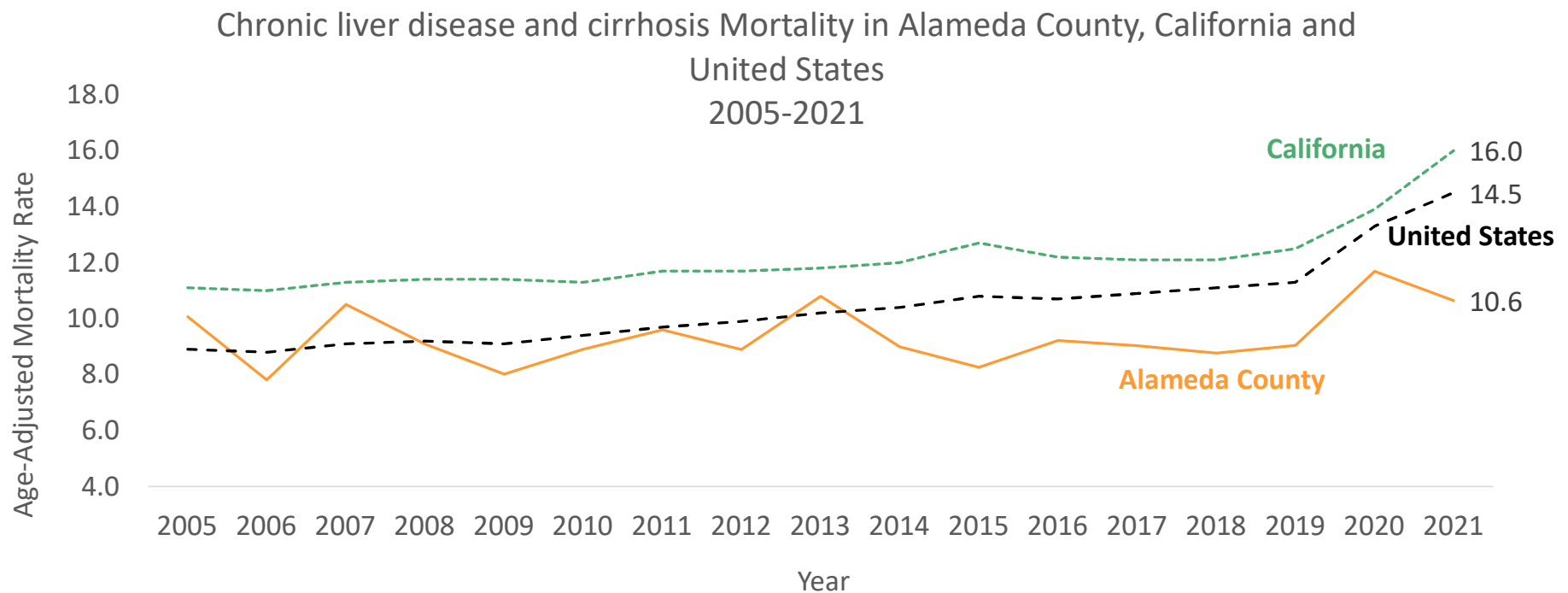


* Since there are few diabetes deaths among Native Americans and Pacific Islanders, we had to aggregate eight years of data for each. For 2014-2021, the Native American rate was 30.2/100,000 and the Pacific Islander rate was 84.4/100,000.

There are racial and ethnic disparities in the median age of death due to diabetes

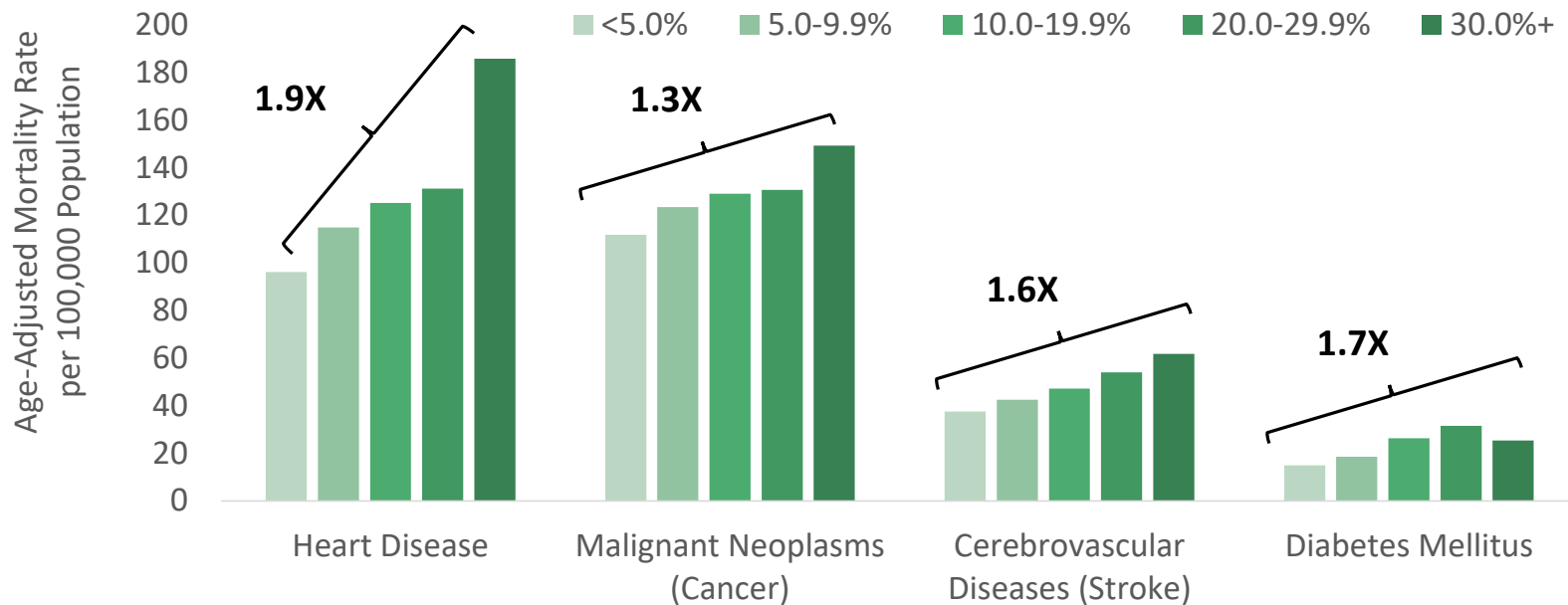


Chronic liver disease mortality is lower in Alameda County than in California and the United States and increasing across settings



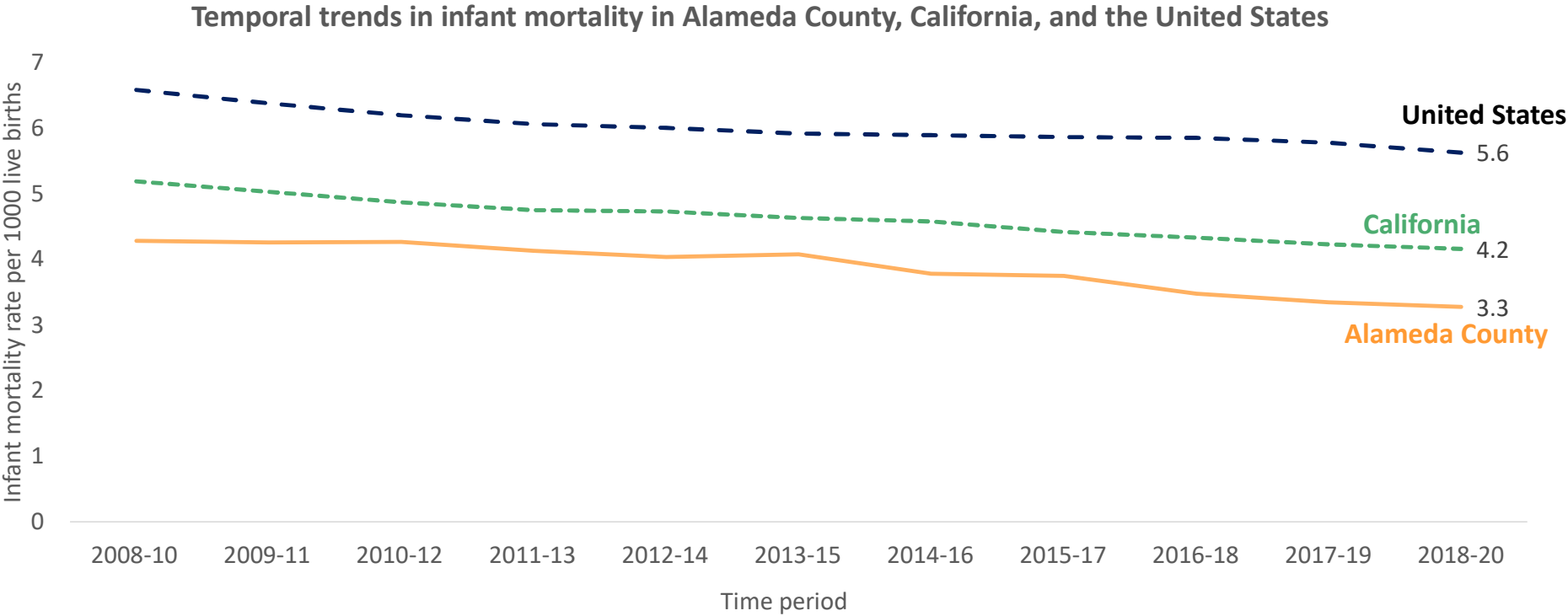
Neighborhood poverty is associated with chronic disease deaths

Chronic Disease Mortality Rate by Neighborhood Poverty Level

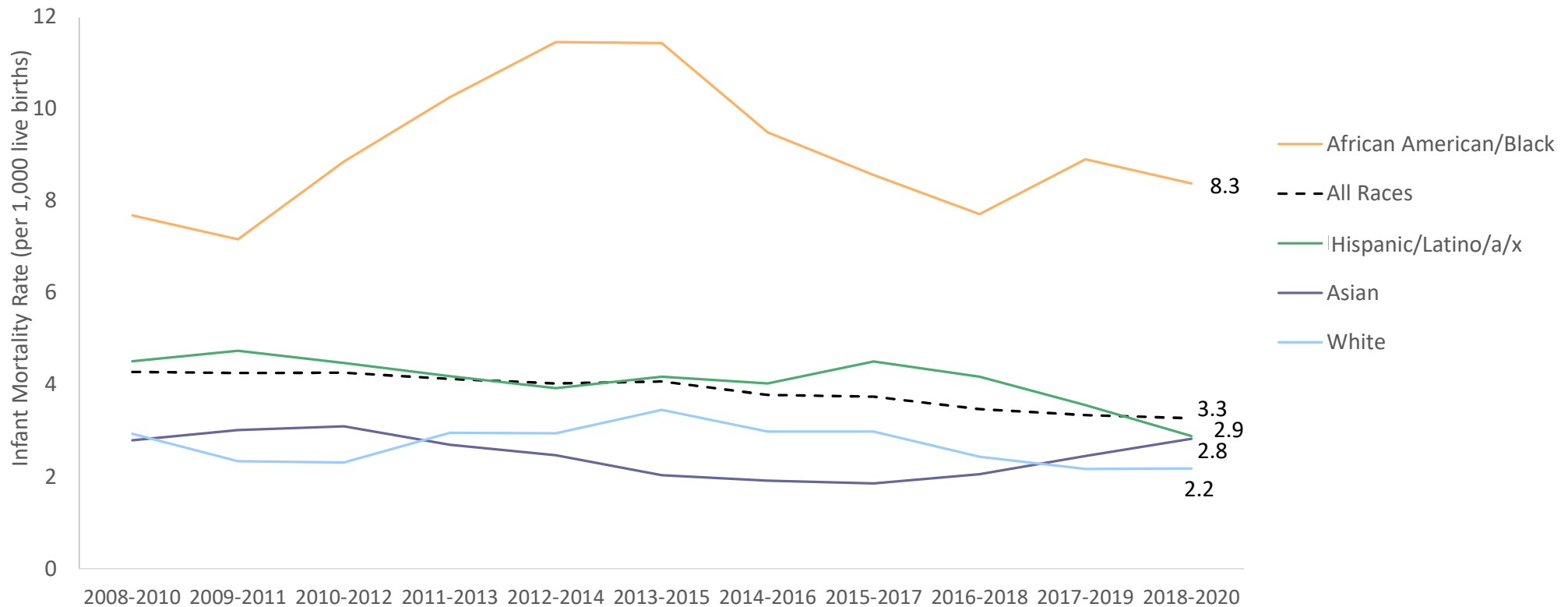


5. Persistent disparities for mothers, pregnant people, and infants

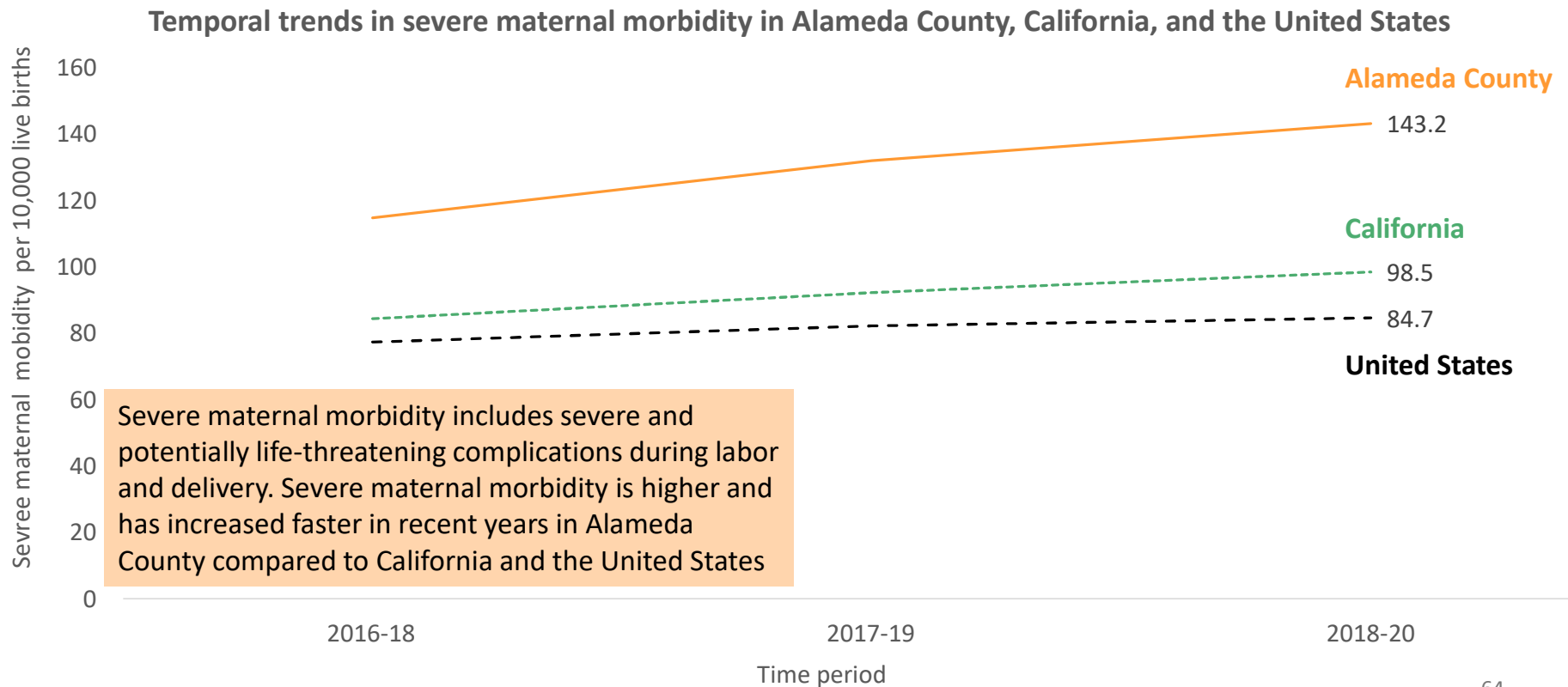
The infant mortality rate is lower in Alameda County than in California and the United States, and declining across settings



Persistent racial disparities in infant mortality in Alameda County

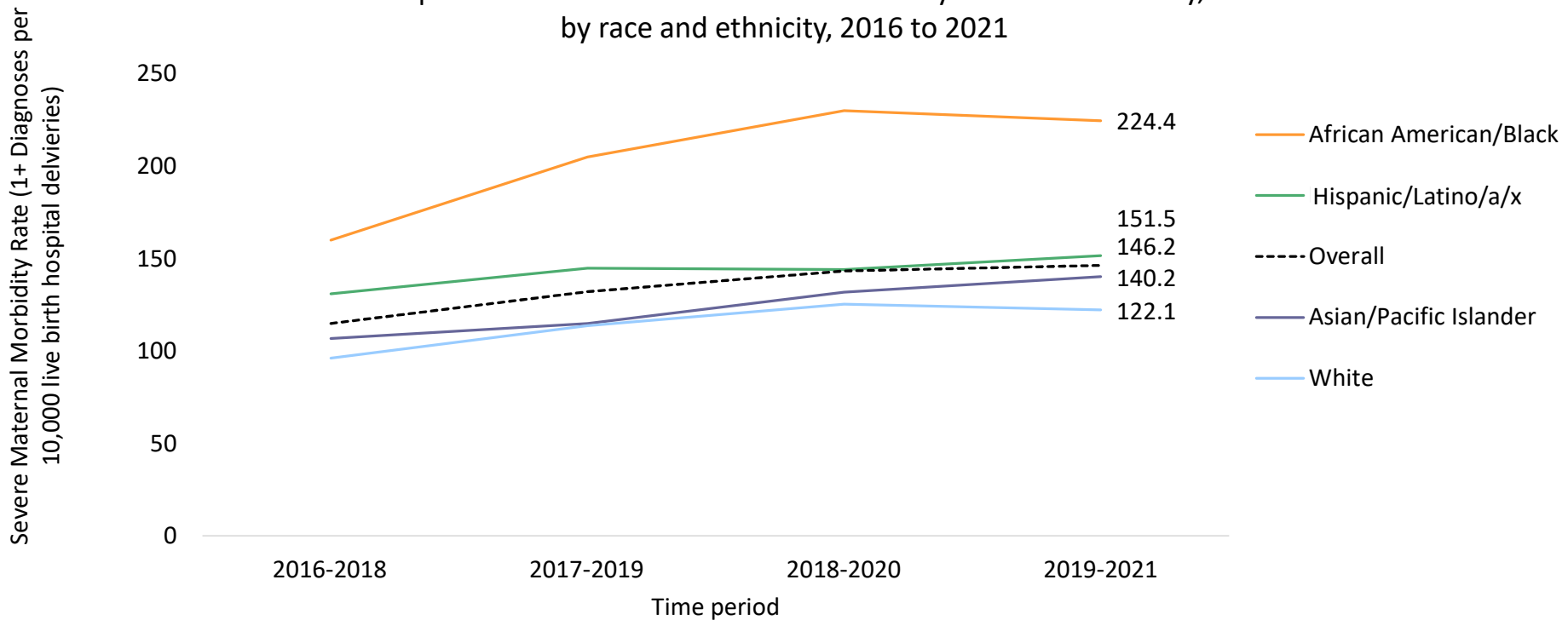


Severe maternal morbidity rate is higher in Alameda County than in California and the United States, and increasing across settings



Alameda County racial and ethnic disparities in severe maternal morbidity

Temporal trends in severe maternal morbidity in Alameda County, by race and ethnicity, 2016 to 2021



Note: Estimates are provided by the California Department of Public Health for overlapping 3-year periods. Data begin in 2016, when new International Classification of Disease (ICD) codes were introduced (ICD-10). Rates were not available for Native American and Pacific Islander populations due to data suppression.

See other data at <https://acphd.org/data-reports/>.

General questions about this report and the work of the Alameda County Public Health Department can be sent to HCSA-PIO@acgov.org.

Technical questions can be sent to CAPE-Epidemiology@acgov.org.