

Alameda County Maternal & Infant Health Indicators

Alameda County Public Health Department
Health Care Services Agency

April, 2025



Our Vision of Health Equity

EVERYONE in Alameda County –
no matter who you are,
where you live,
how much money you make,
or the color of your skin –
can lead a healthy,
fulfilling and productive life.



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Maternal, Paternal, Child, and Adolescent Health (MPCAH) Purpose and Values

Mission

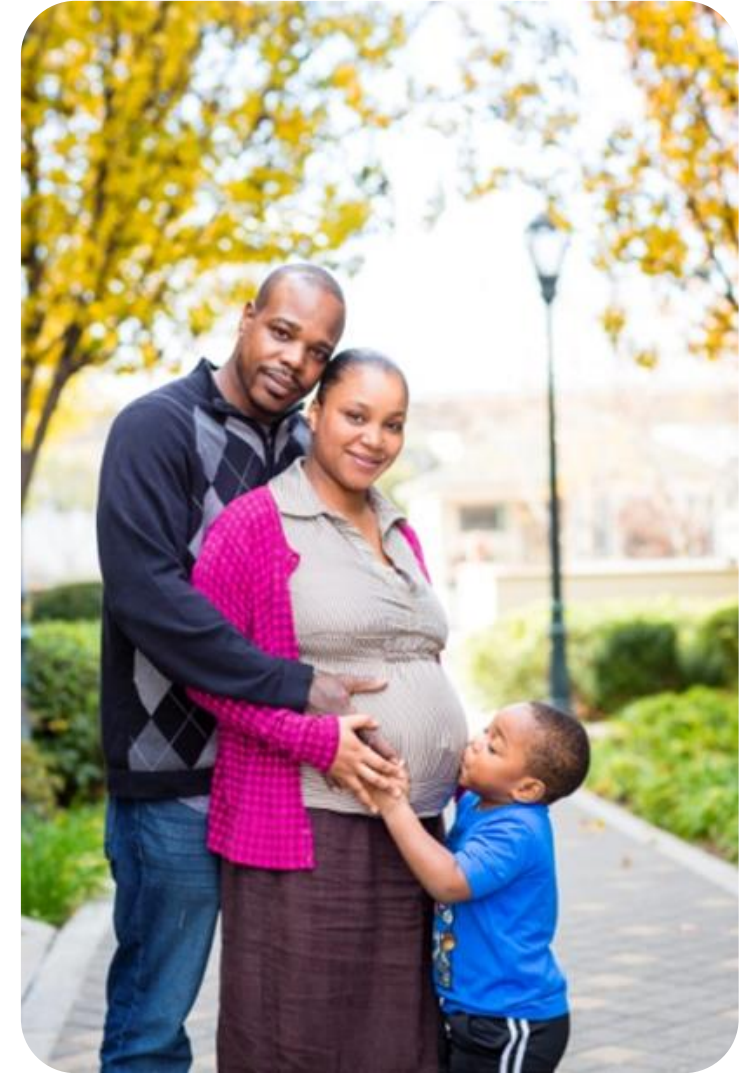
MPCAH works together through our various programs to ensure that women, children, youth, fathers, parents and families achieve optimal health and well-being through the provision of client-centered, culturally responsive, strengths-based services and supports, combined with community transformation efforts that aim to improve neighborhood conditions.

Purpose

Promoting and supporting client-centered decisions and goals for health which include positive pregnancy outcomes, thriving births, families, and communities. **Maternal and infant mortality disparities** drive interventions, programs and our collective work, specifically in the Black community and other populations such as parents of medically fragile and first-time mothers.

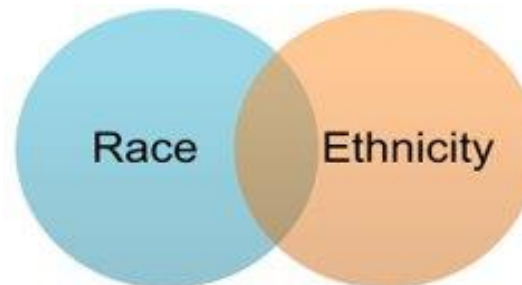
Values

- Relationship-Based
- Trauma-Informed
- Race and Equity Focused



Defining Race & Ethnicity

- **Both Race and Ethnicity are Social Constructs** → assigning meaning to and categorizing different bodies
- **Race:** Narrow category based on real or perceived biological differences between groups of people.
- **Ethnicity:** Broad category based on common language, religion, nationality, history or another cultural factor.
- Challenges with Categorization
 - Race & Ethnicity overlap in complex ways (census changes)
 - Definitions have changed overtime (“Irish”= Race)
 - People Can Fit in Multiple Categories (multiracial category)
 - People have multiple/intersecting identities



How We Determine Baby's Race/Ethnicity

- The birth certificate allows mothers to select up to 3 race groups and Hispanic/Latina/o/x/e ethnicity
- Woman or person giving birth's race/ethnicity determines baby's race/ethnicity
- Public health race/ethnicity is mutually exclusive (one category per mother & baby)
- Starting Out Strong uses similar methodology
 - Suite of Alameda County Public Health programs including home visiting, prenatal/postpartum supports, fatherhood initiatives, and services for children with special healthcare needs
- Different program & data sources have different definitions

Hispanic/Latina/o/x/e Ethnicity Any Race

Mexican
Chicano
Puerto Rican
Cuban
Central/South American

Race Categories (Not Hispanic)

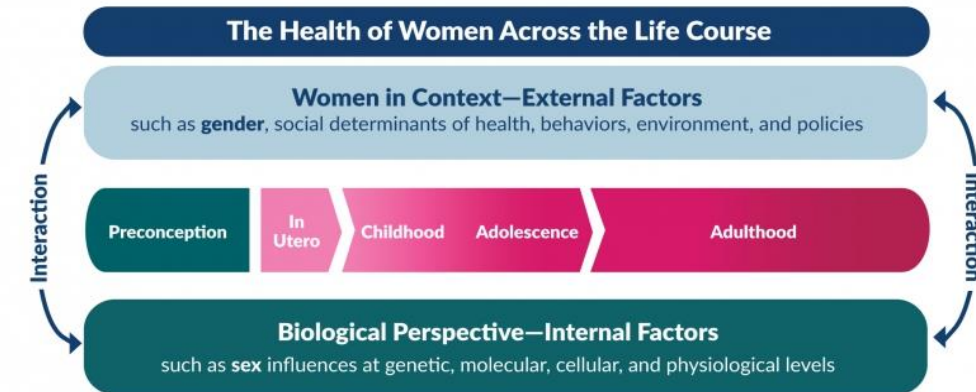
African American/Black
American Indian/Alaska
Native
Asian
Pacific Islander
White
Multiracial = More than 1
of the above

Unknown Race/Ethnicity

Mother's Race/Ethnicity
not included on baby's
birth certificate
"Refused to State" or
"Unknown"

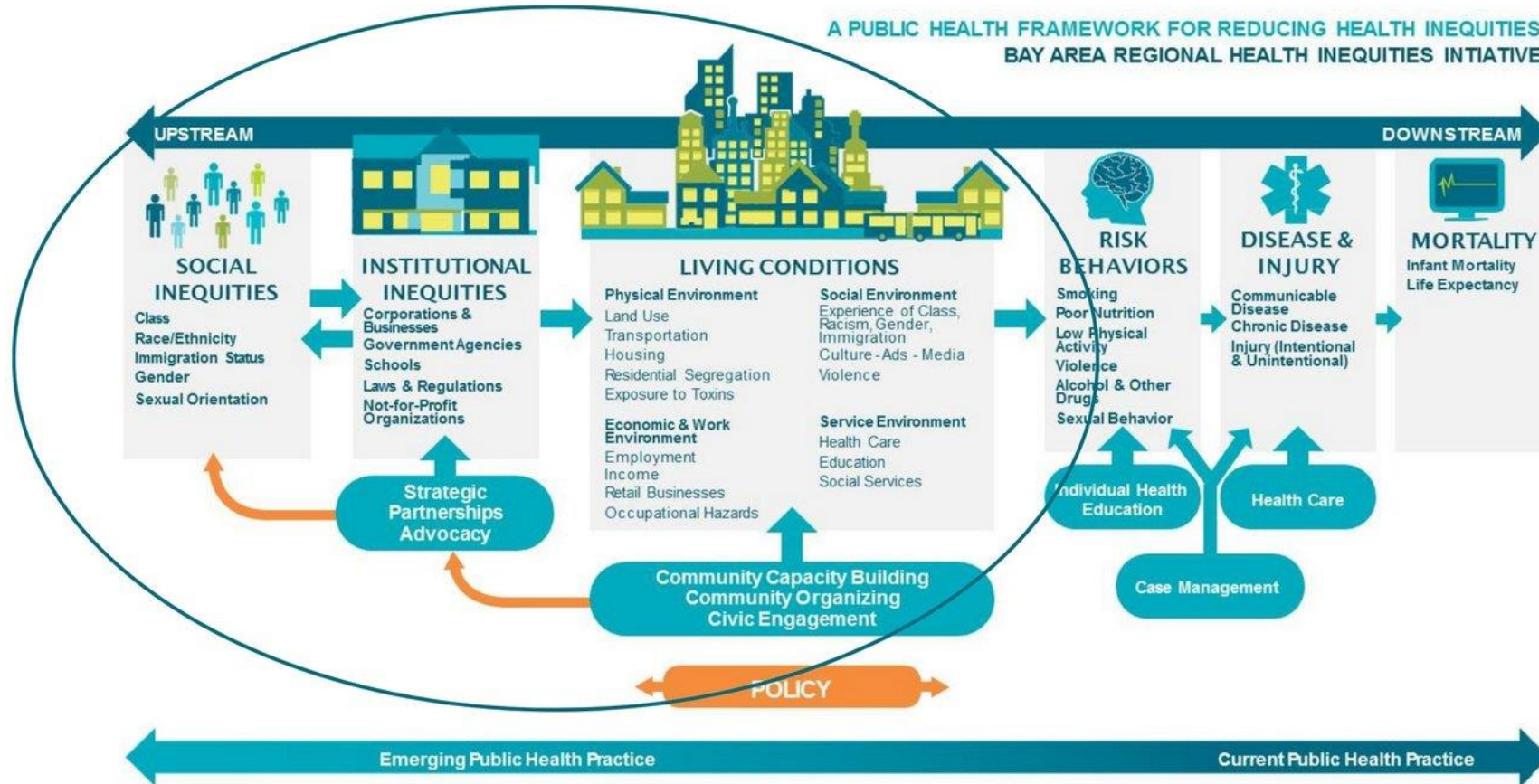
Why We Categorize Race/Ethnicity

- Data Aggregation/Analyses: to count and compare groups
- Align with National Standards (NCHS, CDC, CDPH, HP2030)
- Measure how well we are doing compared to other jurisdictions
- Mother's race/ethnicity incorporates Life Course Perspective
 - Social, economic, and physical environment in each stage of life affect the next stage, critical & sensitive periods for intervention
- **#1 reason: To identify health inequities- Race/Ethnicity is our best category for measuring inequities between groups in AC**
 - Race and Ethnicity are proxies (widely measured substitutes) for experiences of discrimination and exposure to programs and policies that uphold structural racism and result in varying environments



Alameda County Social and Structural Determinants of Health

Bay Area Regional Health Inequities Initiative (BARHII) Framework



Political Determinants of Health

Legacies of Slavery

Poverty/Wealth, Dehumanization, Policing

Racist Policies and Laws, Historical and Current

GI Bill

Redlining

Zoning Policy

Regressive Tax System

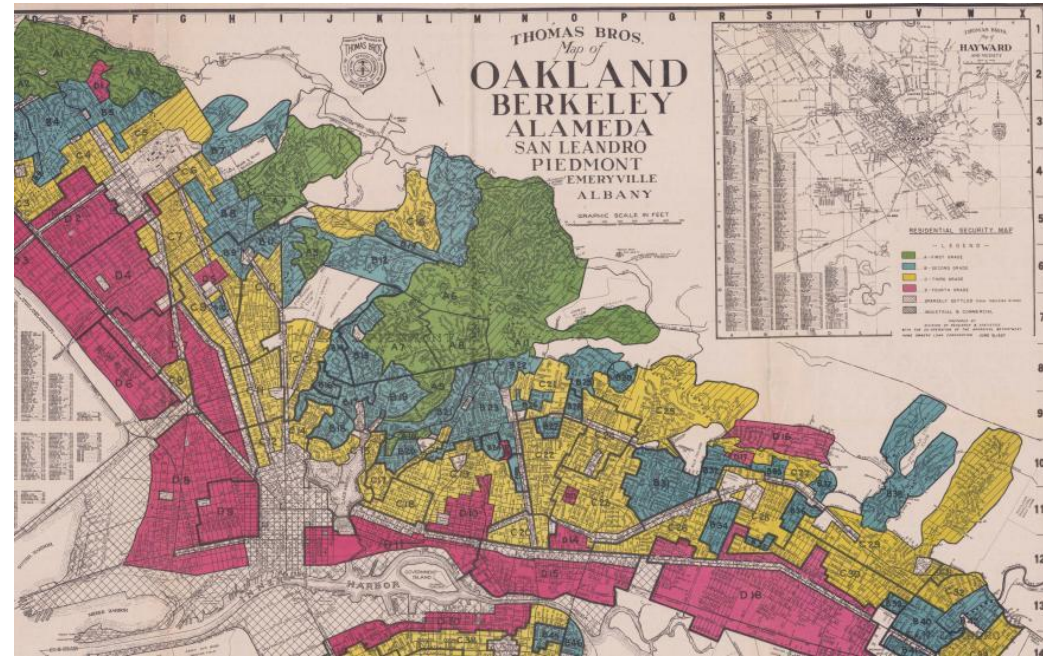
Jim Crow Segregation

Mass Incarceration

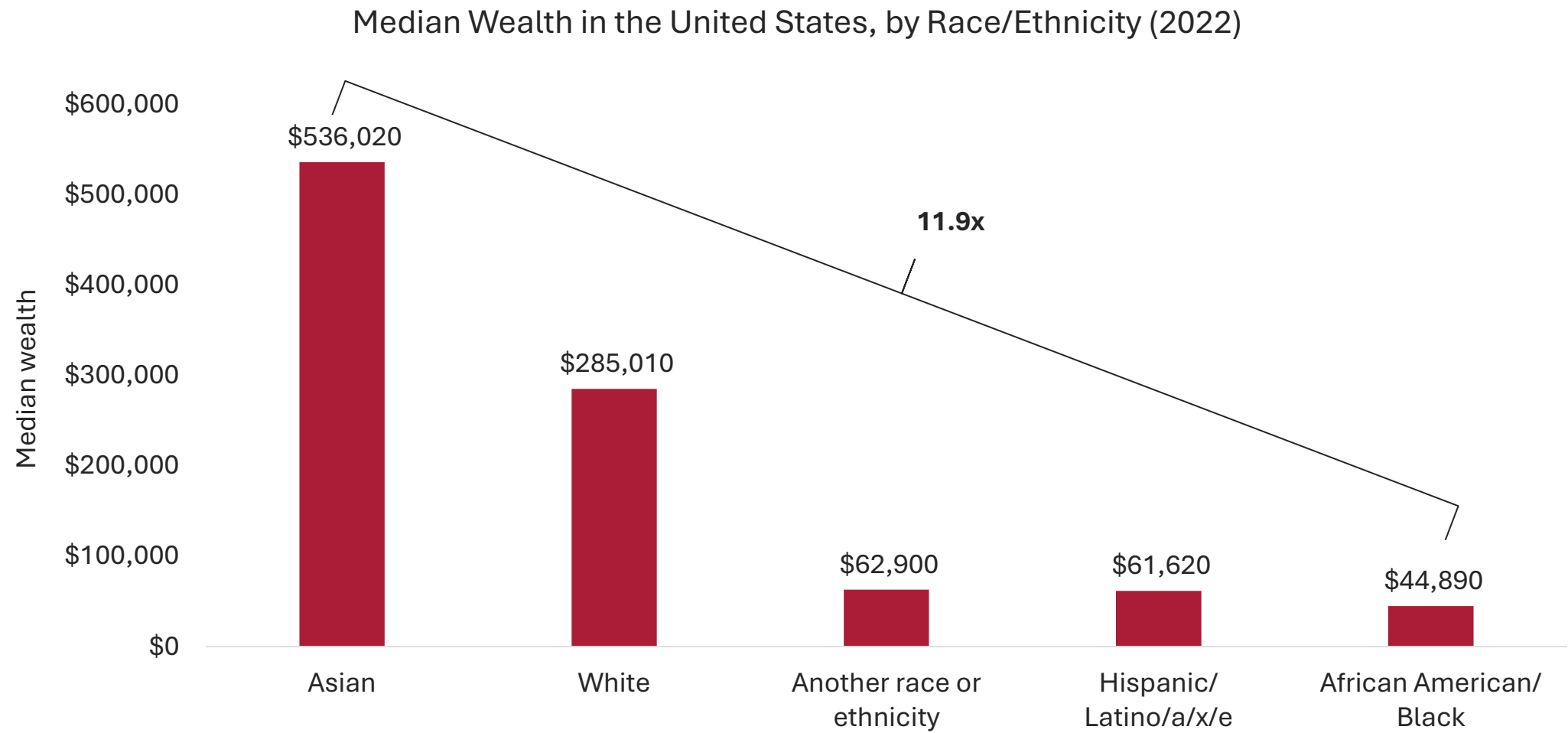
Other examples of racist policies

Chinese Exclusion Act, 1924 Immigration Act

Current Immigration Policy

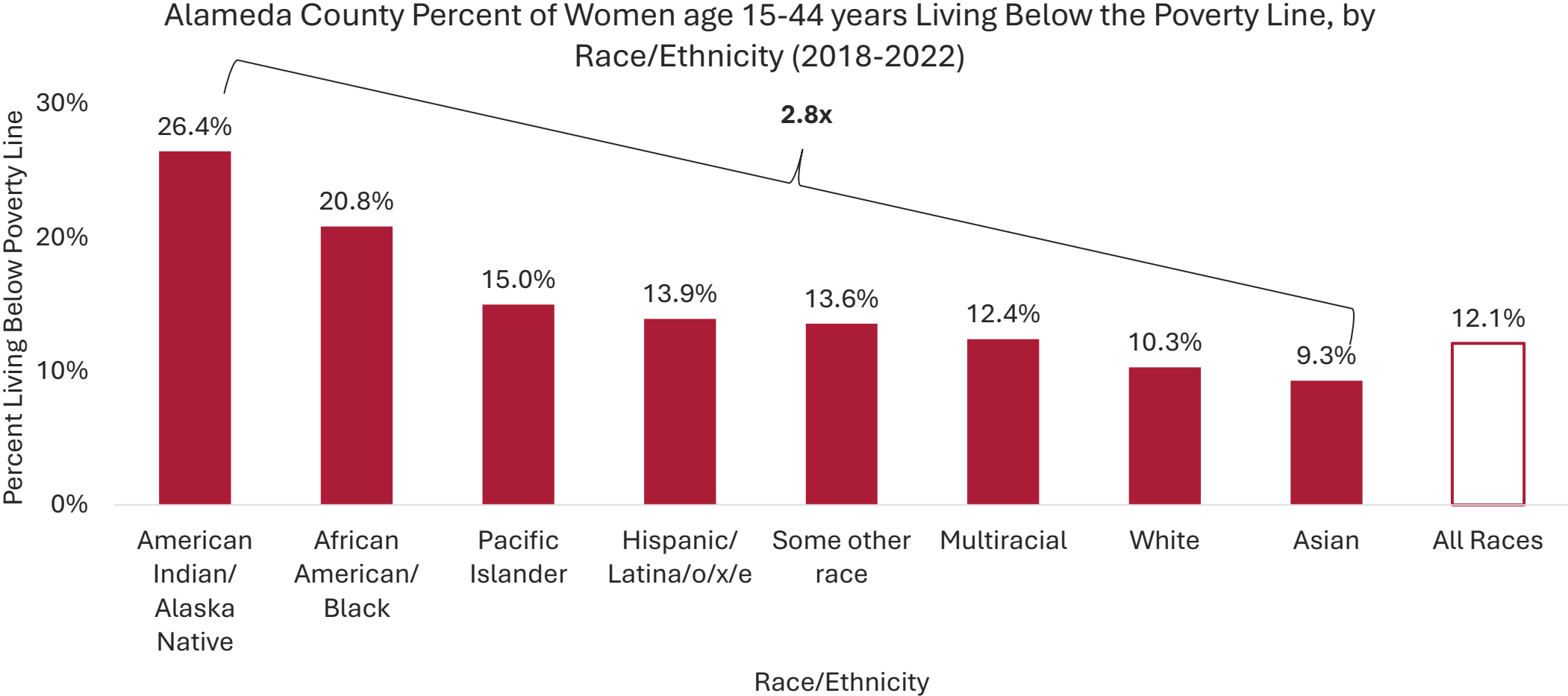


Wealth Gaps by Race/Ethnicity, 2022

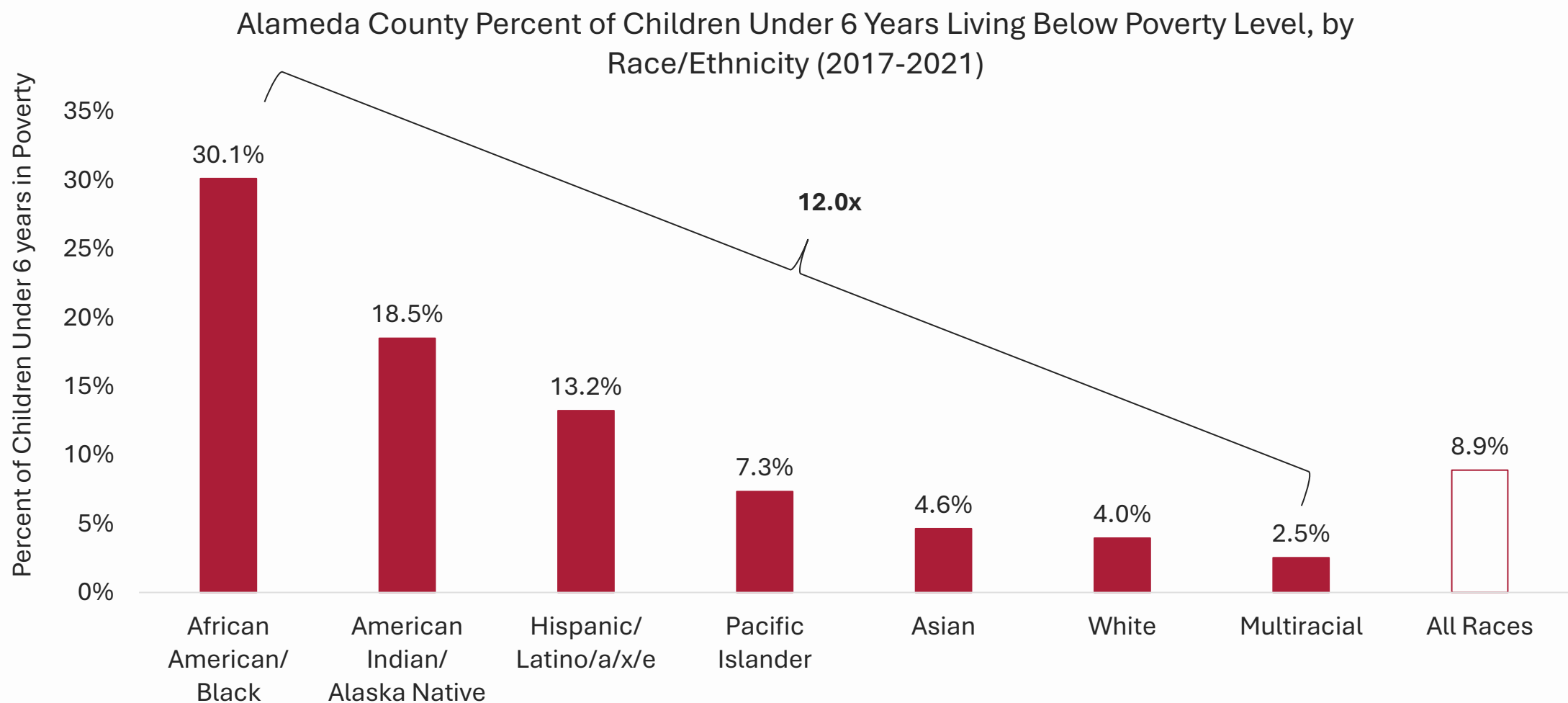


Source: Board of Governors of the Federal Reserve System (2023).
Note: Data source does not provide information on wealth for other races or ethnicities

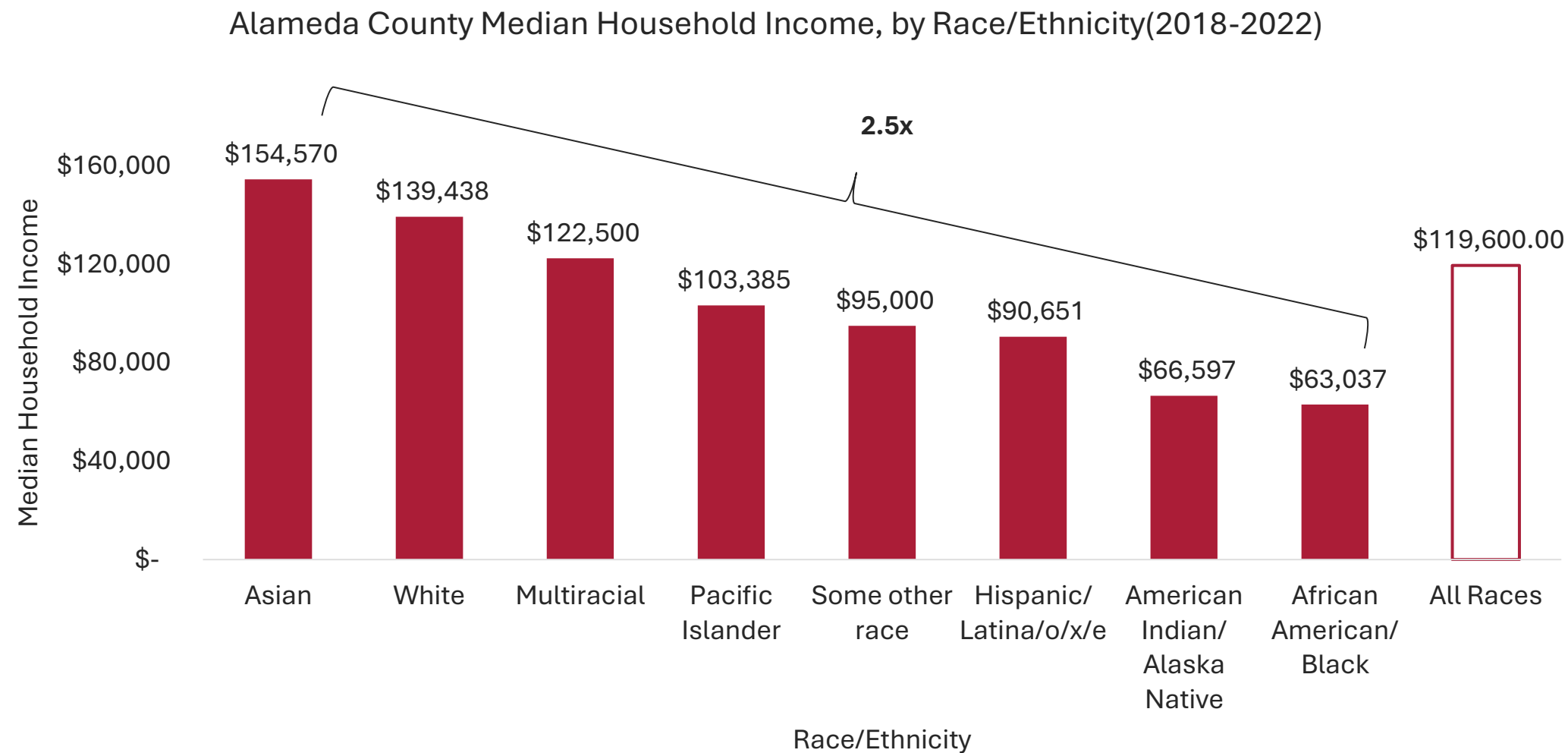
Inequities in poverty among women of reproductive age



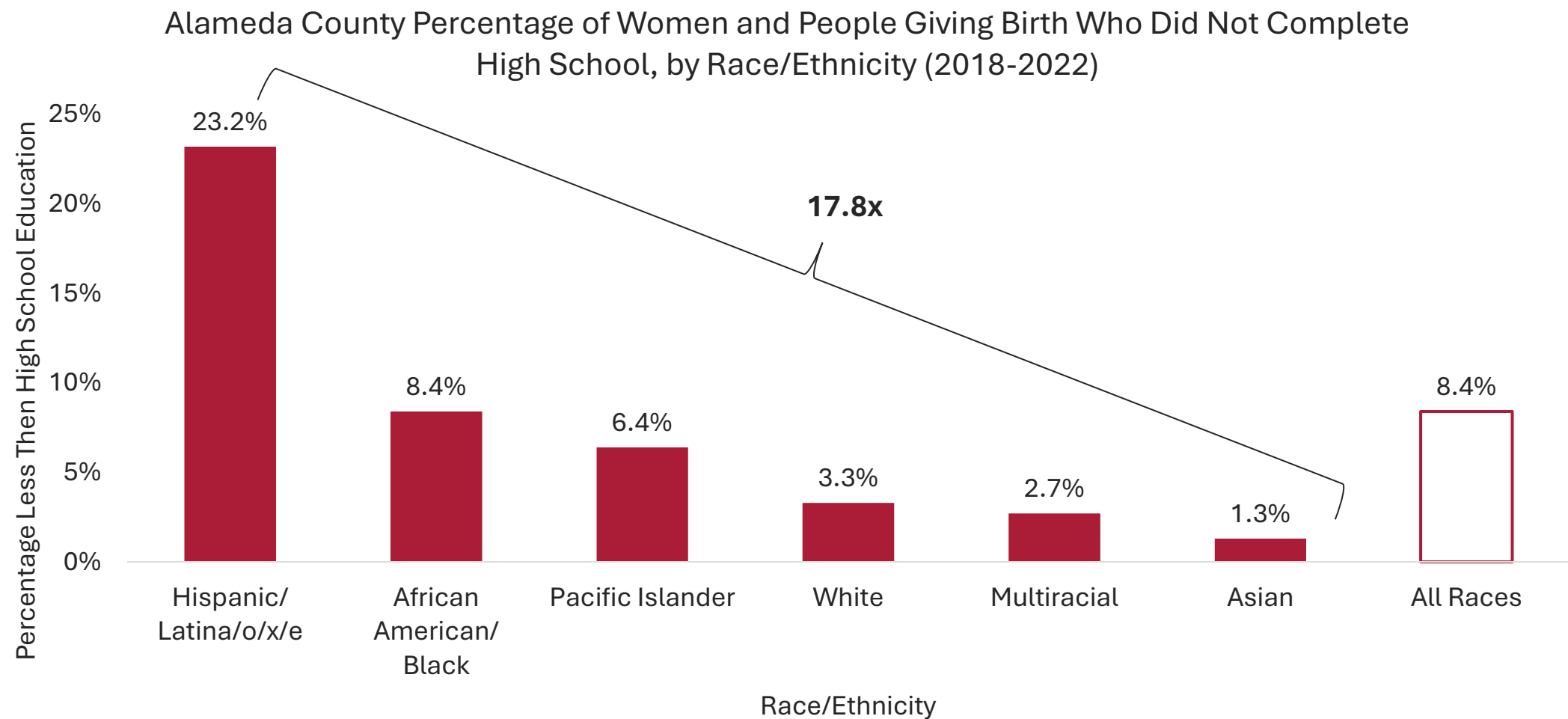
Inequities in child poverty



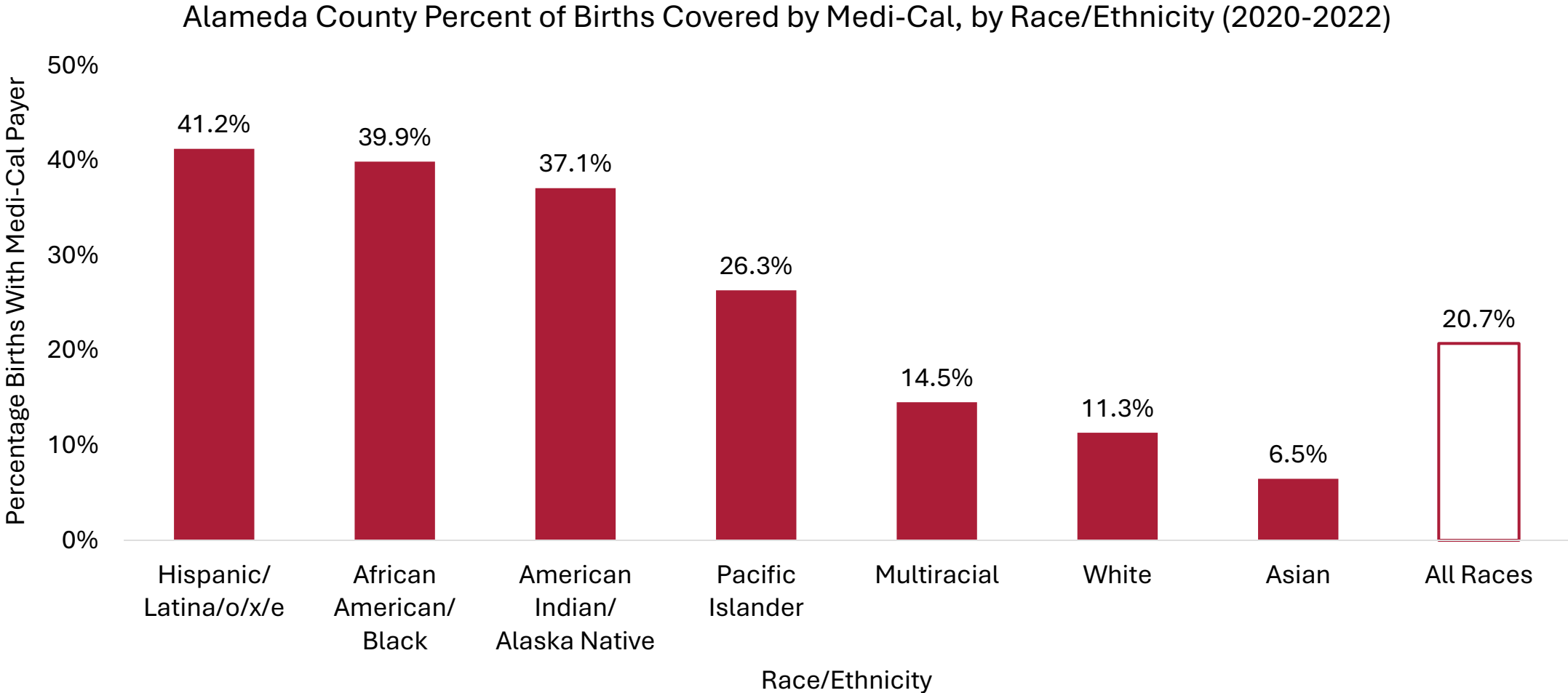
Inequities in median income



Educational inequities among women and people giving birth



Racial and ethnic differences in the percentage of births covered by Medi-Cal



Having A Child in Alameda County



Median Household
Income
\$121,913



Annual Household
Expenses
\$121,703



Average Childcare
Costs
\$16,000-\$20,000

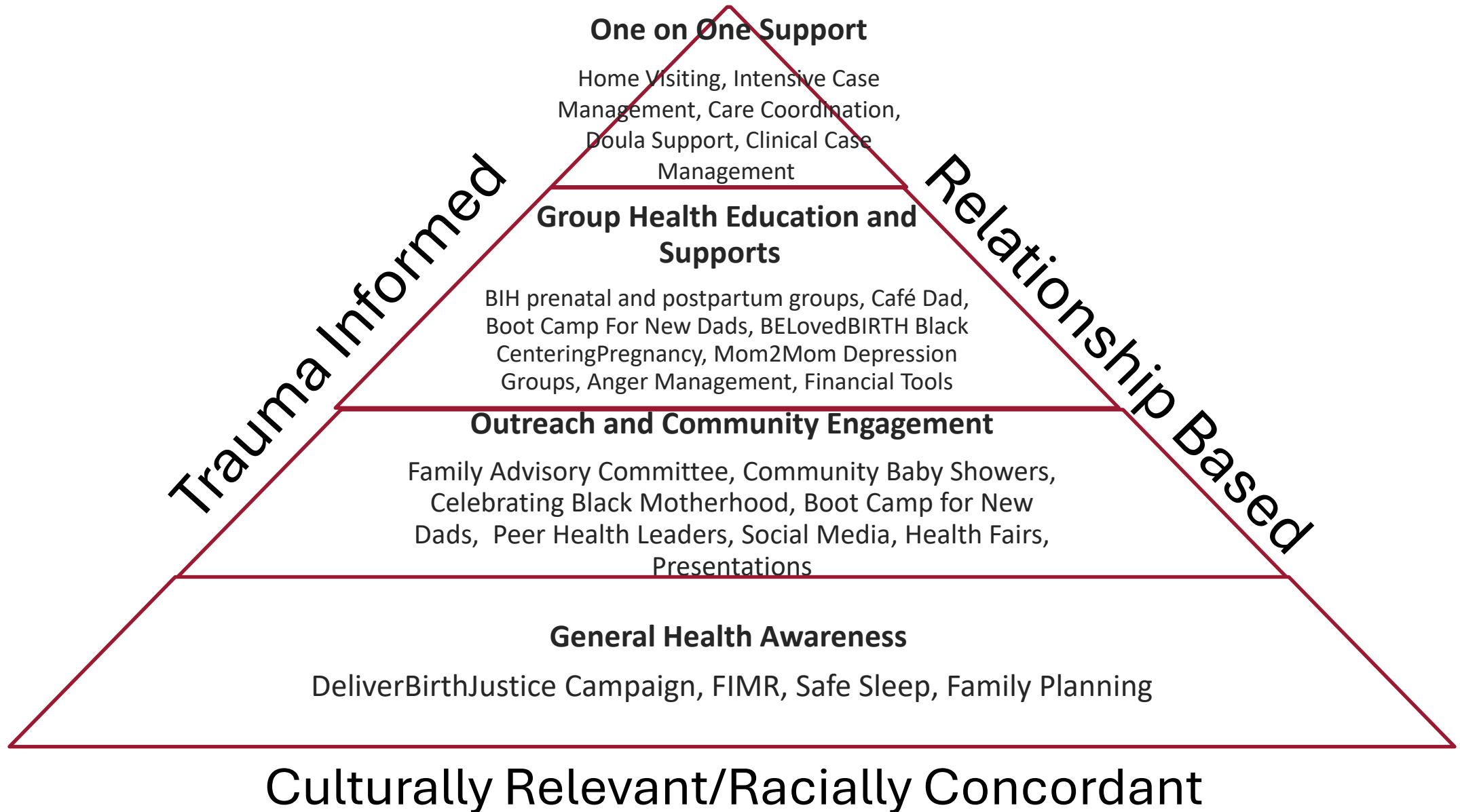


Families Living in
Poverty
13,743

African American/Black and
Hispanic/Latina/o/x/e families
bear a **disproportionate
amount of poverty** due to
structural racism



Starting Out Strong Menu of Supports



Starting Out Strong Programs

- Comprehensive needs assessment and family goal setting
- Screening and monitoring- depression, substance use, IPV, child development
- Counseling and support
- Parent education and support using evidenced based parenting curriculum- Partners for a Healthy Baby
- Linkages, Referrals, Ensuring Access
- Case management Advocacy Accompaniment to court appearances, social and health care services
- Mental health services- brief treatment and pre-treatment services



Startingoutstrong.info

Community Strengths

Collective Action

Pre-5 Collaborative
Steering Committee
Perinatal Equity Initiative

Access to Services

Starting Out Strong System Of Care
Community Based Organizations
Referring partners and providers

Social Connection & Cultural Pride:

Celebrating Black Motherhood
Black Joy Parade
Dia De Los Muertos Celebration

Community Driven Solutions and Centering Community Wisdom:

Family Advisory Committee
Client feedback and testimonials
Lifting the voices of BIPOC
providers and birth workers

Unmet Need for Family Planning Services in Alameda County and California

In 2016, over 87,000 women and people who can give birth in Alameda County aged 13-44 needed publicly funded family planning services

Publicly funded family planning centers in AC served about 54,000 female clients in 2015

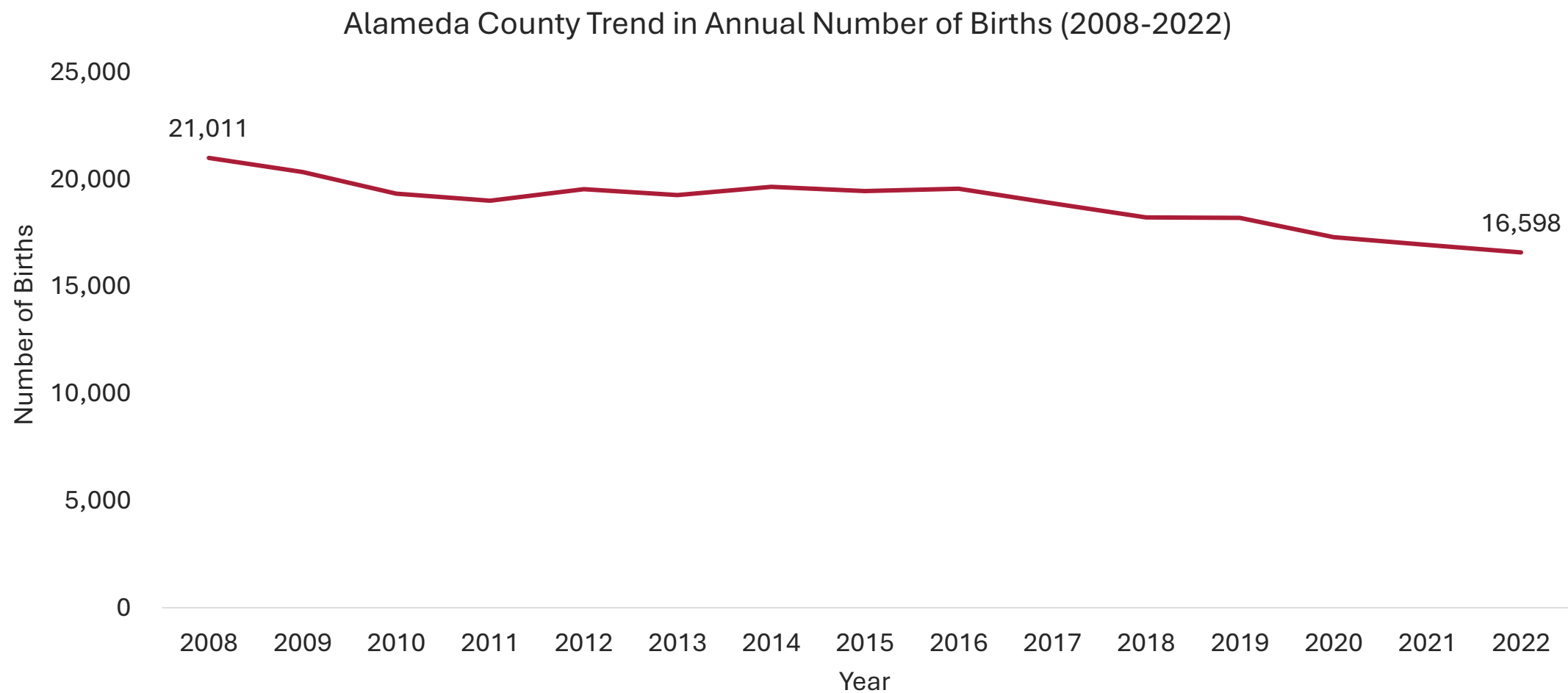
Net savings in California due to publicly funded family planning services amounted to approximately \$1.3 billion in 2016

Publicly funded family planning services are vital to help families achieve their pregnancy goals

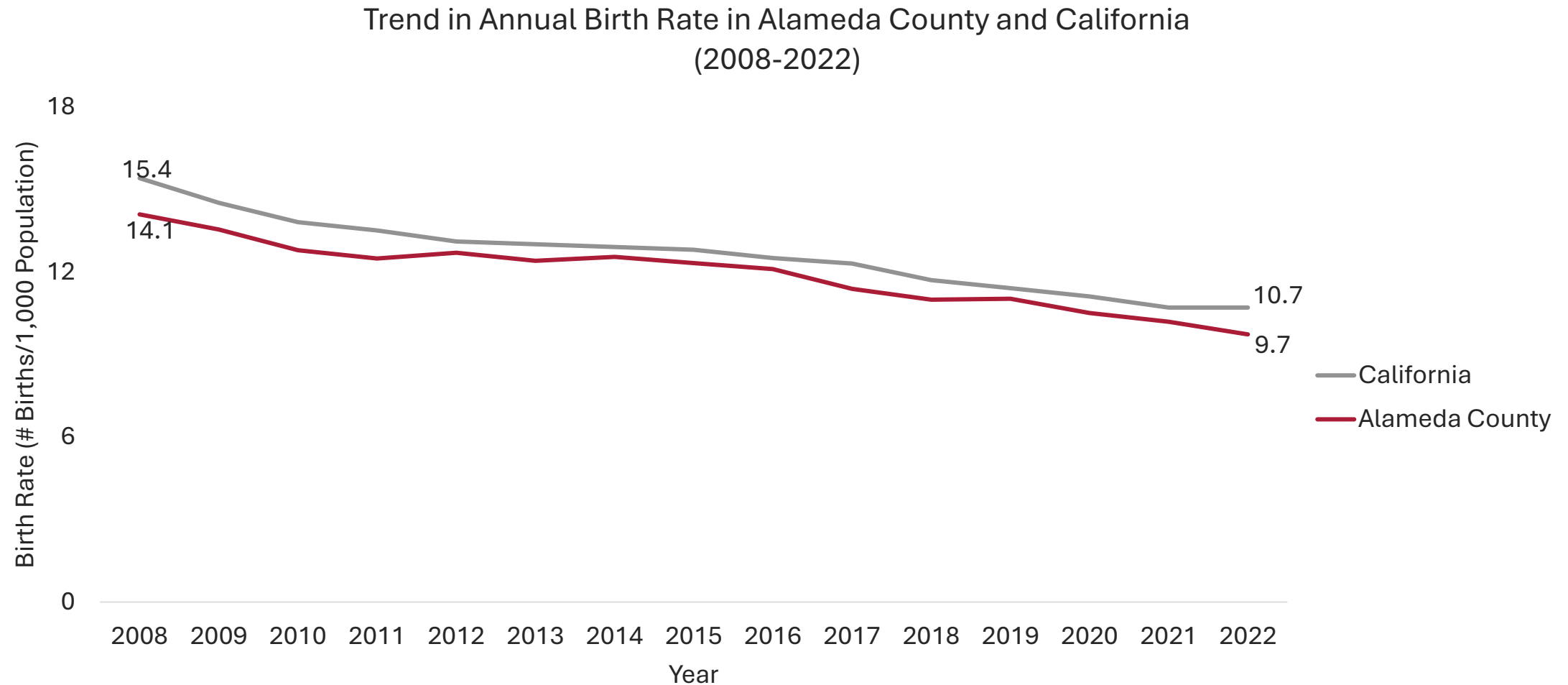


Alameda County Births

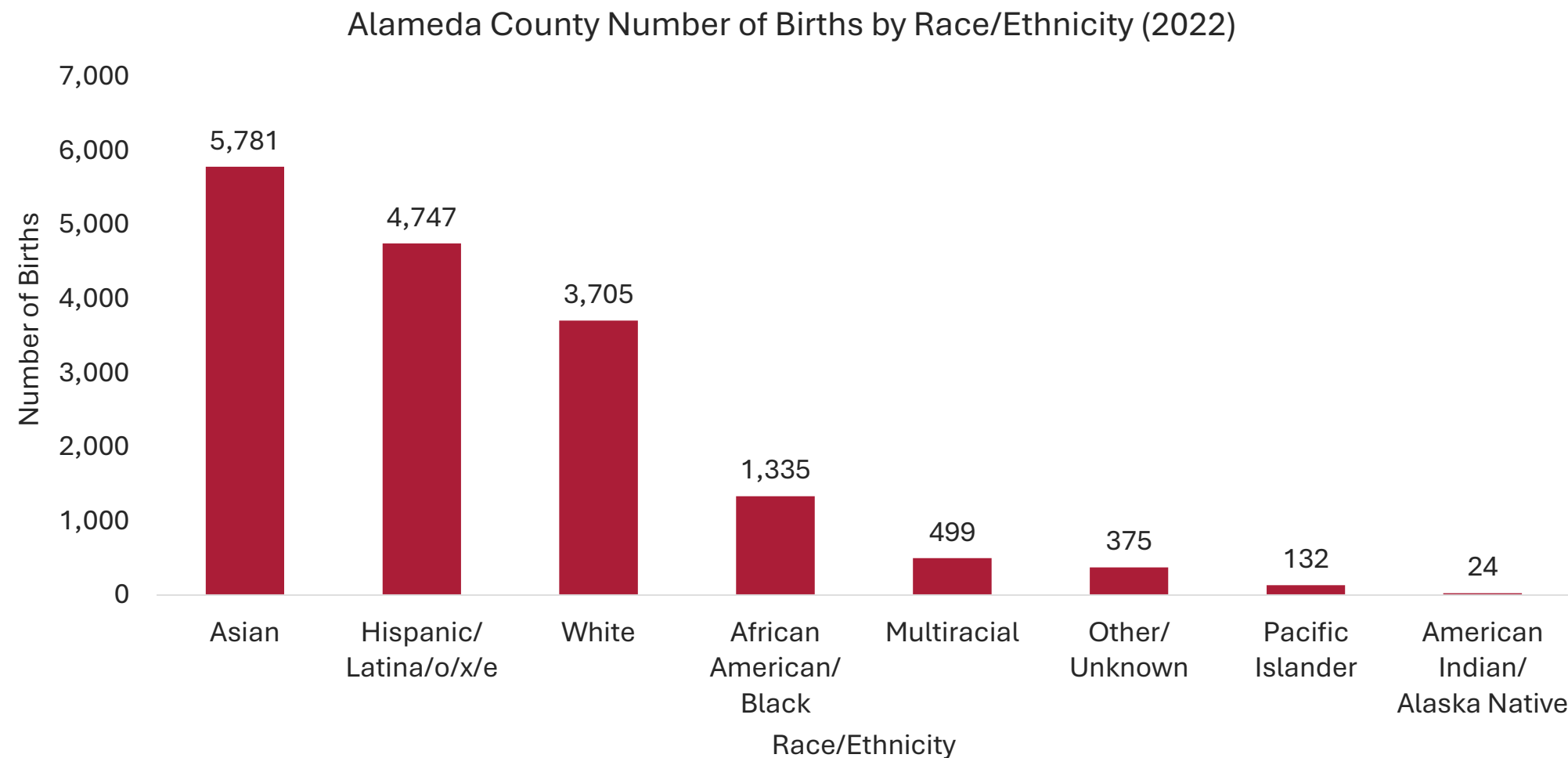
Declining Births In Alameda County



Decreasing trend in Alameda County birth rate

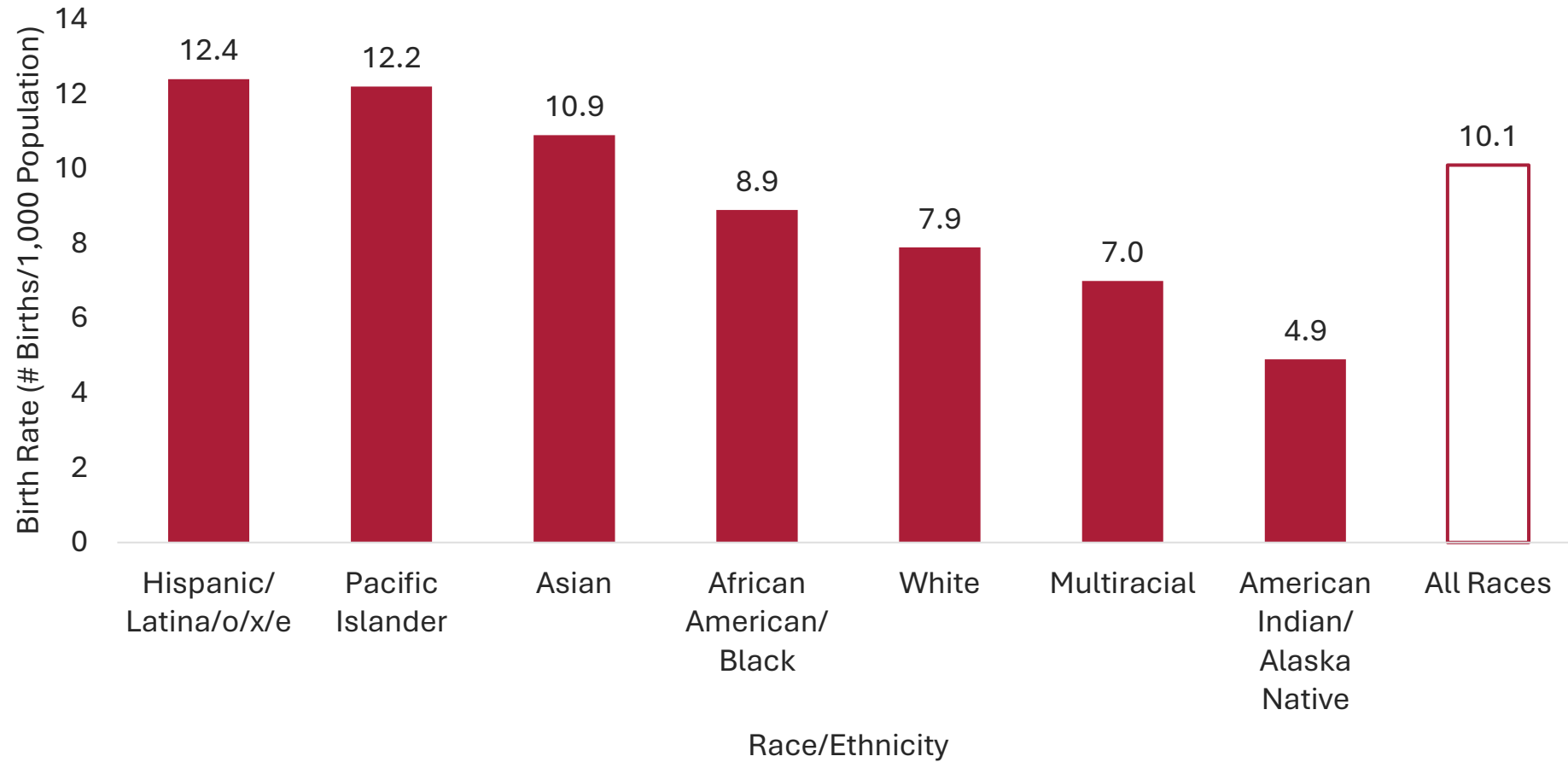


Numbers of births differ by race and ethnicity



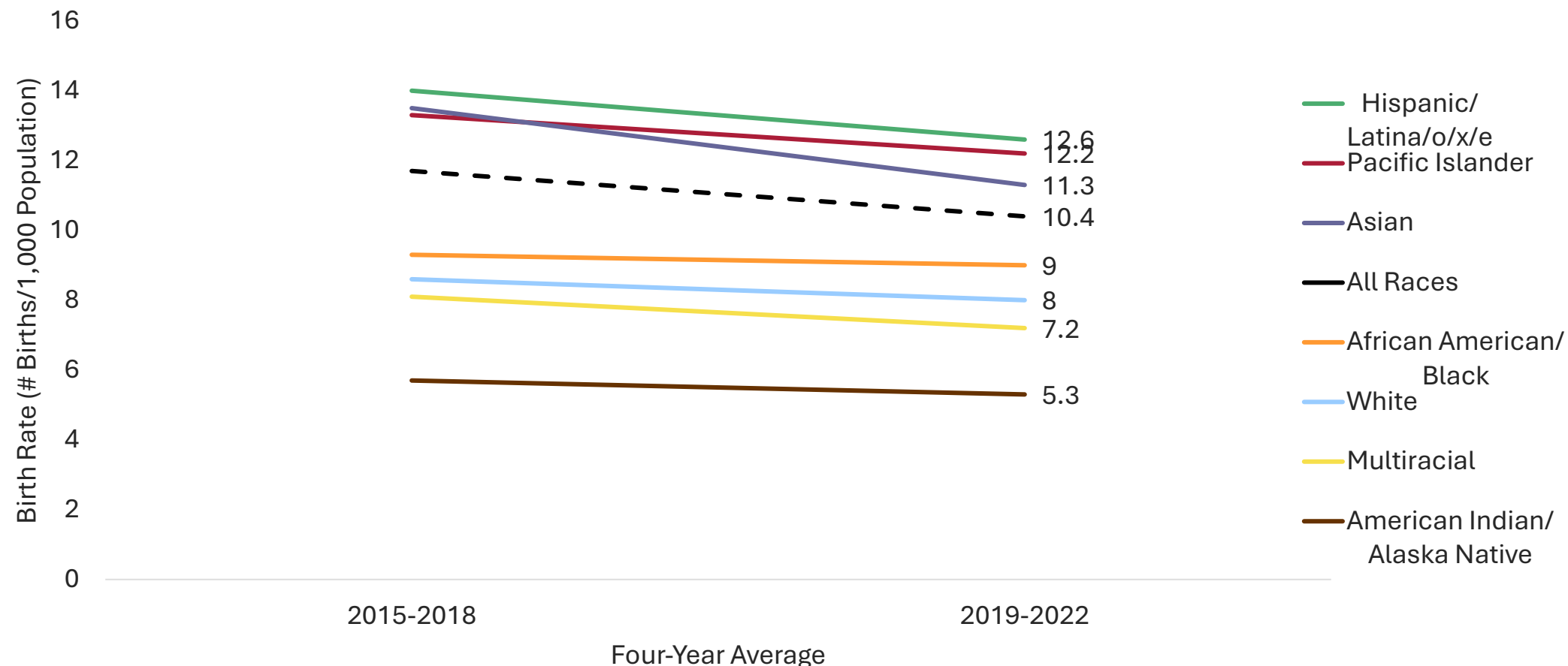
Birth rates differ by race and ethnicity

Alameda County Birth Rate, by Race/Ethnicity (2022)

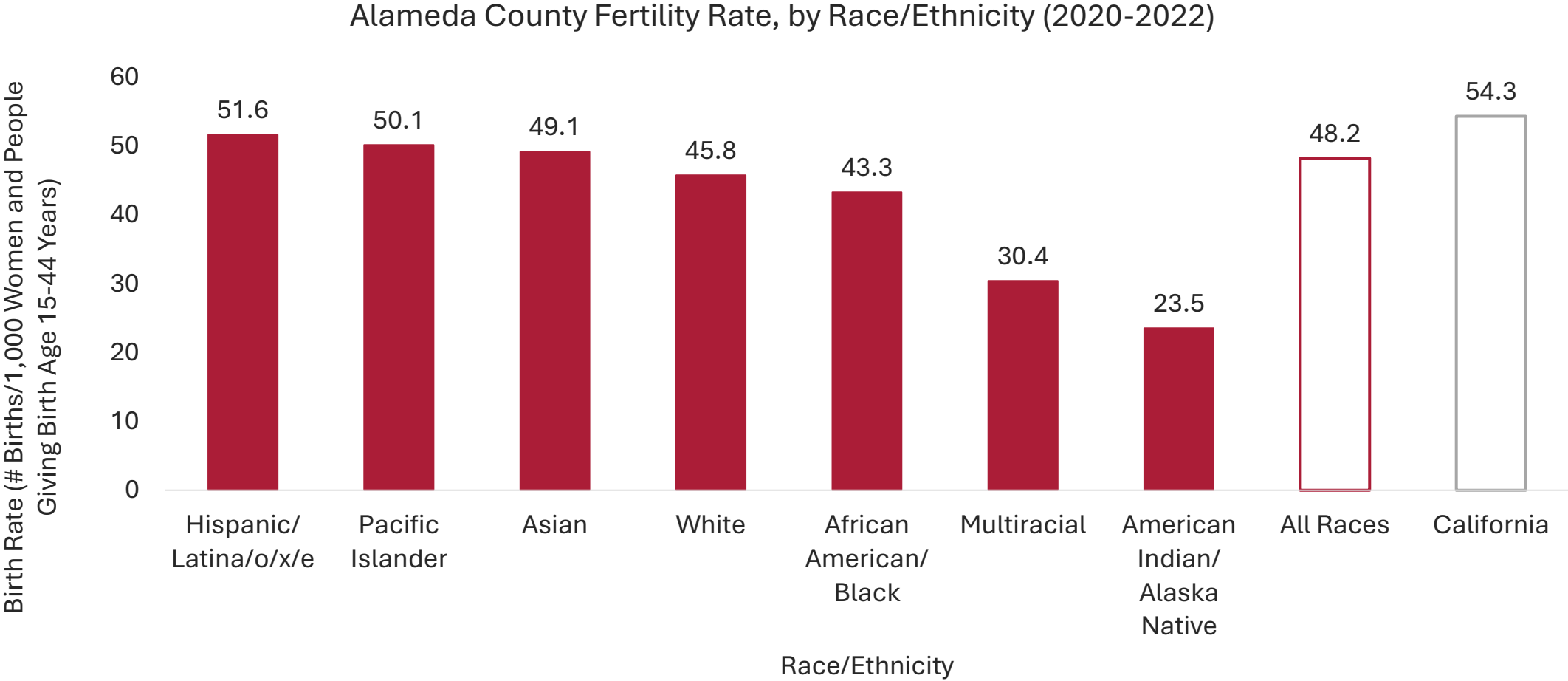


Trends in birth rates differ by race and ethnicity

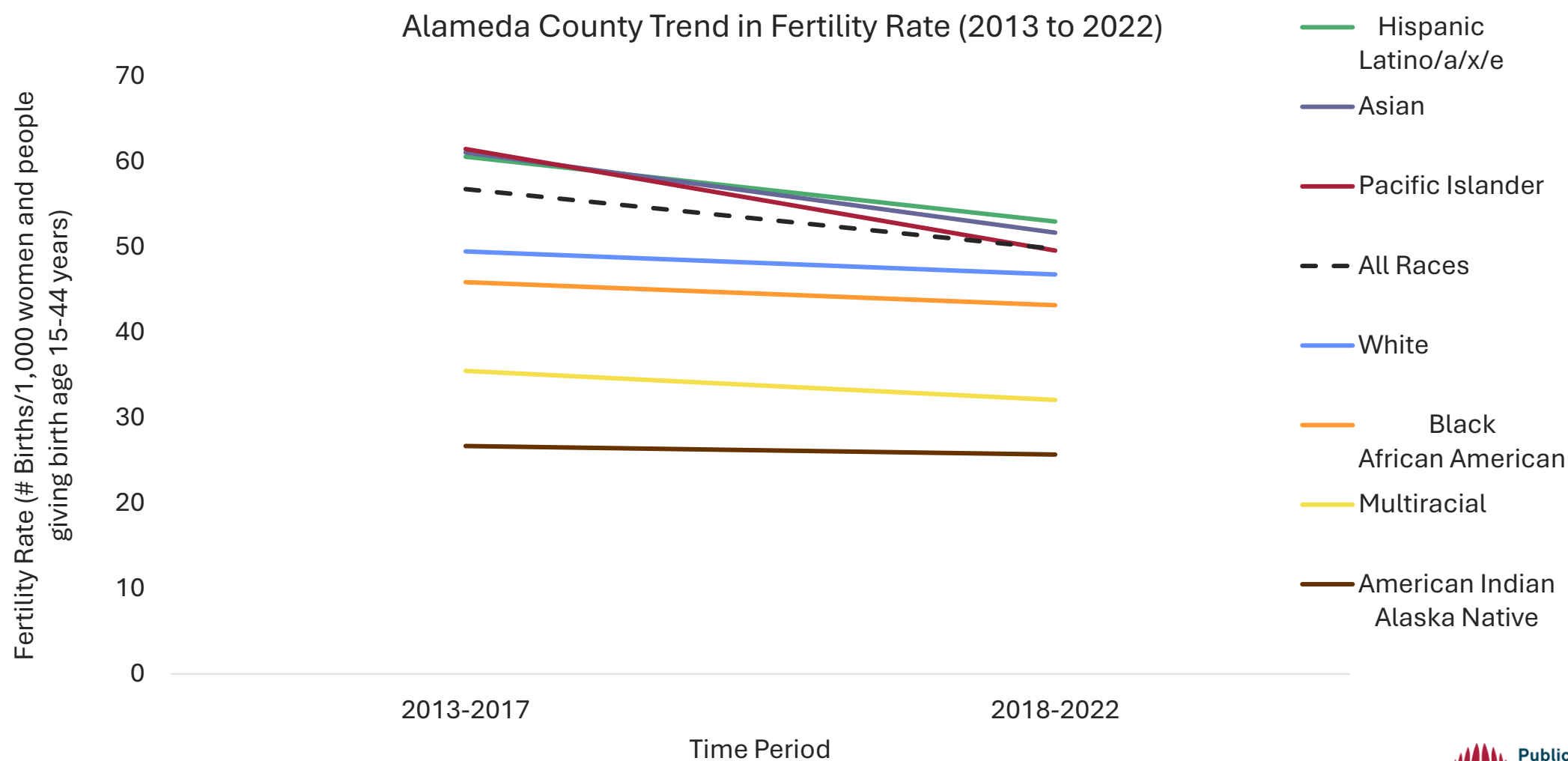
Alameda County Trends in Birth Rate, by Race/Ethnicity (2015 to 2022)



There are racial and ethnic differences in fertility rates

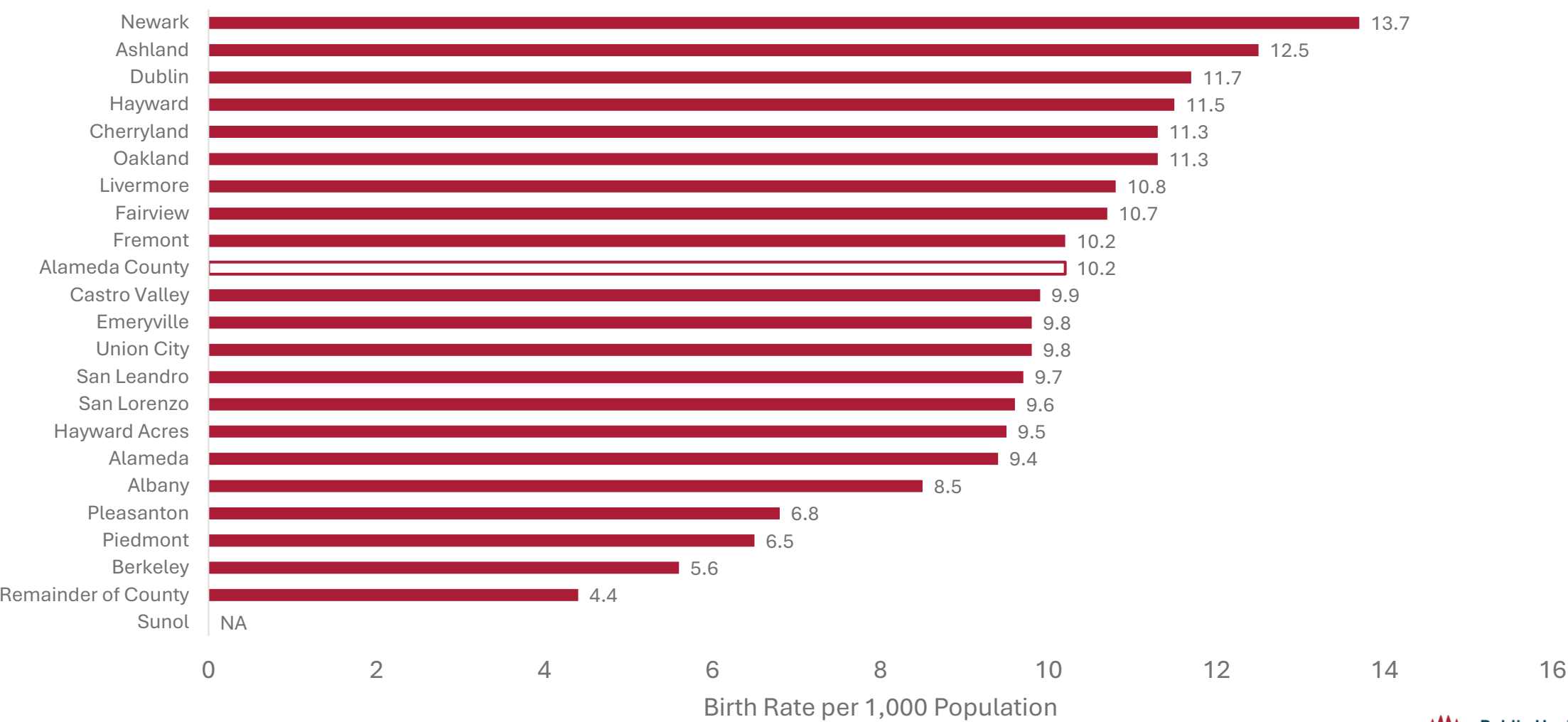


Fertility Rates have decreased over time



Geographic differences in birth rates

Alameda County Birth Rate by City/Place (2022)



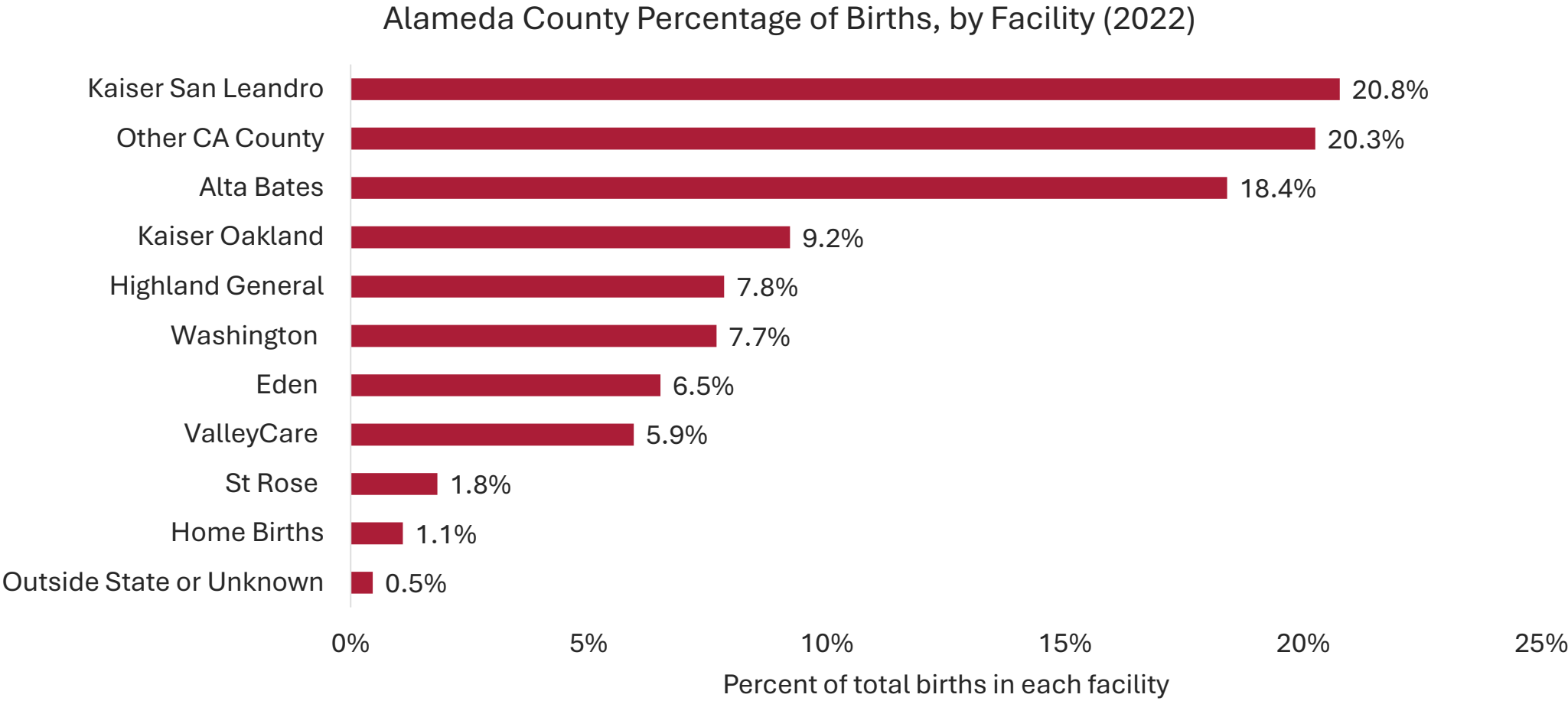
Birth Rate per 1,000 Population

- >10.35
- 7.27- 10.35
- 3.63- 7.27
- <=3.6
- Less than five births

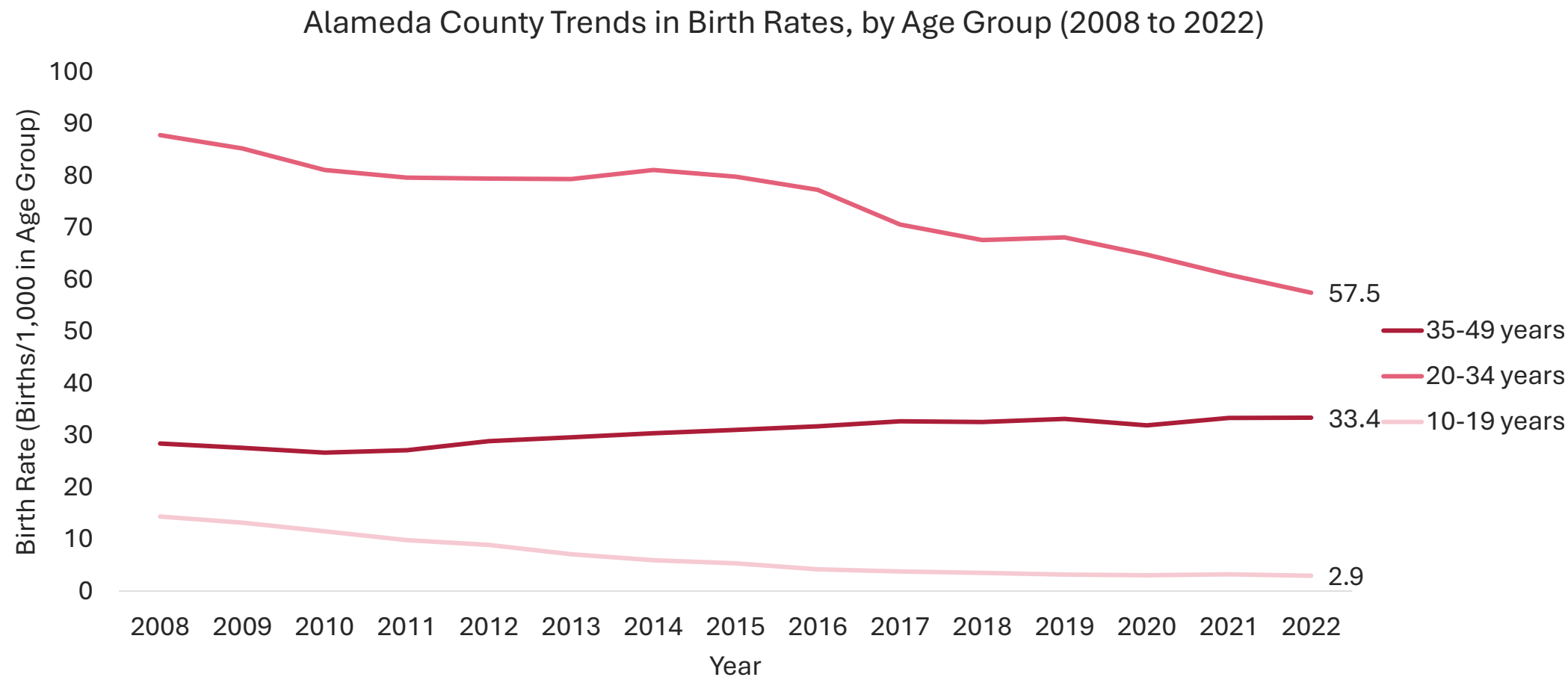
Alameda County rate 9.7/1,000 population

0 5 10 Miles

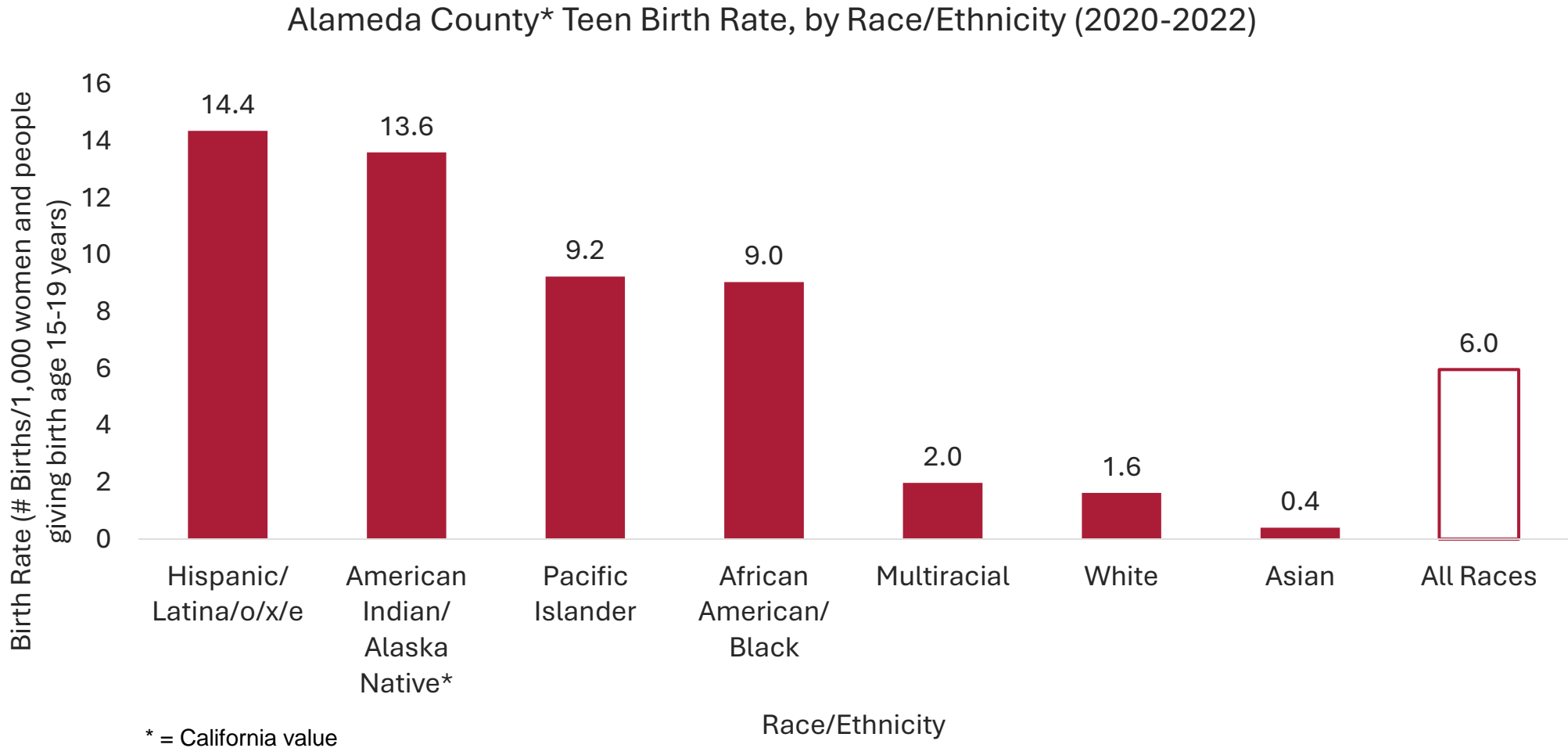
Where Alameda County residents give birth



Differing trends in birth rates by age group

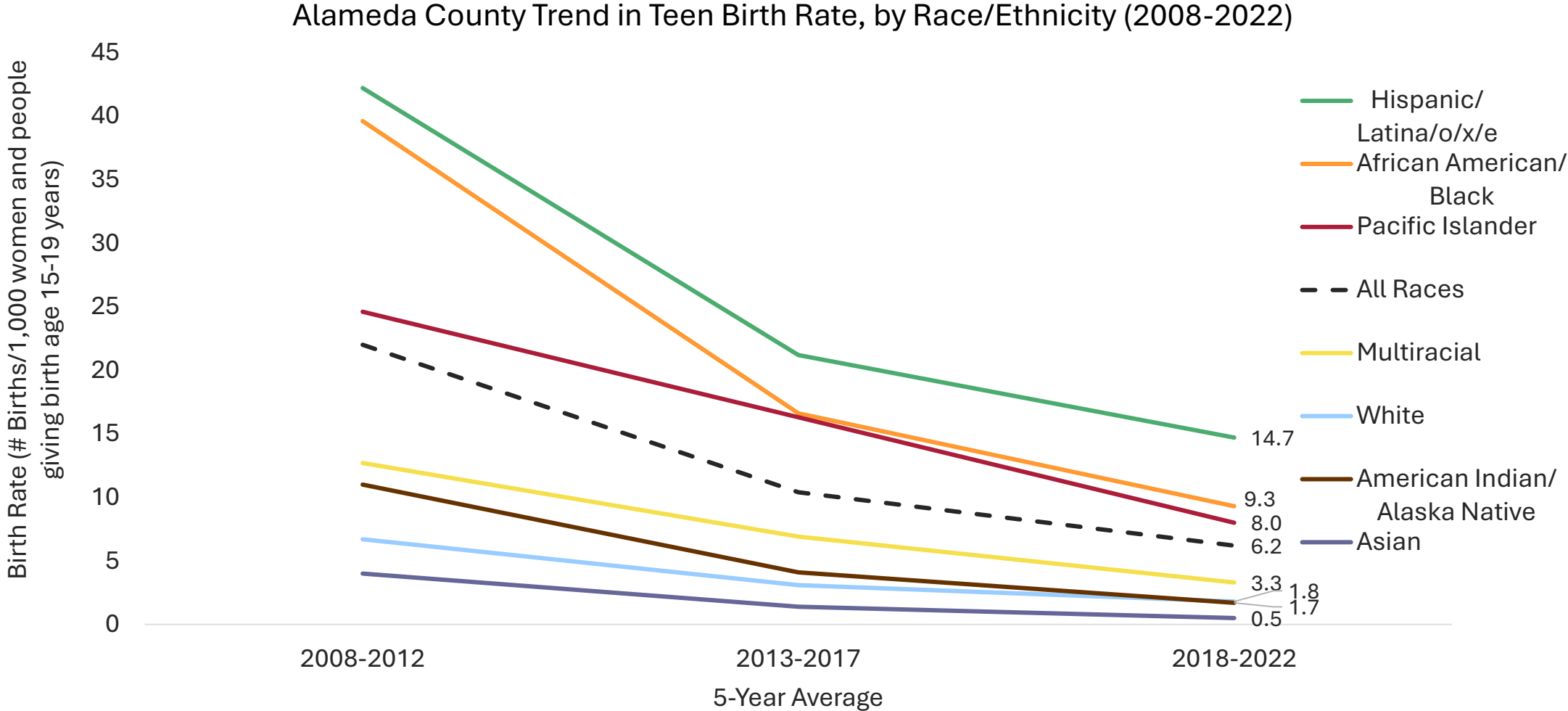


Inequities in teen birth rates



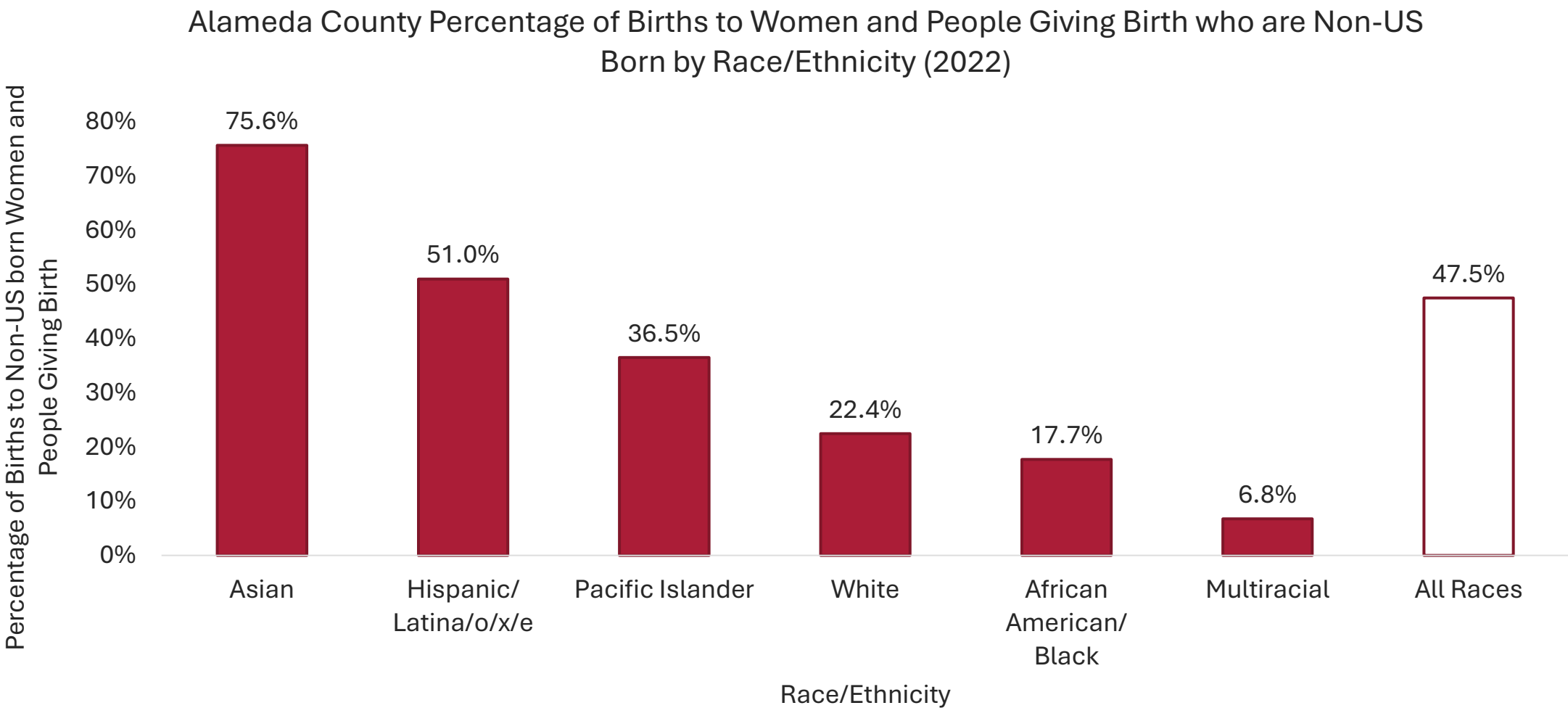
Source: CAPE, with data from Alameda County Vital Statistics files, 2020-2022
CA data from California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Adolescent Births Dashboard

Inequities in teen birth rate over time



Source: CAPE, with data from Alameda County Vital Statistics files, 2008-2022

There are racial and ethnic differences in the percentage of births to Non-US born women and people giving birth



Leading countries of birth for women and people giving birth in Alameda County

Alameda County top countries of birth for women and people giving birth, by race/ethnicity (2022)

Asian		
Rank	Country	Percent
1	India	1981 (34.2%)
2	United States	1408 (24.3%)
3	China	947 (16.4%)
4	Philippines	395 (6.8%)
5	Vietnam	210 (3.6%)

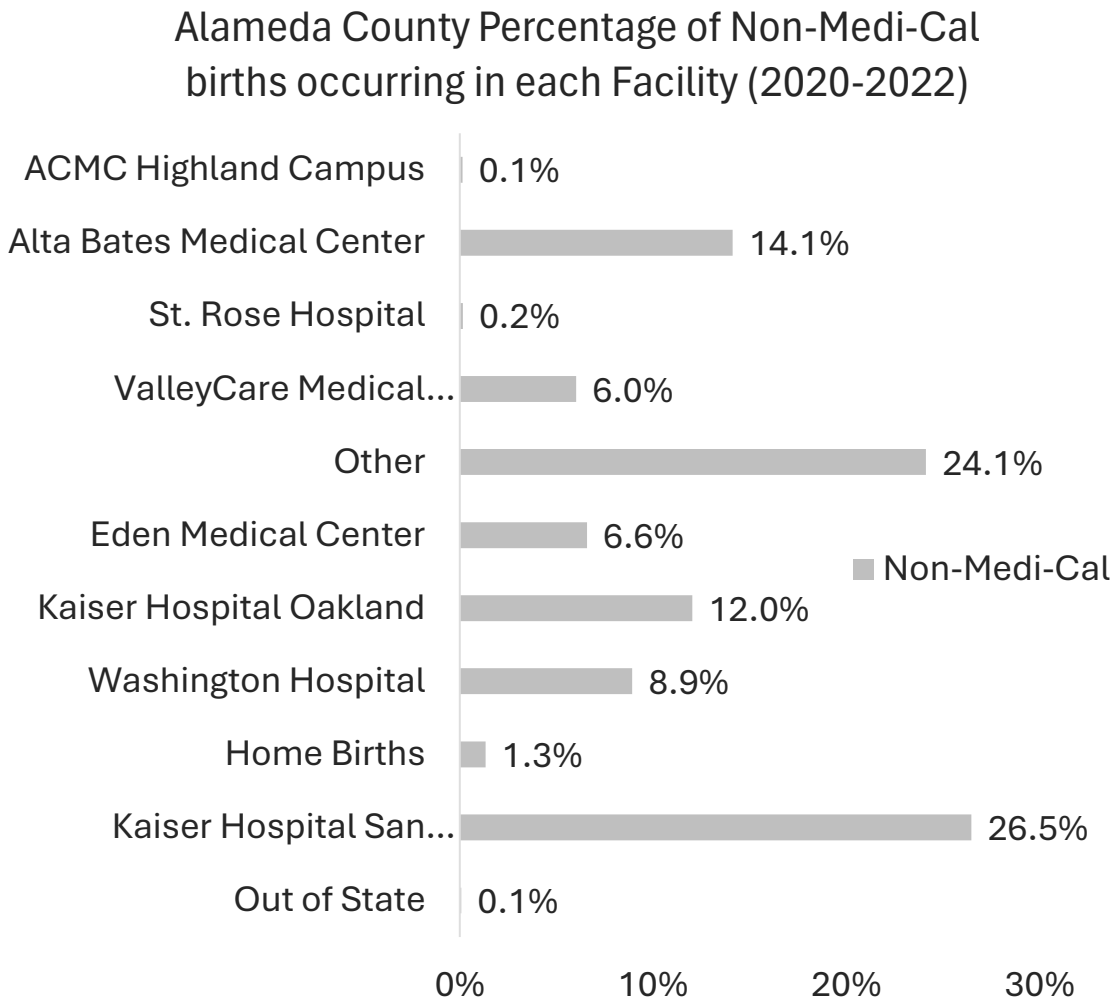
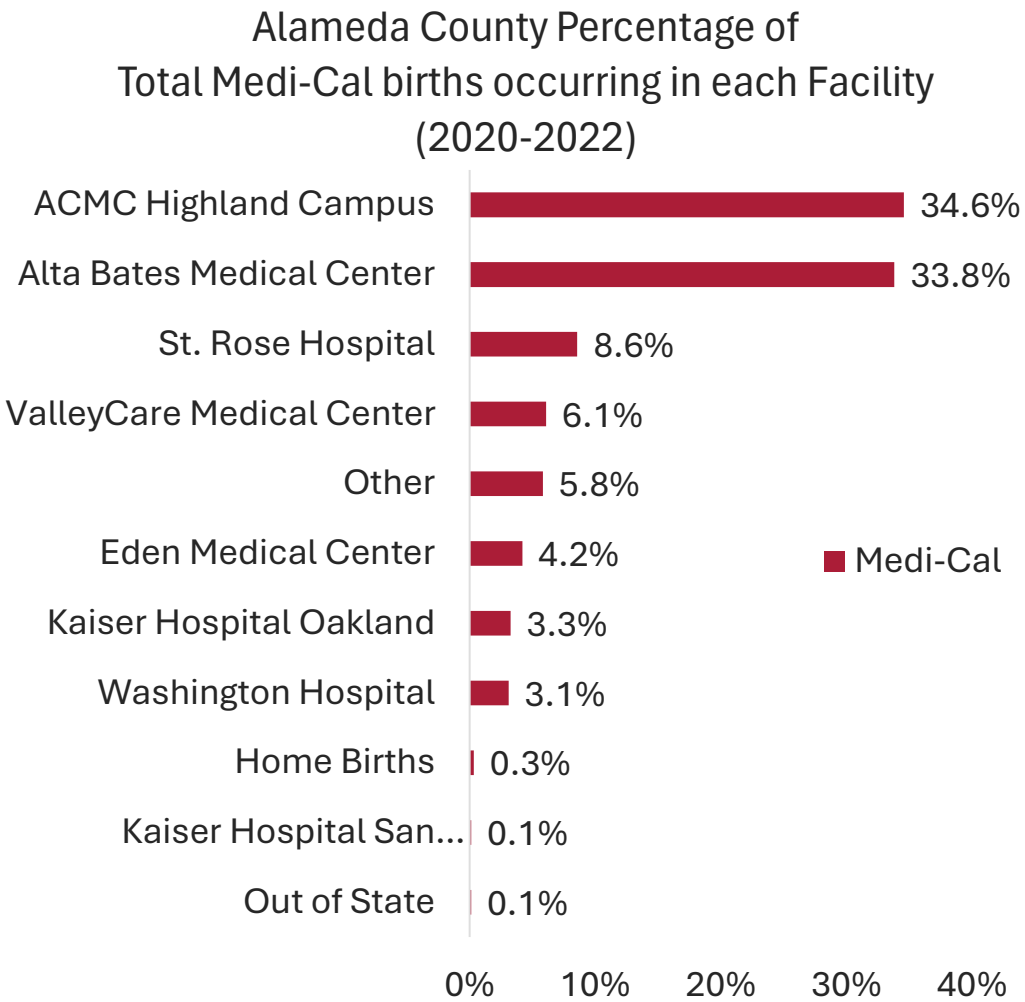
African American/Black		
Rank	Country	Percent
1	United States	1063 (79.7%)
2	Ethiopia	77 (5.8%)
3	Eritrea	39 (2.9%)
4	Nigeria	37 (2.8%)

Hispanic/Latina/o/x/e		
Rank	Country	Percent
1	United States	2298 (48.4%)
2	Mexico	1130 (23.9%)
3	Guatemala	607 (12.8%)
4	El Salvador	307 (7.1%)
5	Honduras	155 (3.3%)

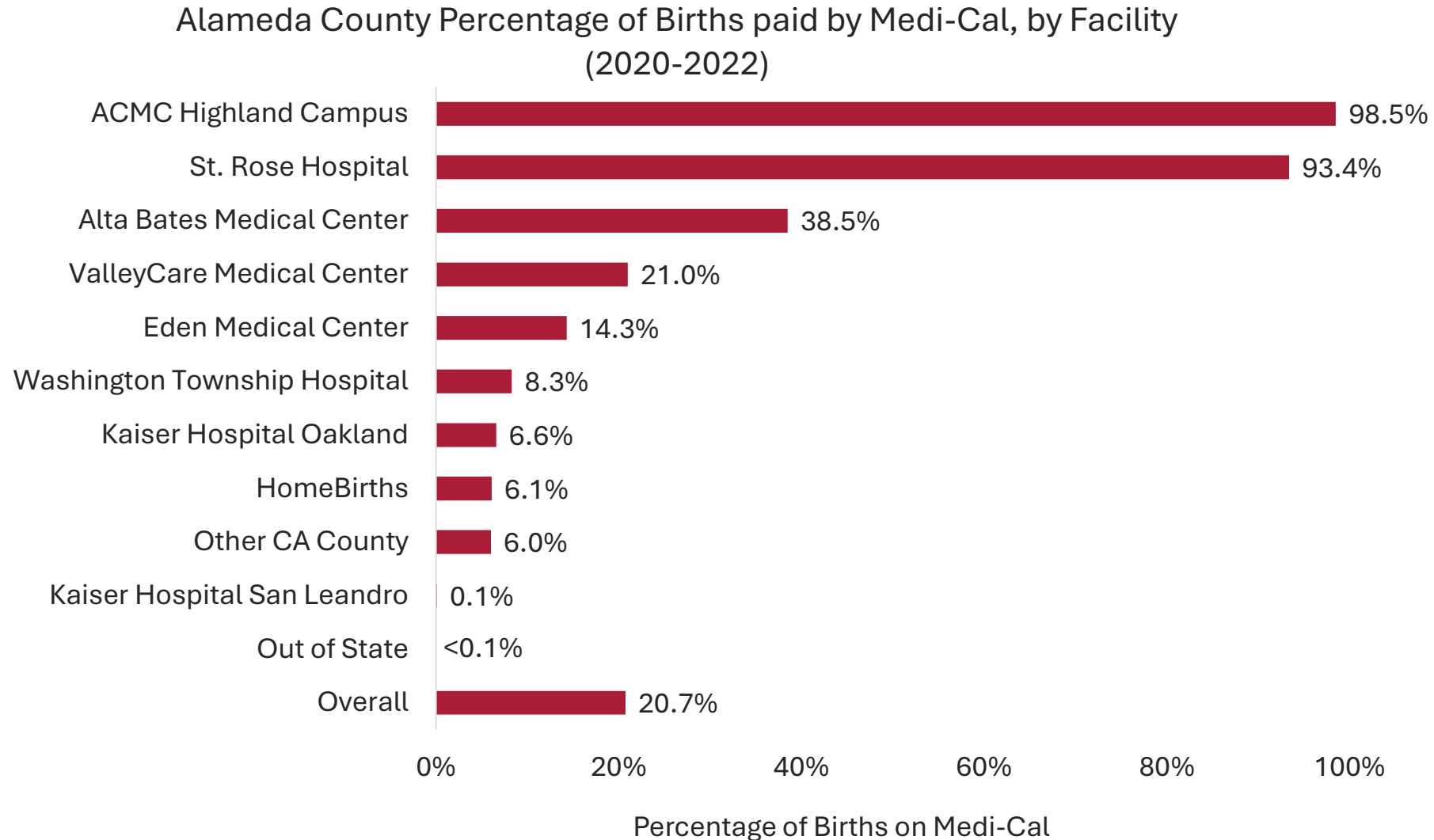
Pacific Islander		
Rank	Country	Percent
1	United States	97 (73.5%)
2	Fiji	19 (14.4%)
3	Tonga	12 (9.1%)

White		
Rank	Country	Percent
1	United States	2748 (74.3%)
2	Afghanistan	208 (5.6%)
3	Yemen	167 (4.5%)
4	Russia	41 (1.1%)

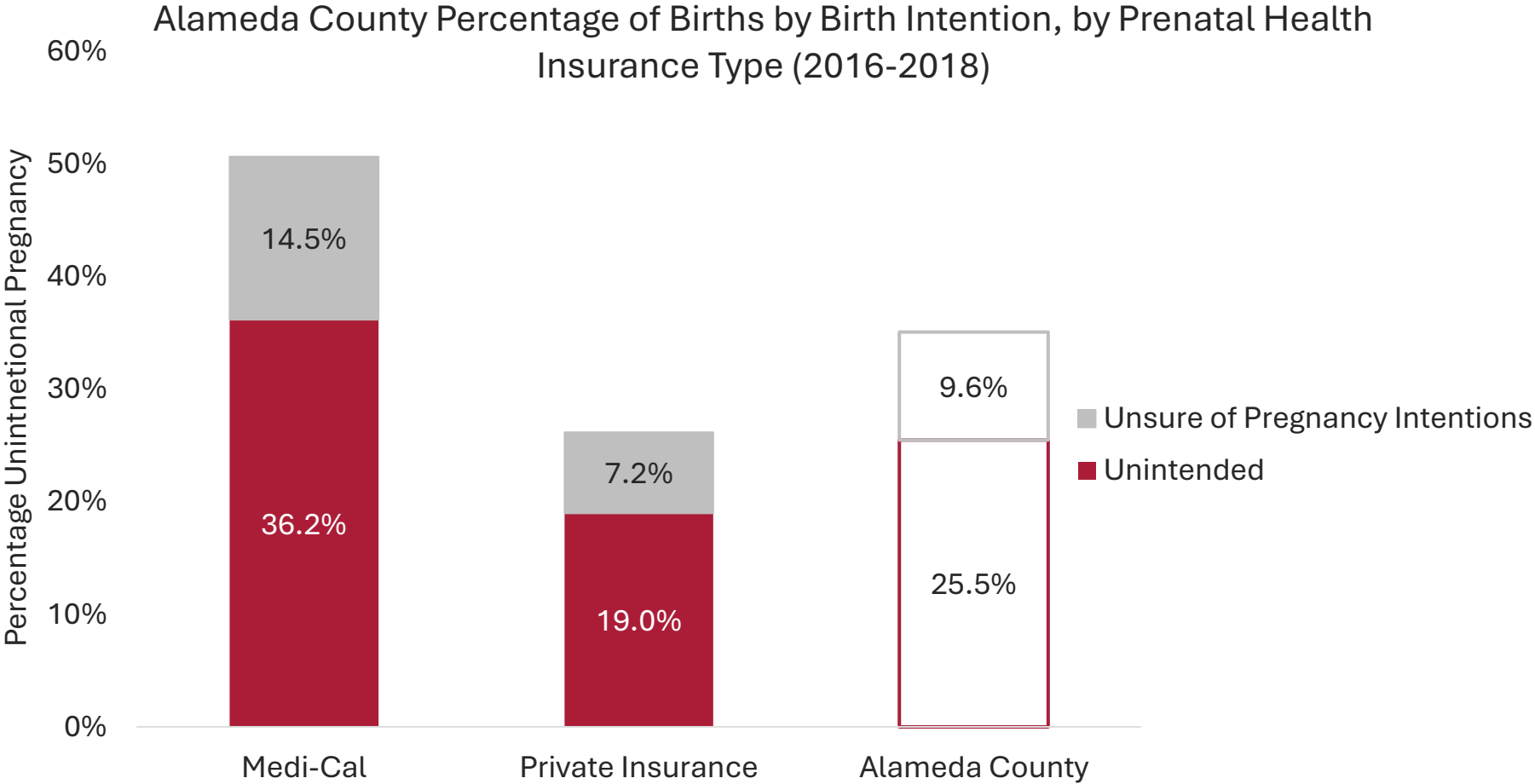
Among Medi-Cal covered families, the births most often occurred at Highland Hospital and Alta Bates



Nearly all births at Highland Hospital and St. Rose Hospital were to women and pregnant people covered by Medi-Cal

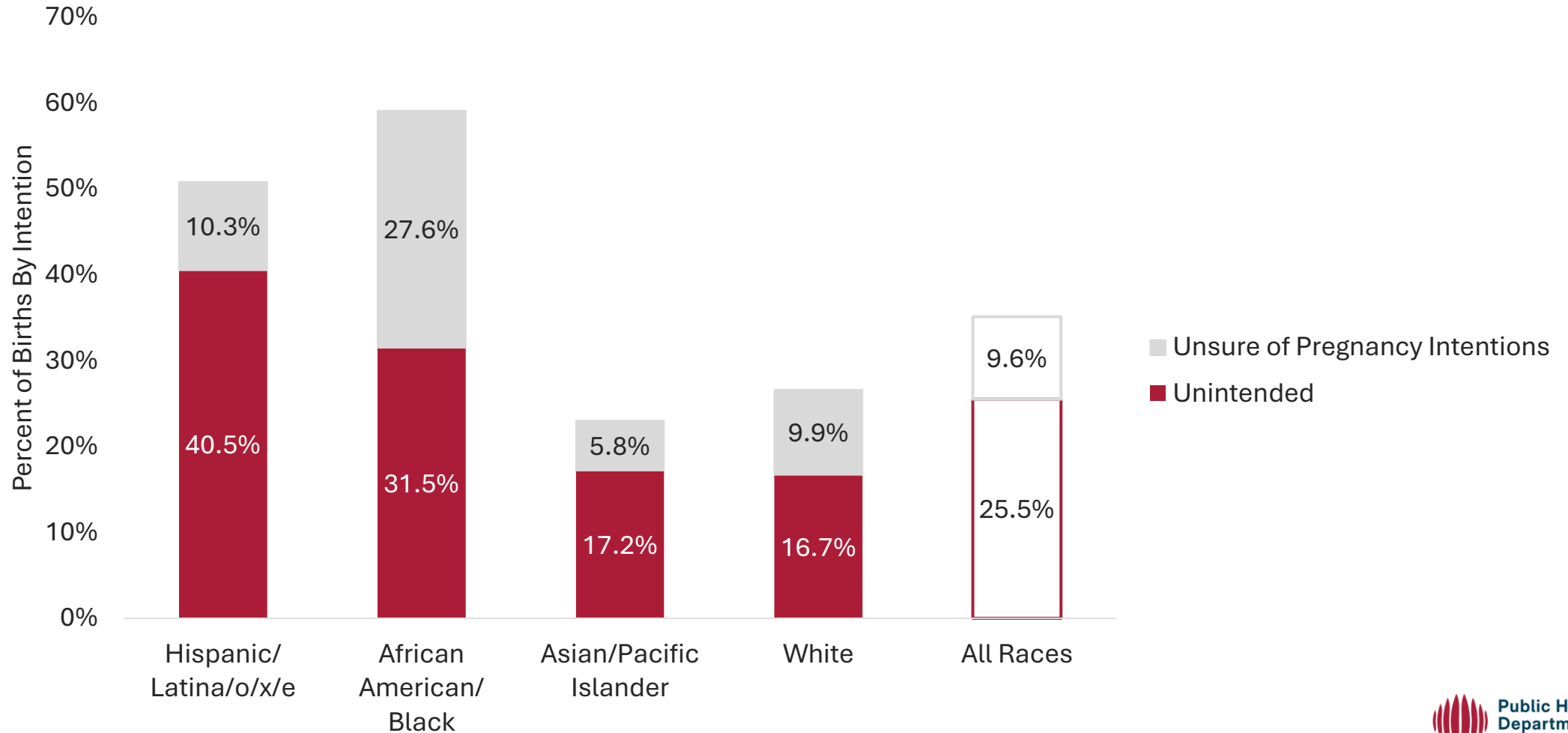


One-quarter of births were unintended pregnancies; 1 in 3 Medi-Cal births and nearly 1 in 5 private insurance births were unintended



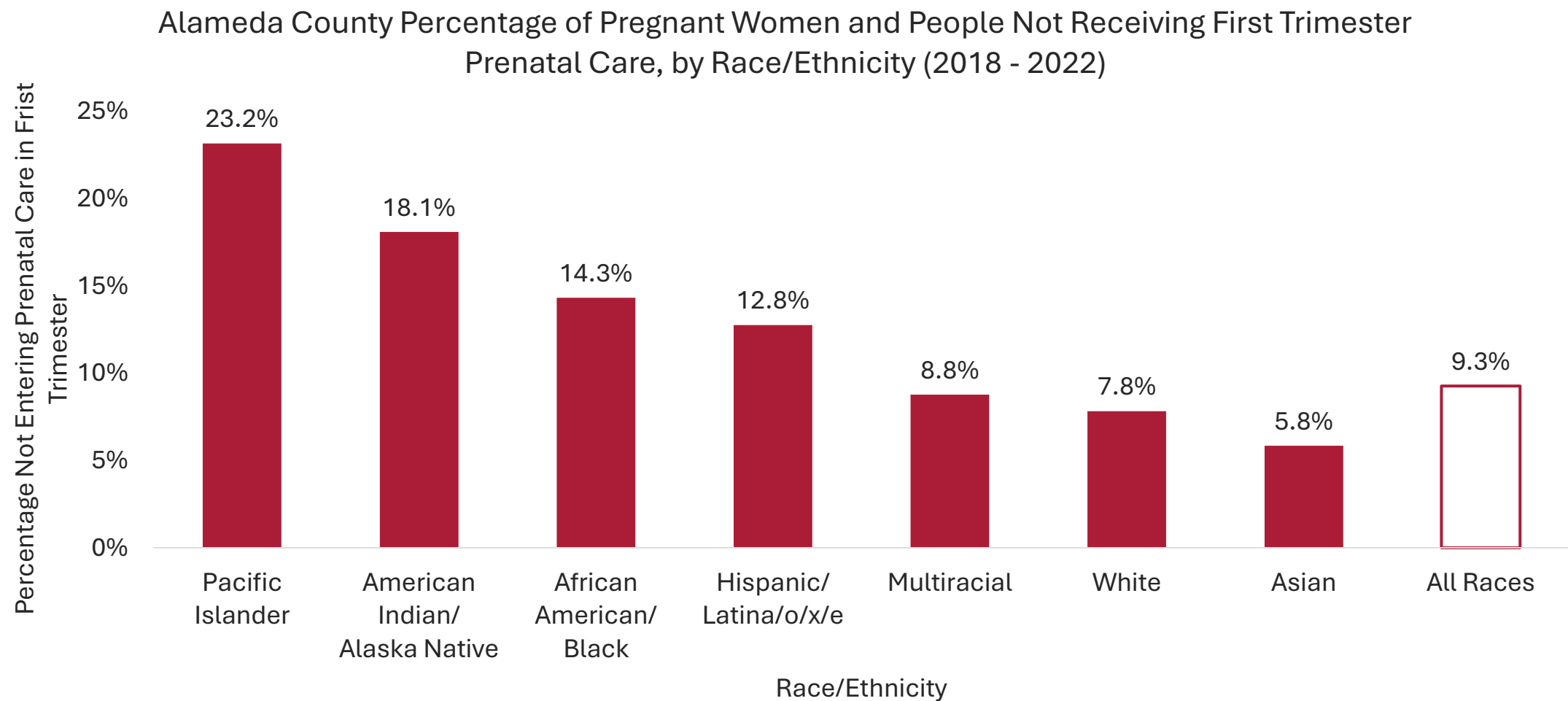
Hispanic/Latina/o/x/e and African American/Black women and people giving birth had the highest proportions of unintended pregnancies

Alameda County Percentage of Births by Birth Intention, by Race/Ethnicity (2016-2018)



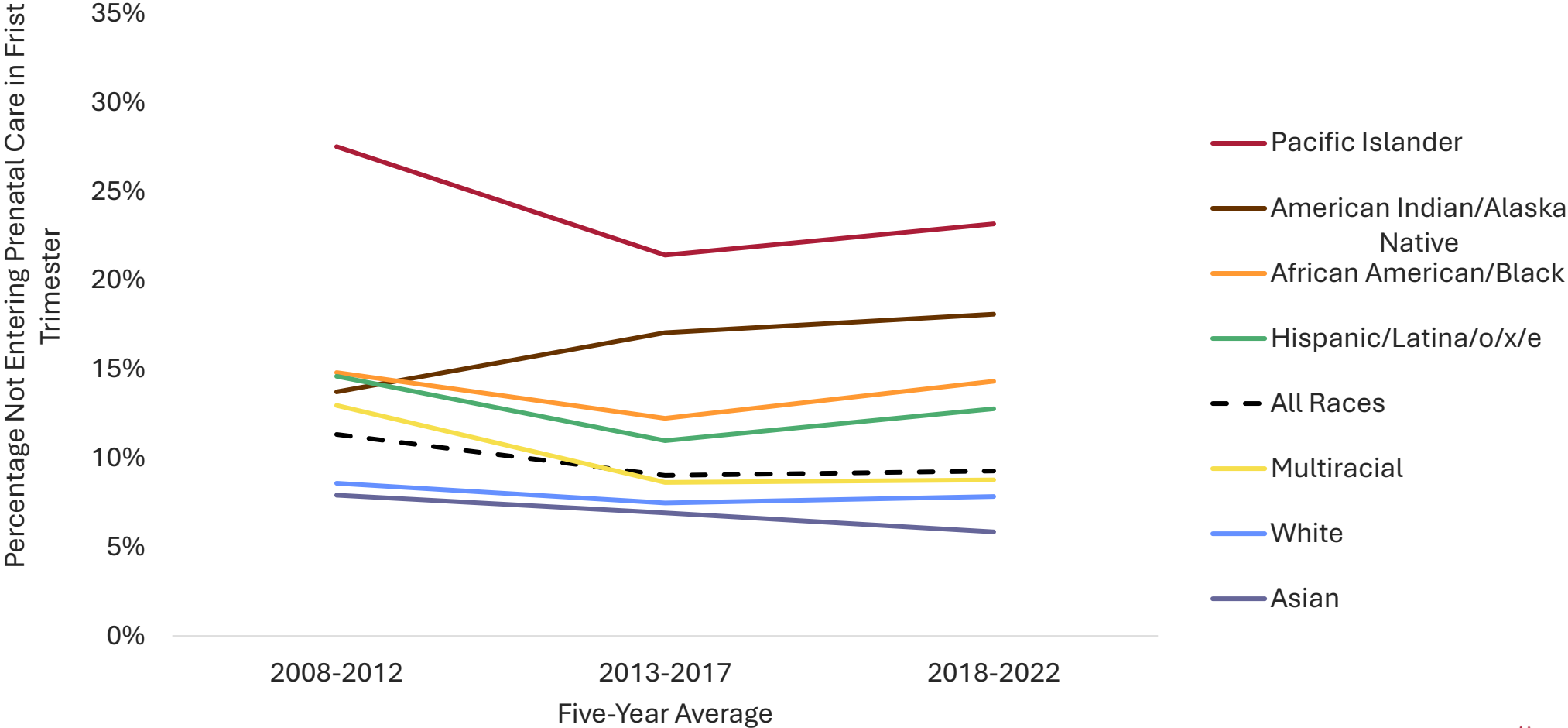
Alameda County Pregnancy & Maternal Health Indicators

Inequities in early prenatal care



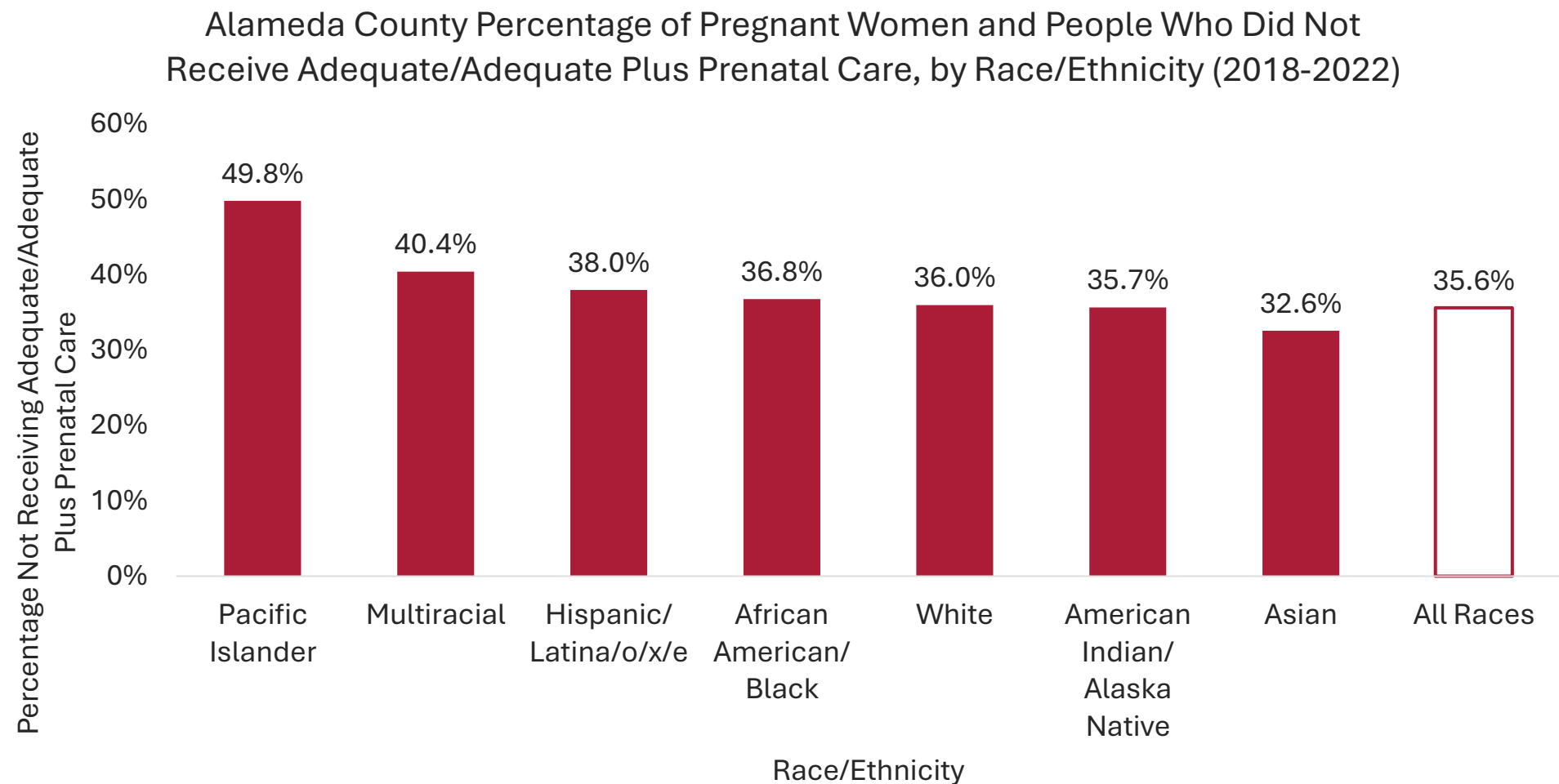
Trends in racial and ethnic inequities in early prenatal care

Alameda County Trend in Percentage of Pregnant Women and People Not Entering Prenatal Care in First Trimester, by Race/Ethnicity (2018-2022)

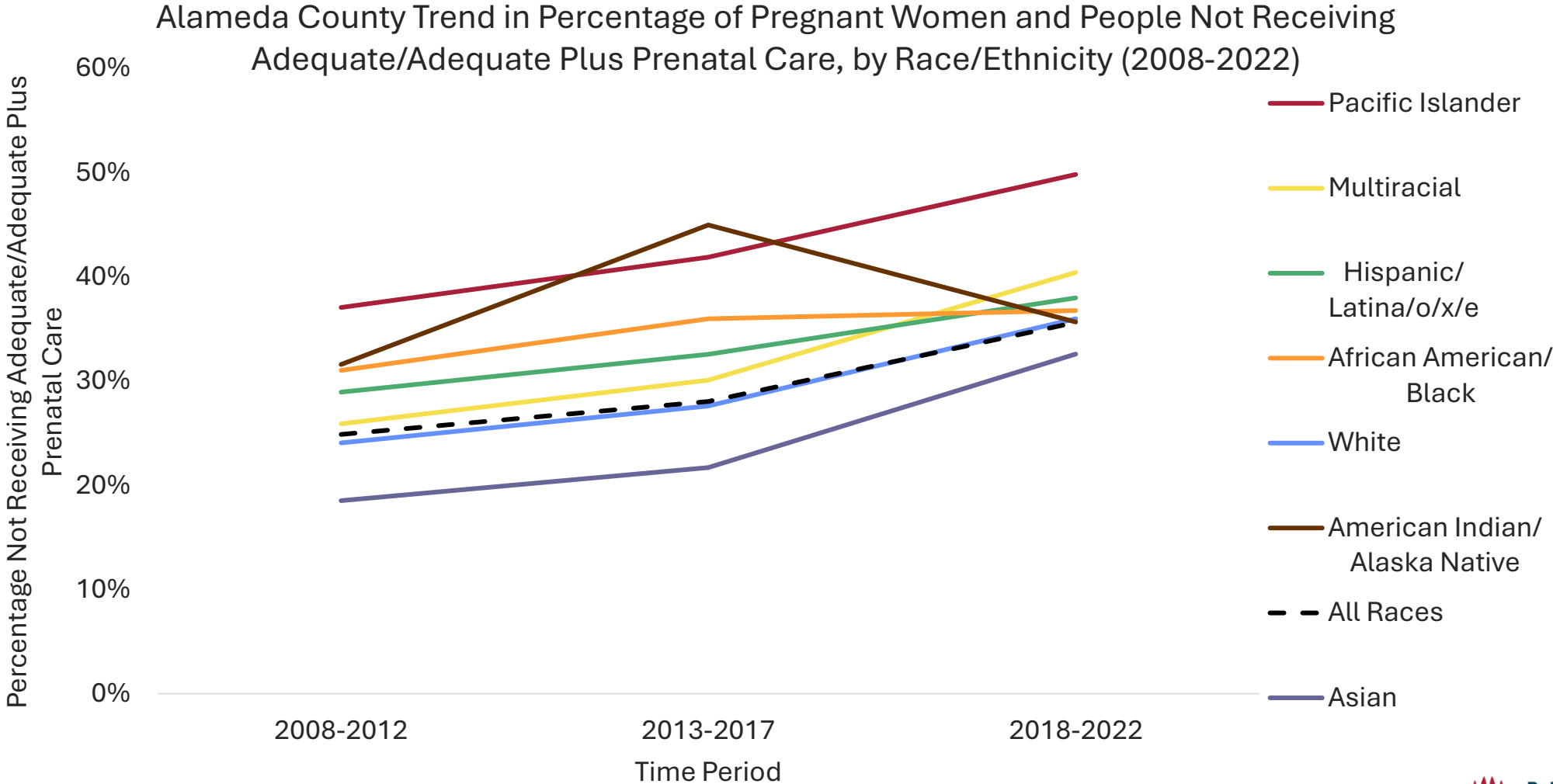


Inequities in not receiving adequate prenatal care

Adequate Prenatal Care:
Prenatal care initiated within the first four months of pregnancy, with the mother/person giving birth attending 80% or more of the expected number of prenatal care visits

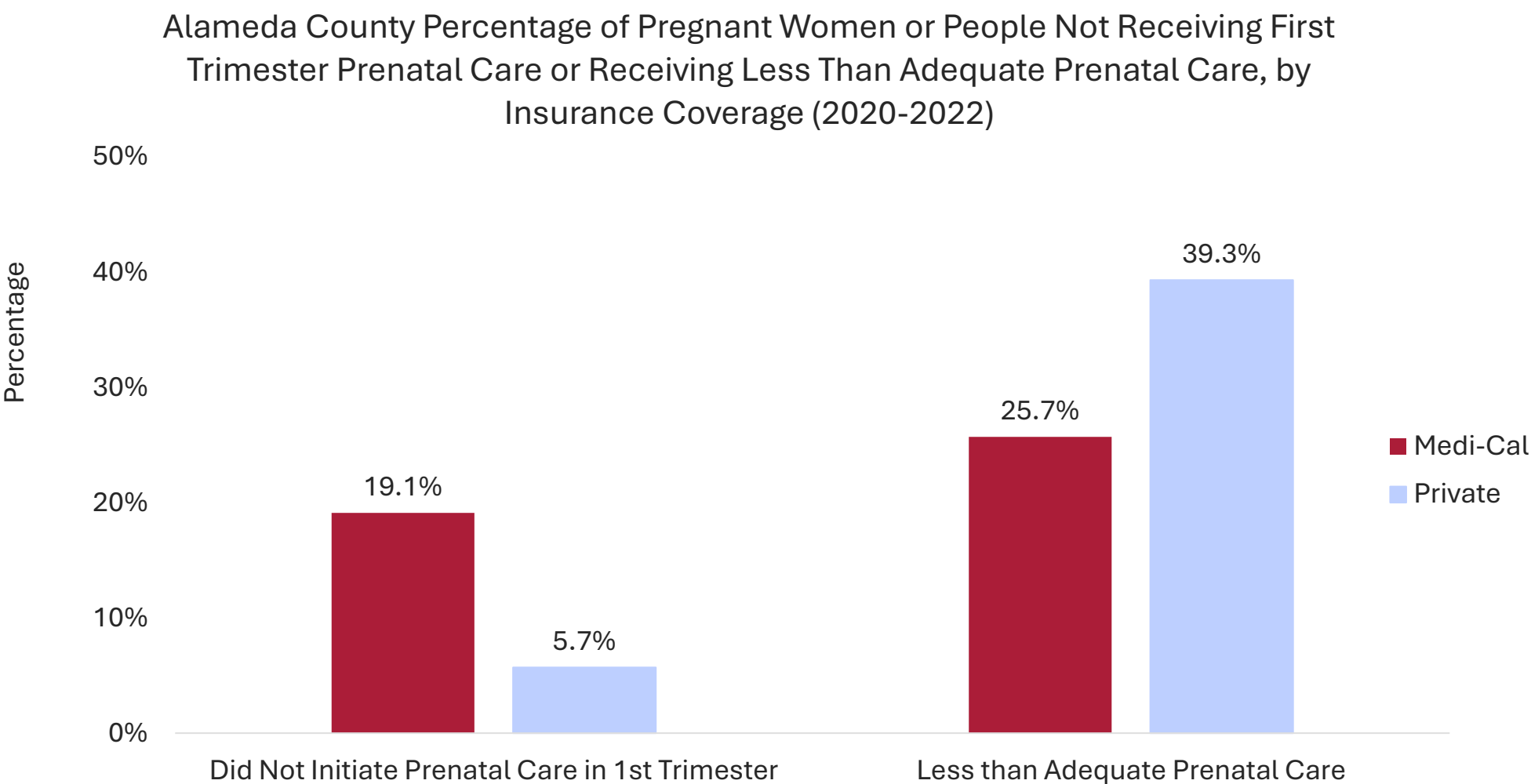


Trends in inequities in not receiving adequate prenatal care

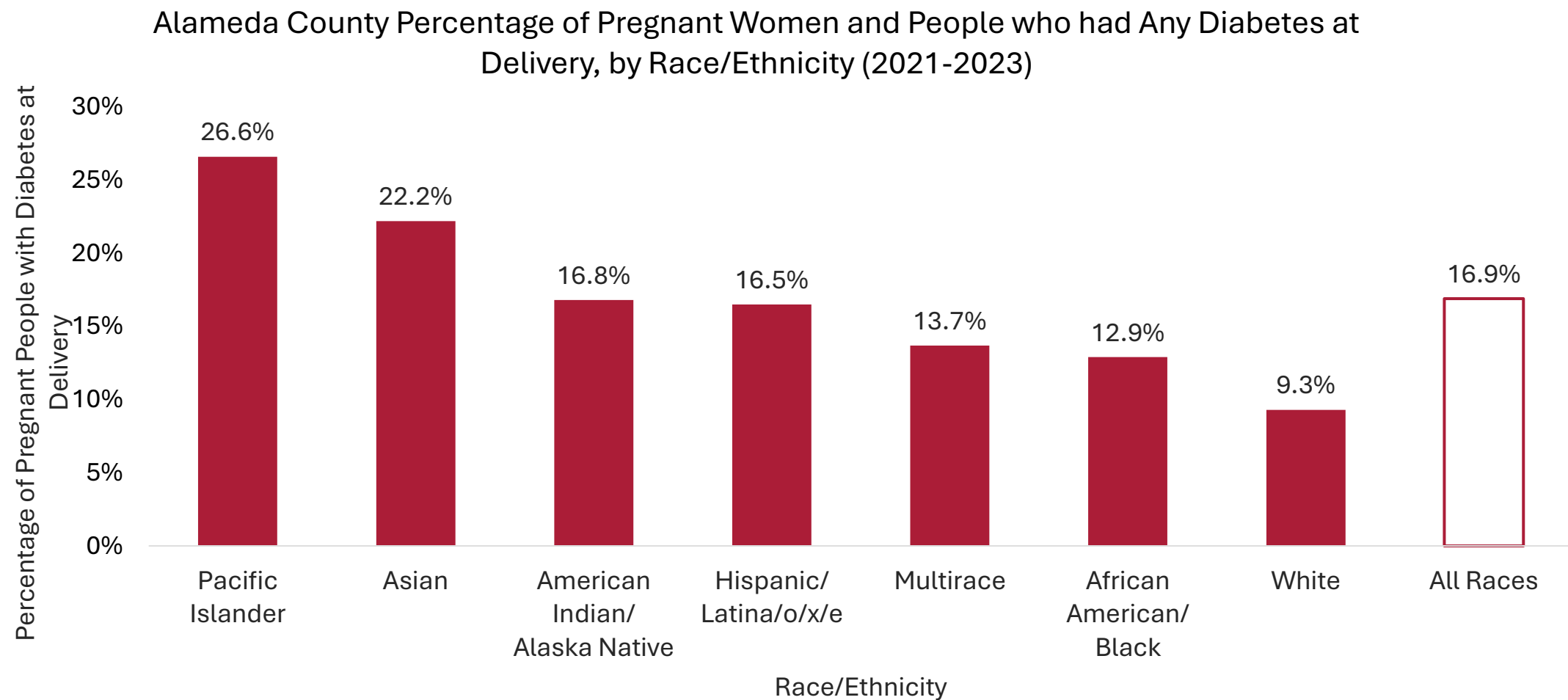


Source: CAPE, with data from Alameda County Vital Statistics files, 2008-2022

Medi-Cal patients had later entry into prenatal care, but higher percentages of adequate prenatal care

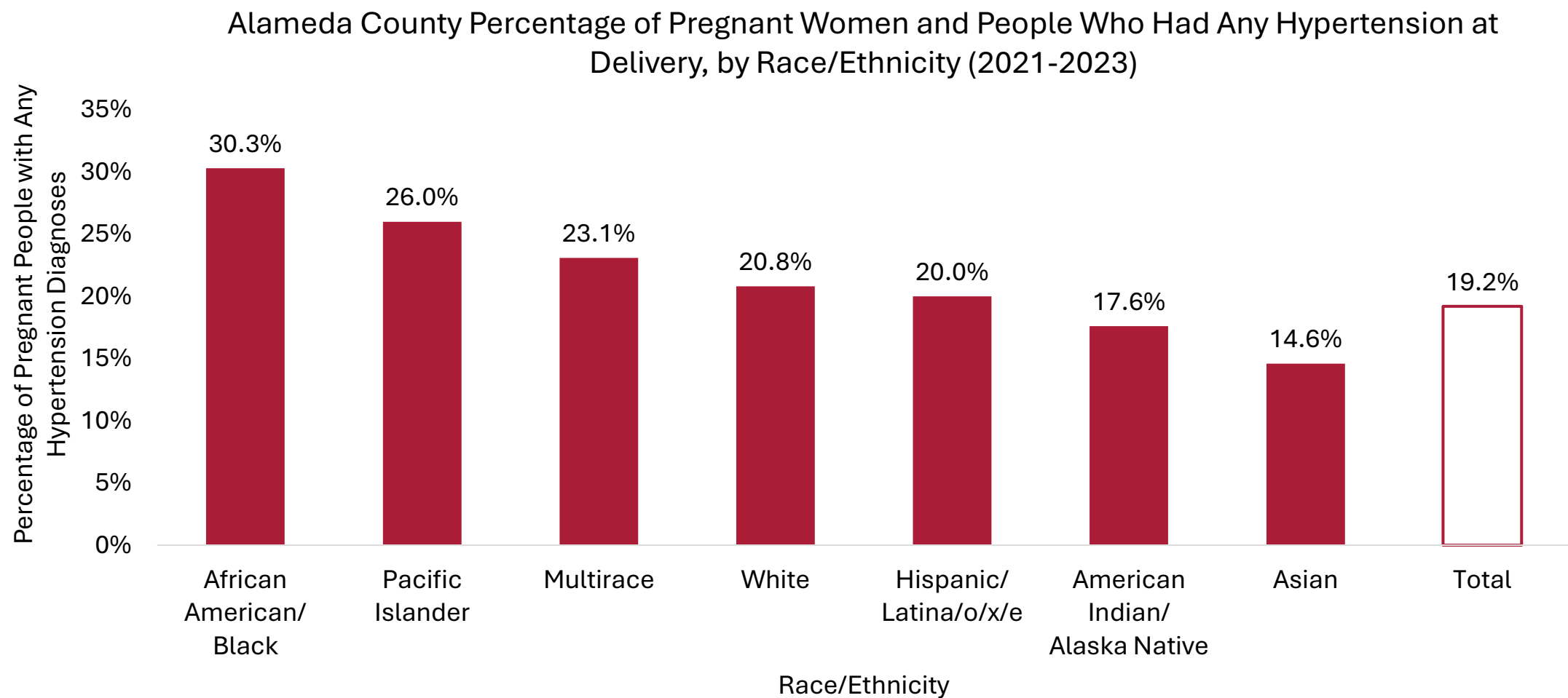


Inequities in pregnant women and people who had any diabetes at delivery



Source: Source: California Department of Public Health / Maternal, Child and Adolescent Health Division / Epidemiology, Surveillance and Federal Reporting Section (2021-2023)

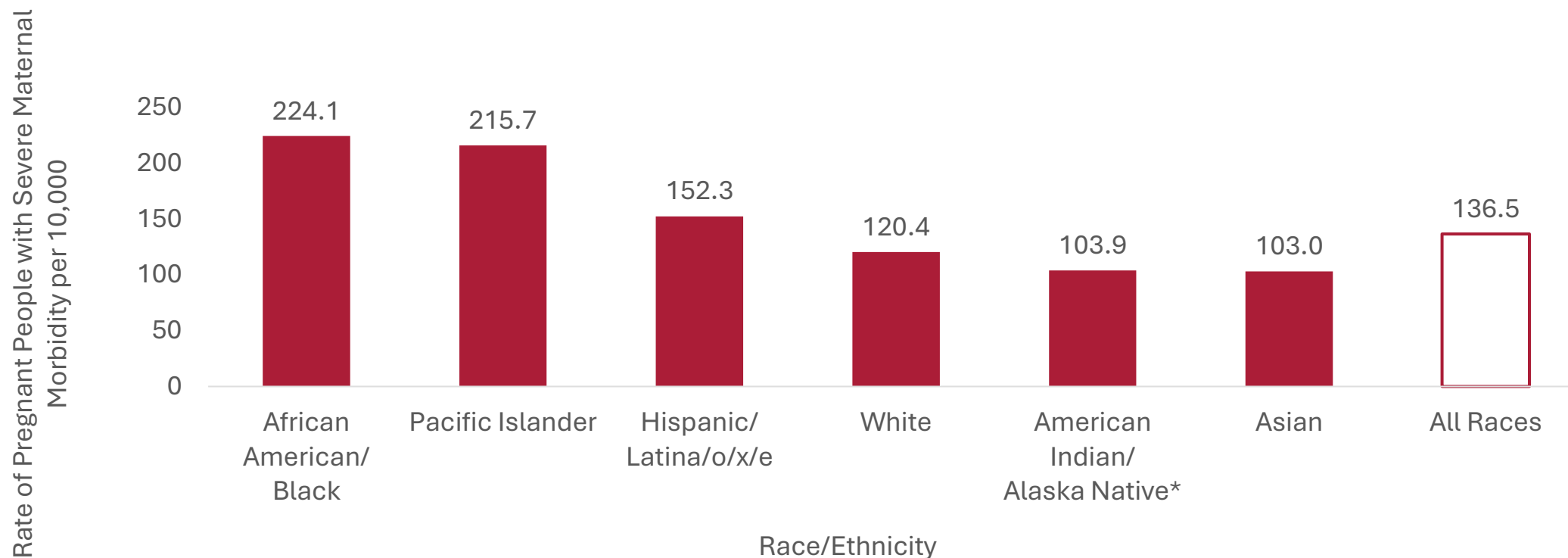
Inequities in pregnant women and people who had any hypertension at delivery



Source: Source: California Department of Public Health / Maternal, Child and Adolescent Health Division / Epidemiology, Surveillance and Federal Reporting Section (2021-2023)

Inequities in severe maternal morbidity

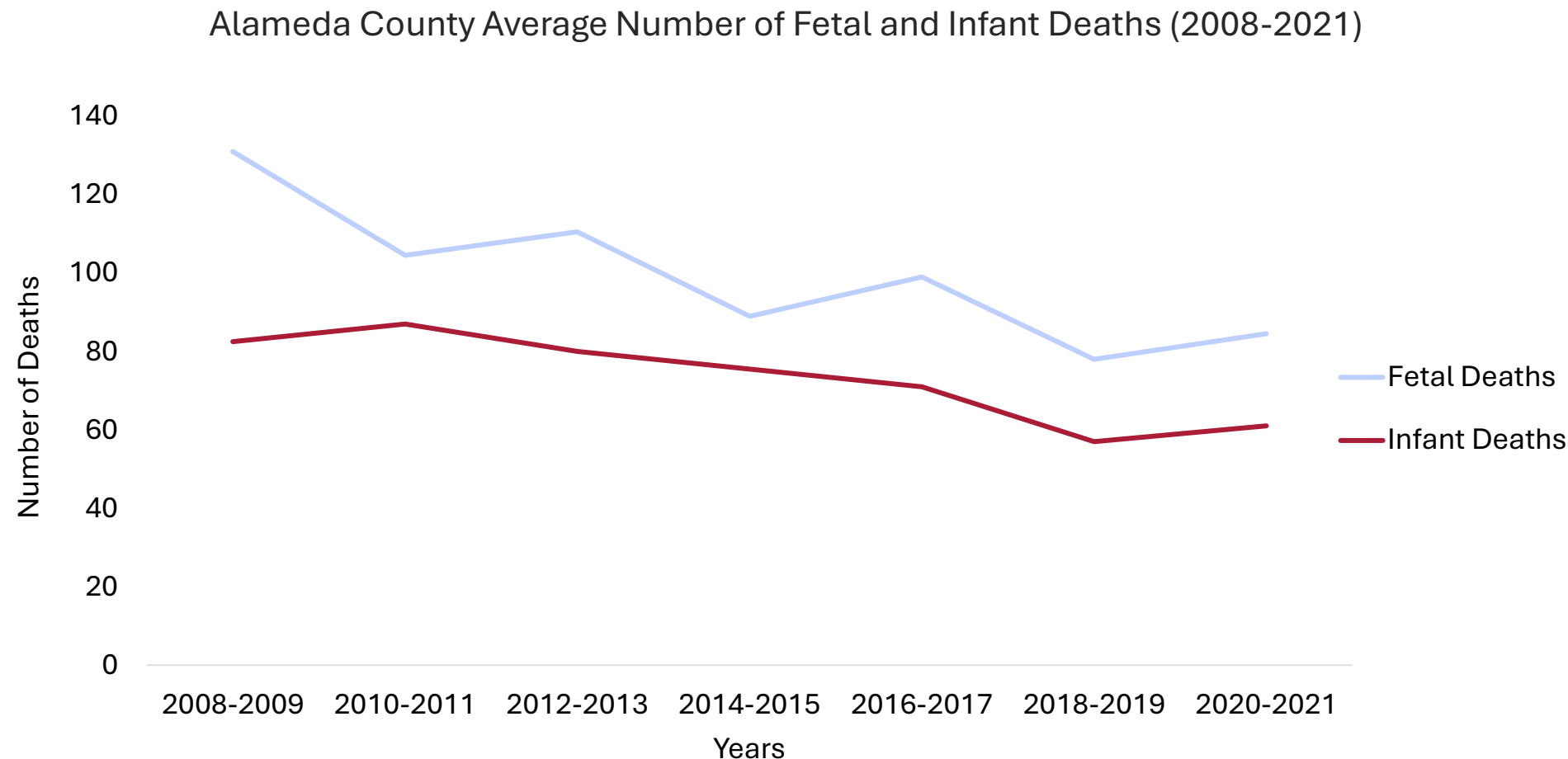
Alameda County* Rate of Severe Maternal Morbidity Among Pregnant Women and People, by Race/Ethnicity (2021-2023)



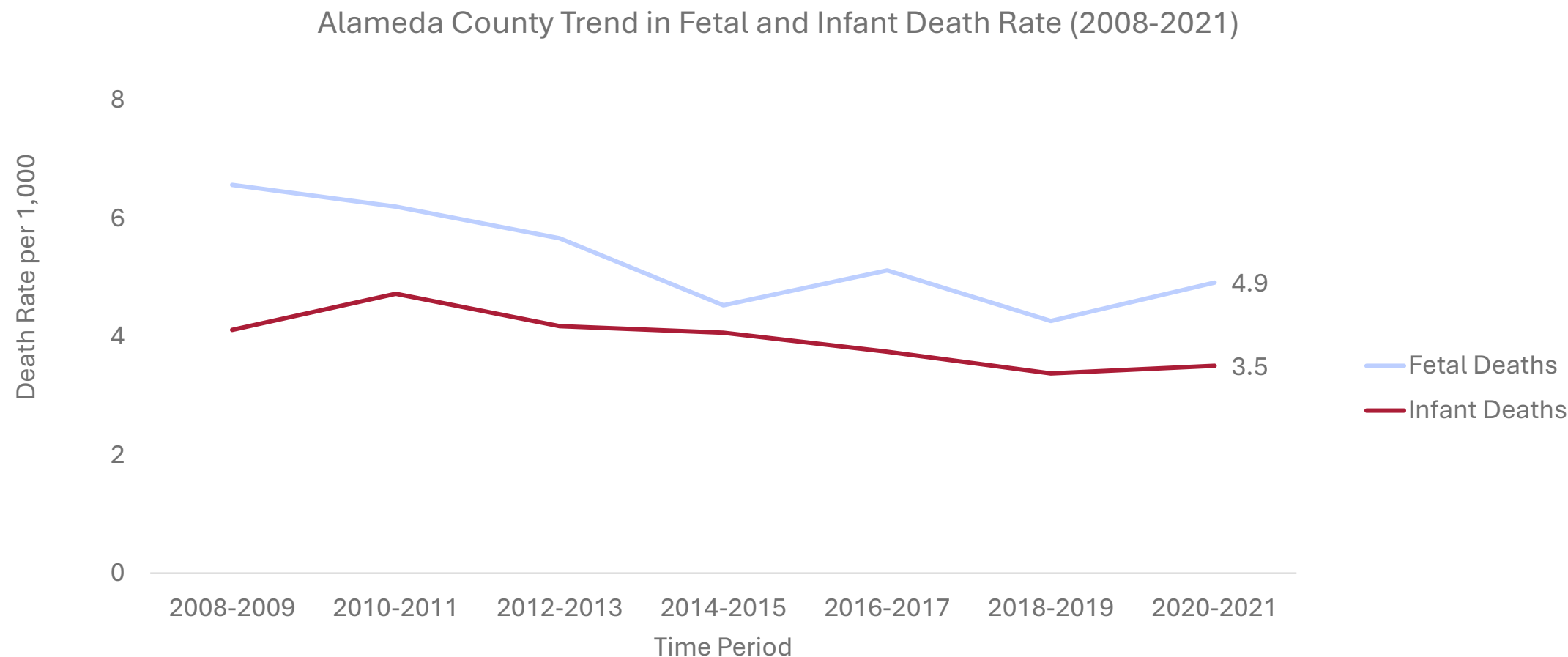
* = California value

Alameda County Infant Health Indicators

Overall, there is a decreasing trend in infant deaths

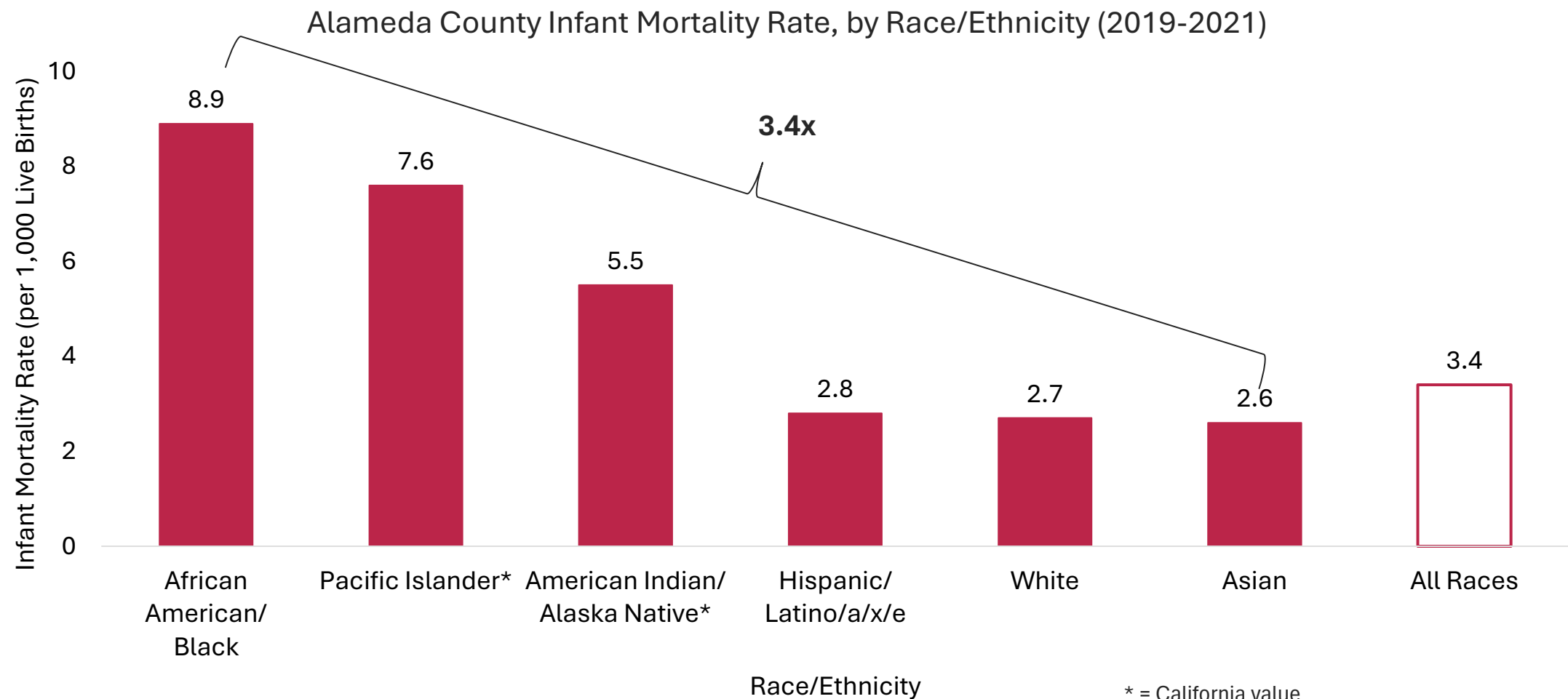


Overall decrease in infant mortality rate trend



Source: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Fetal Mortality Dashboard and Infant Mortality Dashboard

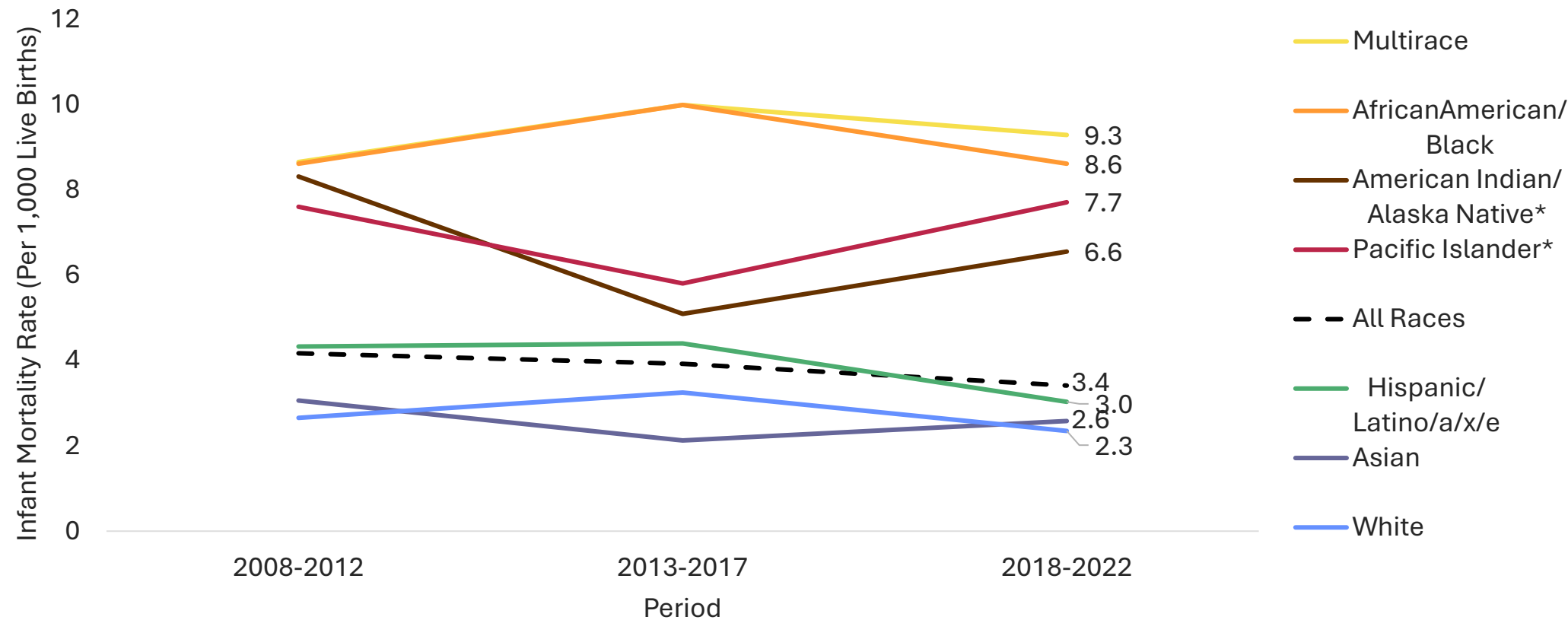
Infant Mortality Rate by Race/Ethnicity, 2019-2021



Source: CAPE, with data from Alameda County Vital Statistics files, 2019-2021
CA data from California Department of Public Health, Center for Family Health,
Maternal, Child and Adolescent Health Division, Infant Mortality Dashboard

Infant Mortality Rate inequity has persisted over time

Alameda County* Trend in Infant Mortality Rate, by Race/Ethnicity, Alameda County
(2008-2022)



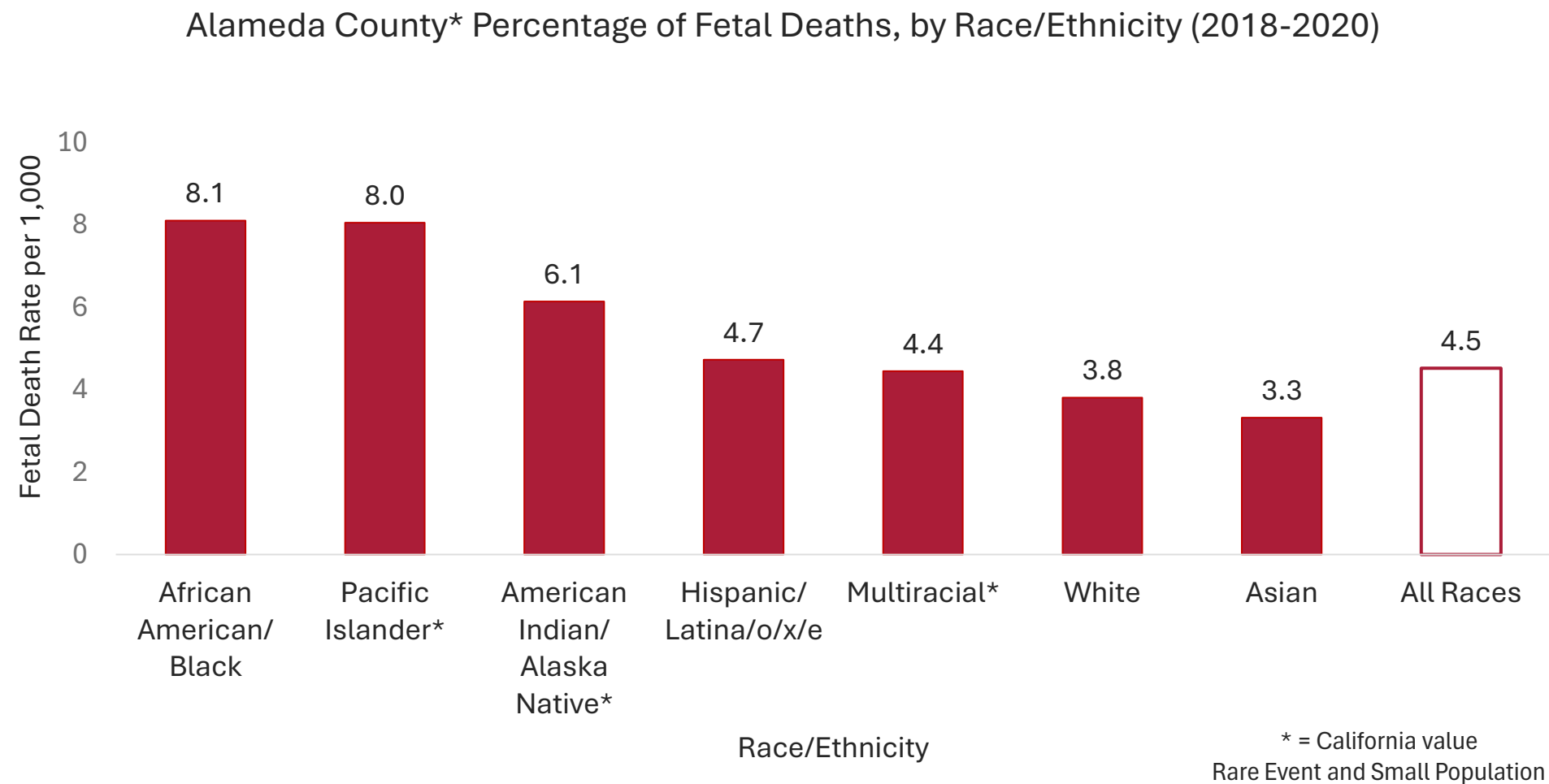
* = California value
Rare Event and Small Population

Source: CAPE, with data from Alameda County Vital Statistics files, 2008-2020
* Source: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Fetal Mortality Dashboard

Leading causes of infant mortality

Rank	Leading Causes of Infant Deaths 2020-2022
1	Congenital malformations, deformations and chromosomal abnormalities
2	Disorders related to short gestation and low birth weight, not elsewhere classified
3	Sudden infant death syndrome
4	Accidents (unintentional injuries)
5	Newborn affected by maternal complications of pregnancy
6	Intrauterine hypoxia and birth asphyxia
7	Newborn affected by complications of placenta, cord and membranes
8	Neonatal hemorrhage
9	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
10	All other causes

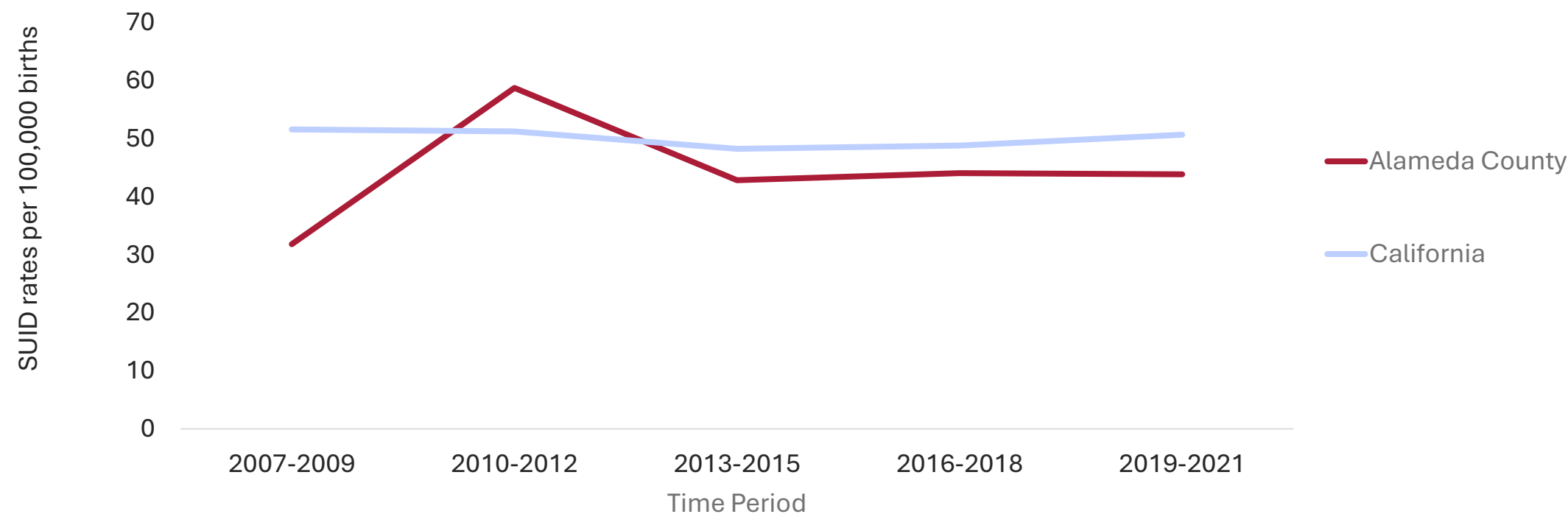
Inequities in fetal deaths



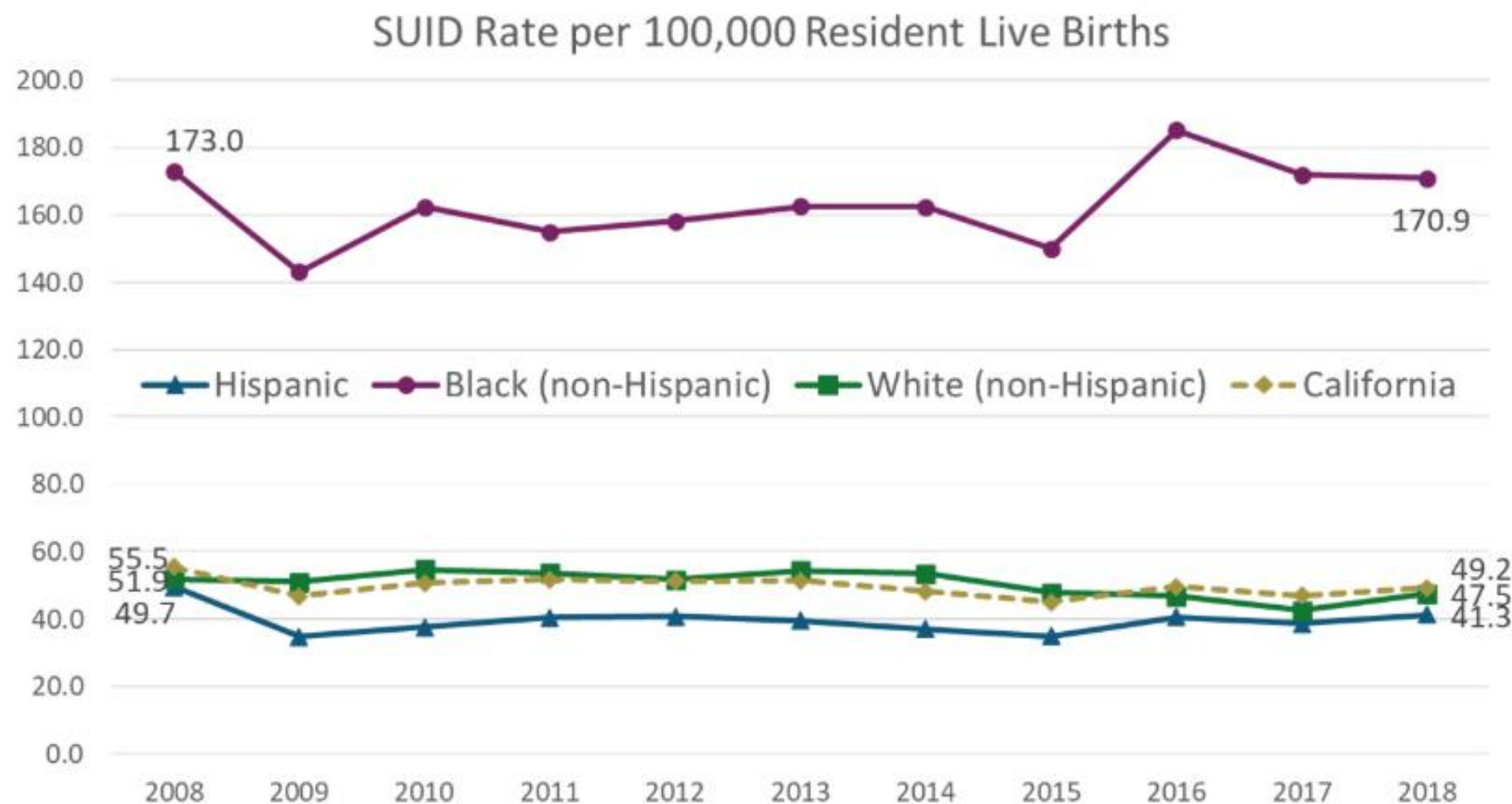
Source: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Fetal Mortality Dashboard and Fetal Mortality Dashboard

Trend in Sudden Unexpected Infant Deaths (SUID), Alameda County and California

Alameda County and California Trends in SUID Rates (2007-2021)

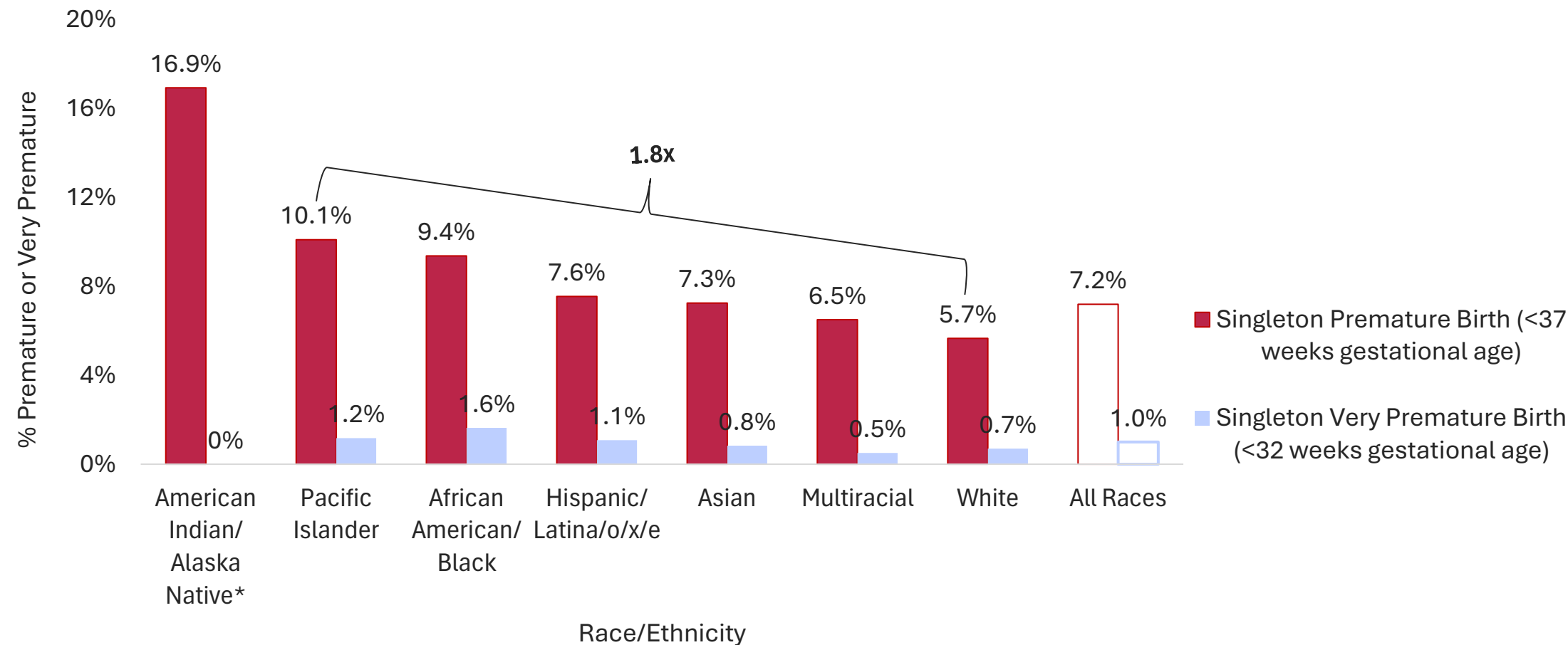


Inequities in Sudden Unexpected Infant Death, California (2008-2018)



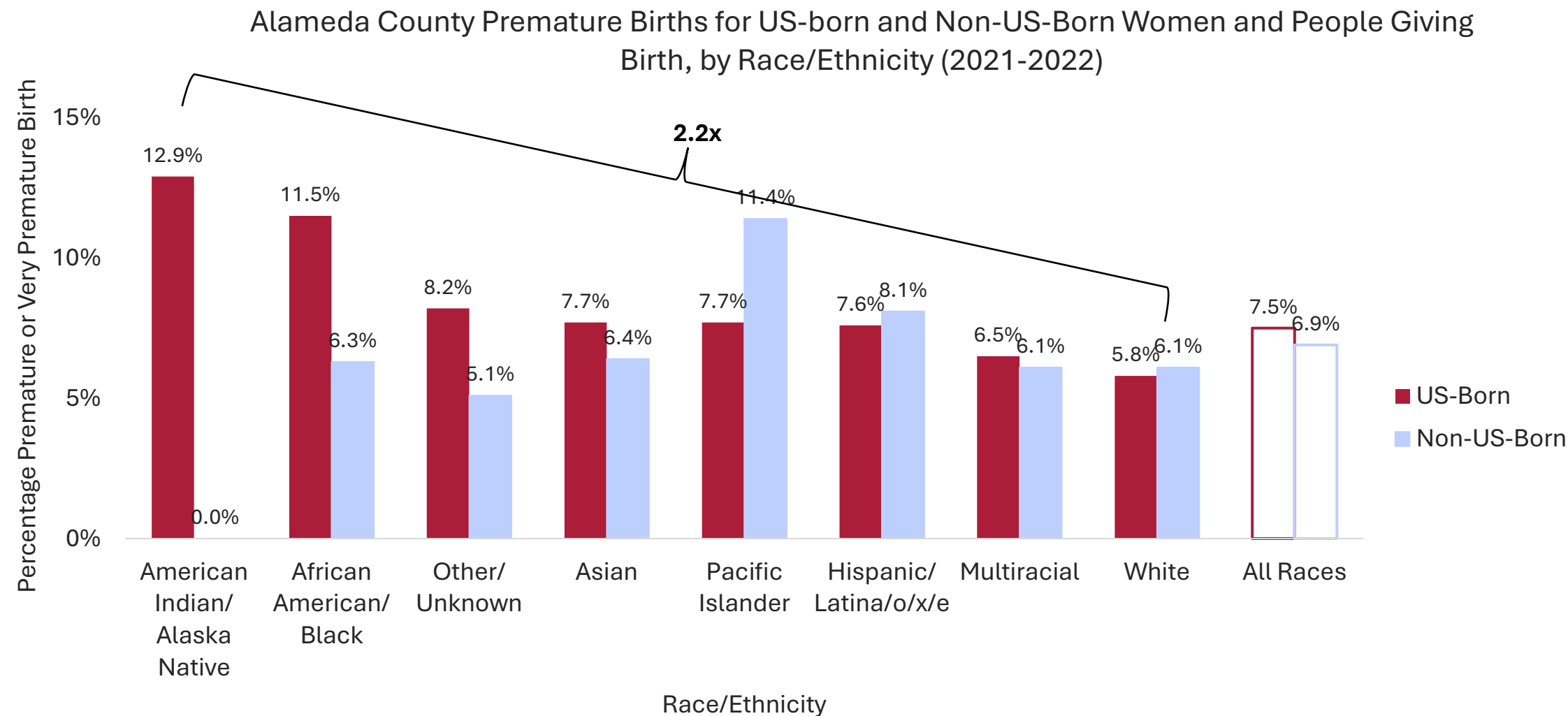
Inequities in Singleton premature births

Alameda County Premature Birth and Very Premature Birth, by Race/Ethnicity (2020-2022)



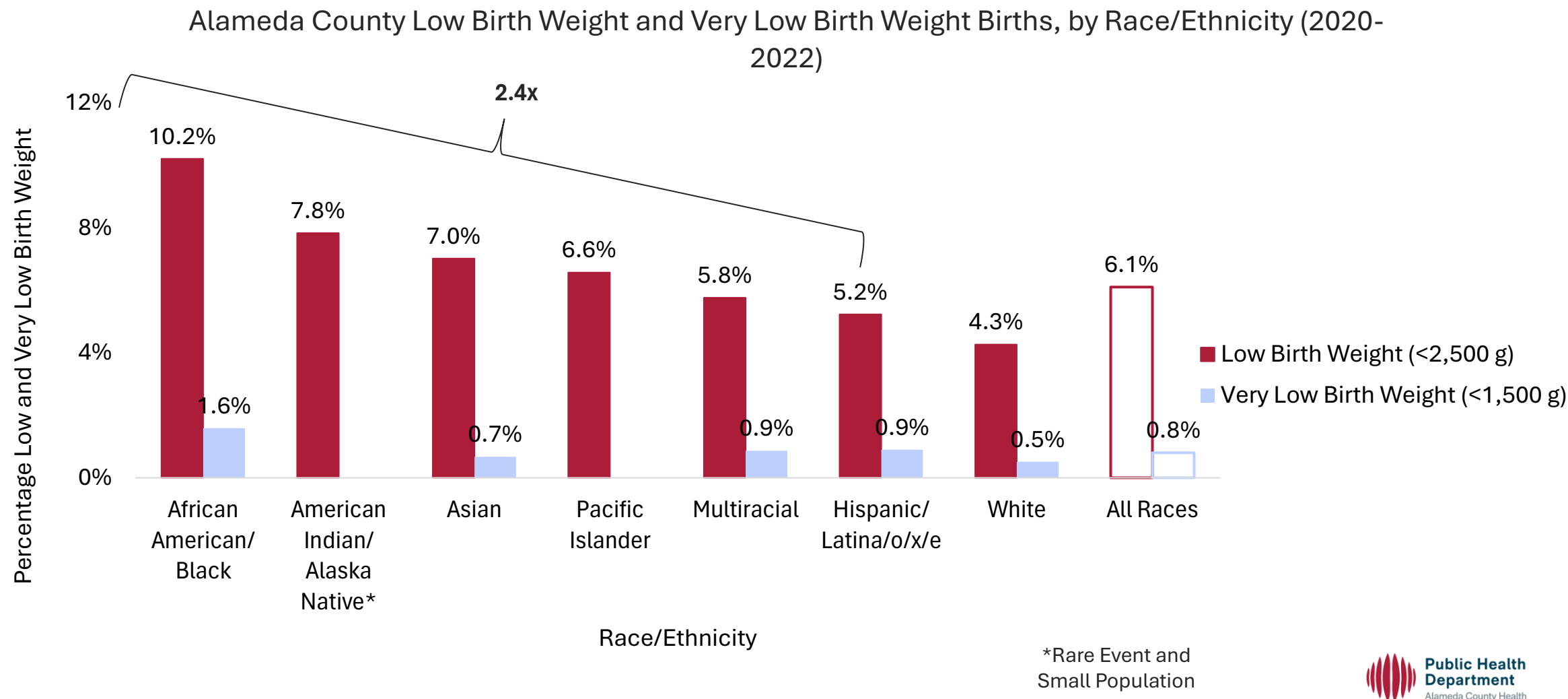
* = California value
Rare Event and Small Population

Inequities in premature births



Source: CAPE, with data from Alameda County Vital Statistics files, 2020-2022

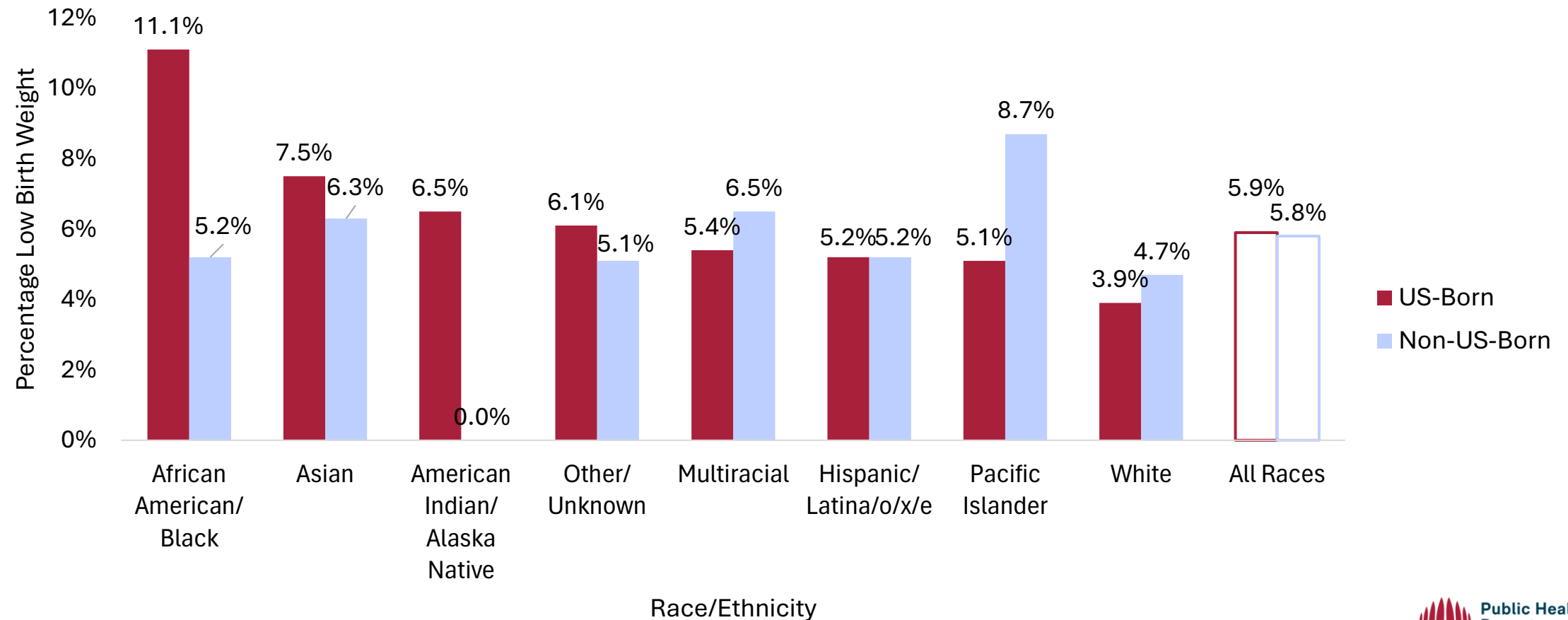
Inequities in low birth weight



Source: CAPE, with data from Alameda County Vital Statistics files, 2020-2022

Inequities in low birthweight births

Alameda County Low Birthweight Births for US-Born and Non-US-Born Women and People Giving Birth, by Race/Ethnicity (2021-2022)



Alameda County Breastfeeding and Infant Sleep

Structural Drivers of Breastfeeding and Infant Care Practices

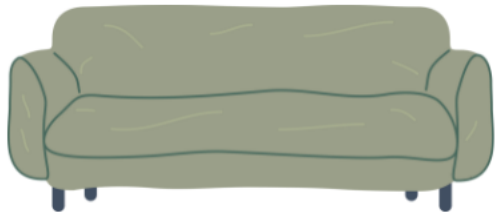


No Guaranteed Paid Family Leave

*Time with Baby
Pumping Accommodations at Work*

Safe and Stable Housing

*Black/African American and
Hispanic/Latino/a/x/e women and
people giving birth report higher
rates of homelessness*



Prenatal and Postpartum Care

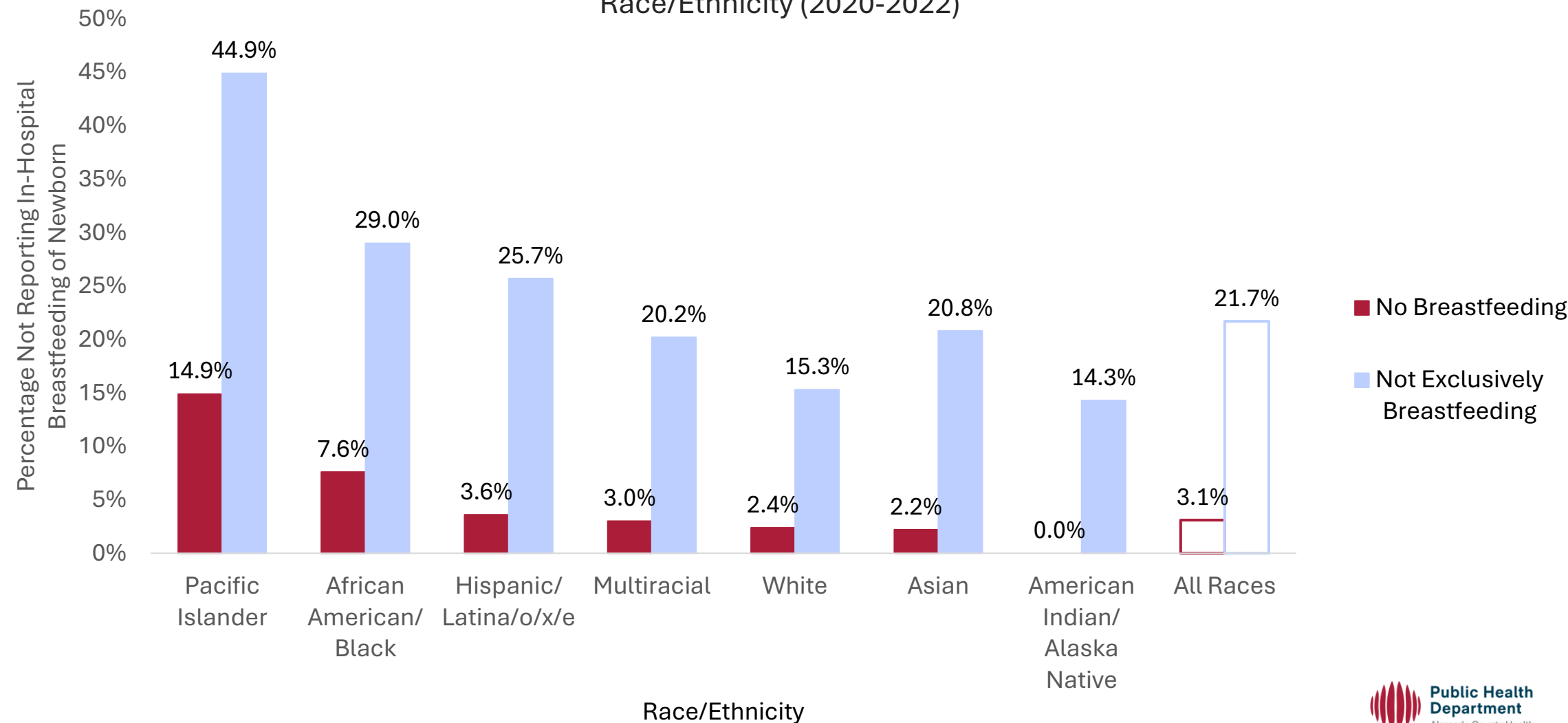
*Lactation Support/Coaching
Infant Care Education*



Due to structural racism and differences in socioeconomic position, some women and people giving birth have more time and resources to spend on lactation supports, supplies, and infant care education

Inequities in-hospital breastfeeding initiation

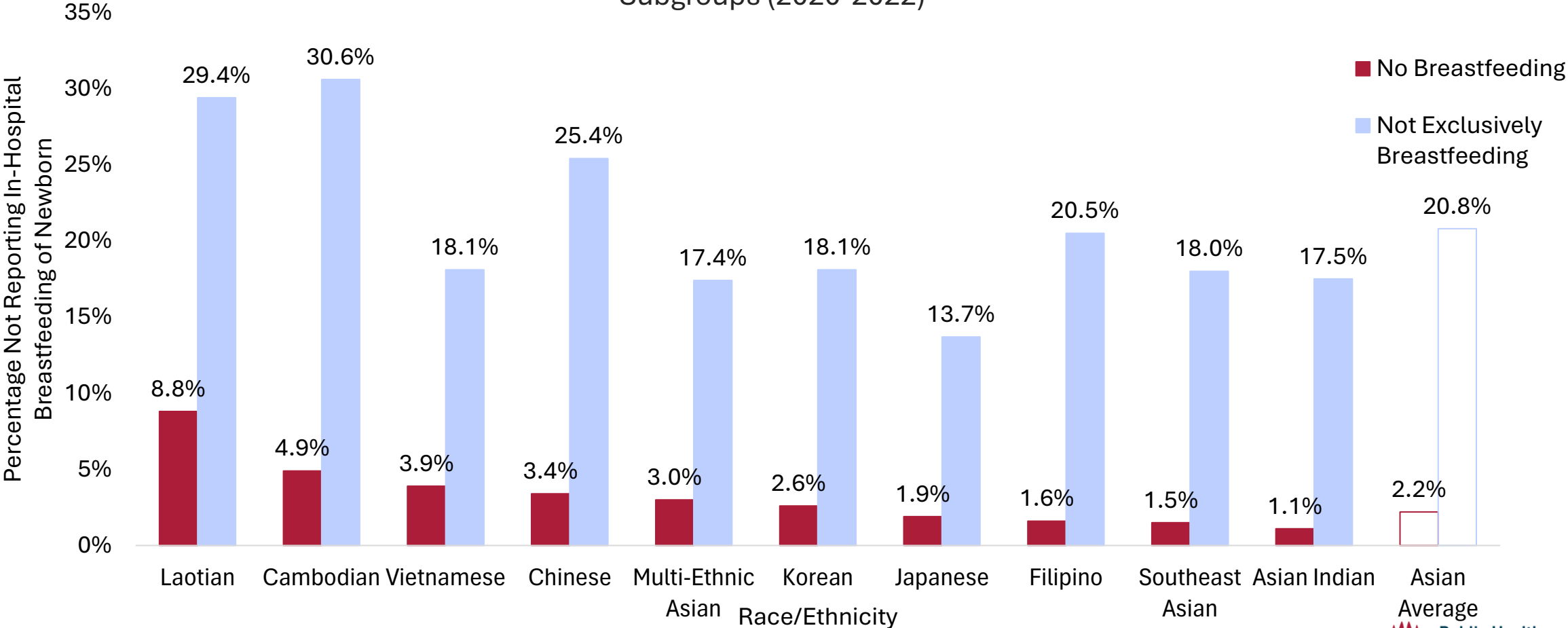
Alameda County Percentage of Women and Pregnant People Not Breastfeeding In Hospital, by Race/Ethnicity (2020-2022)



Source: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Breastfeeding Initiation Dashboard

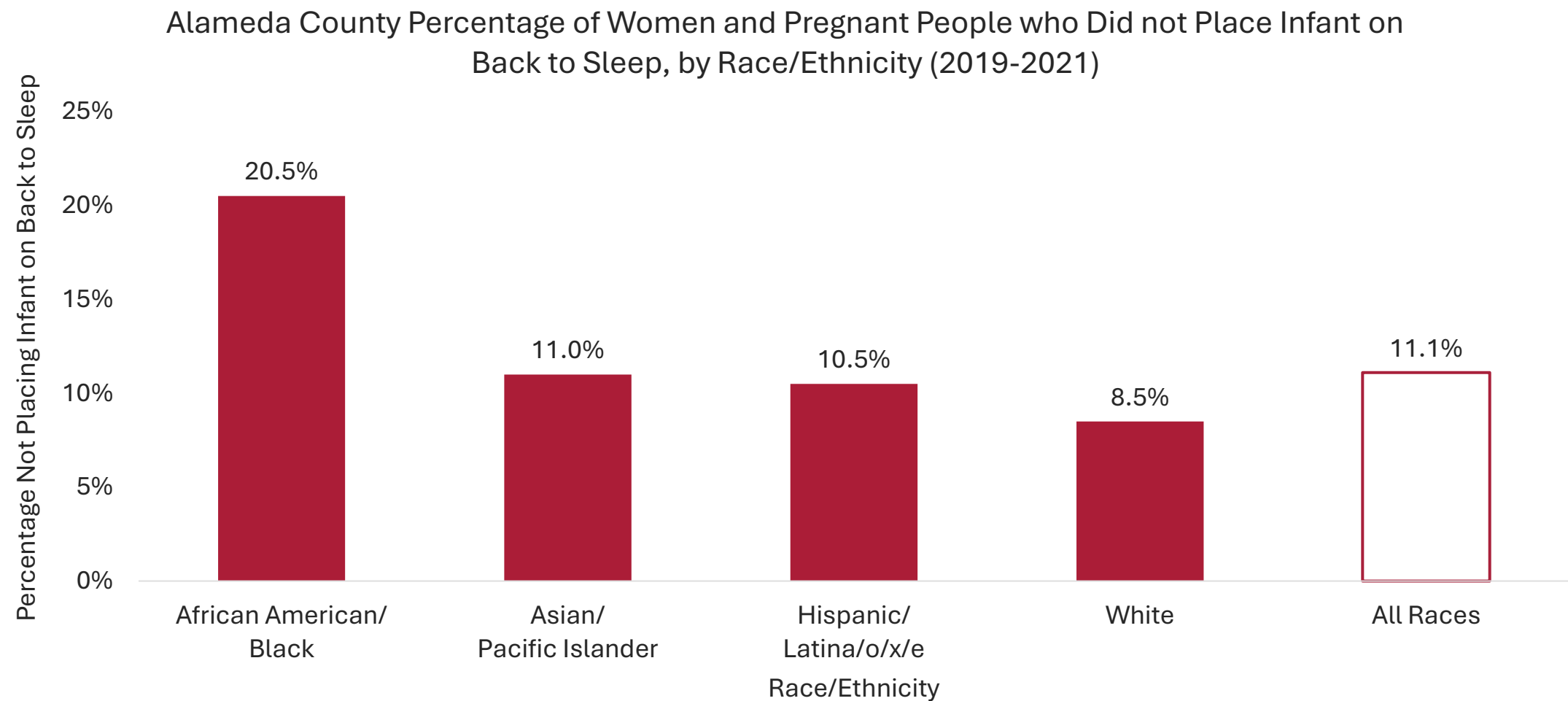
Inequities in breastfeeding initiation within Asian subgroups

Alameda County Percentage of Women and Pregnant People Not Breastfeeding In Hospital, Asian Subgroups (2020-2022)

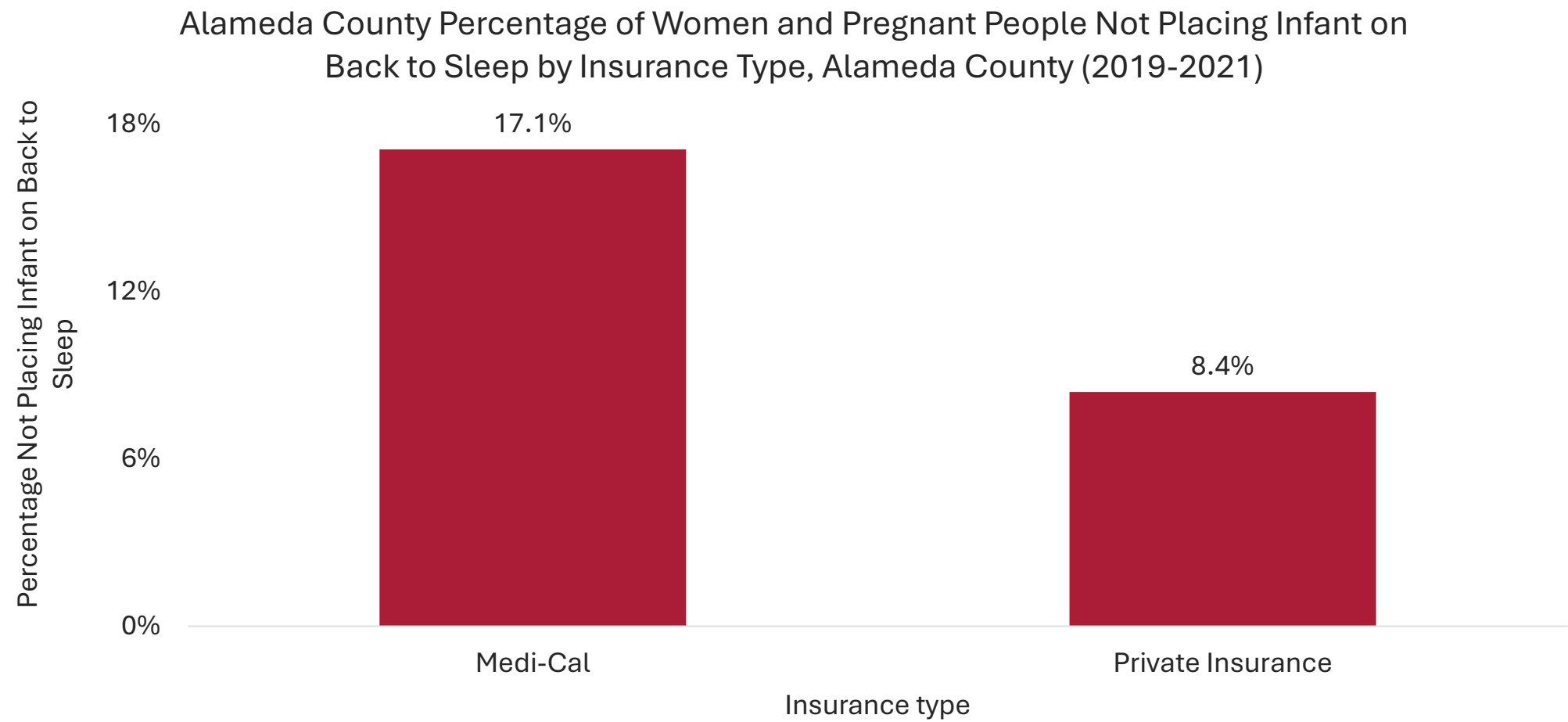


Source: California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, Breastfeeding Initiation Dashboard

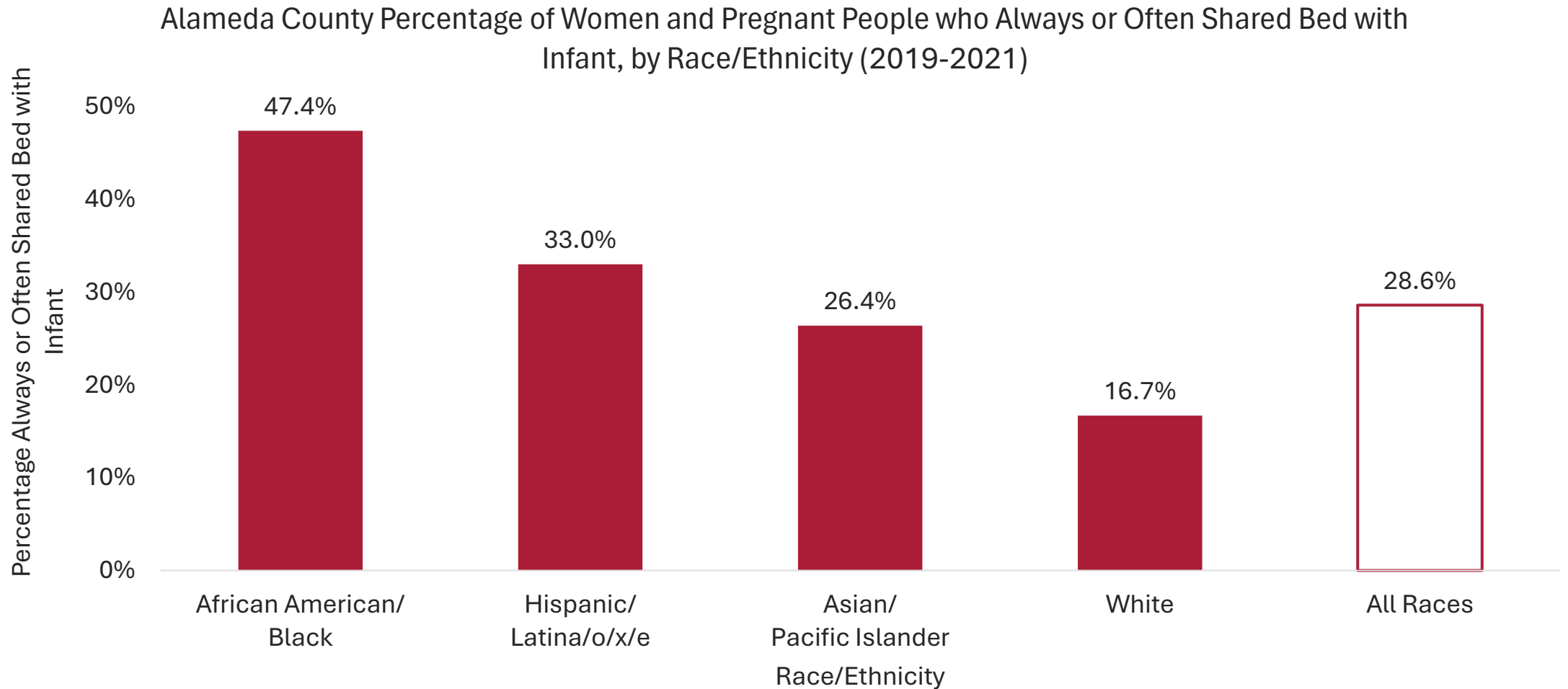
Approximately 1 in 10 families did not place infant on back to sleep



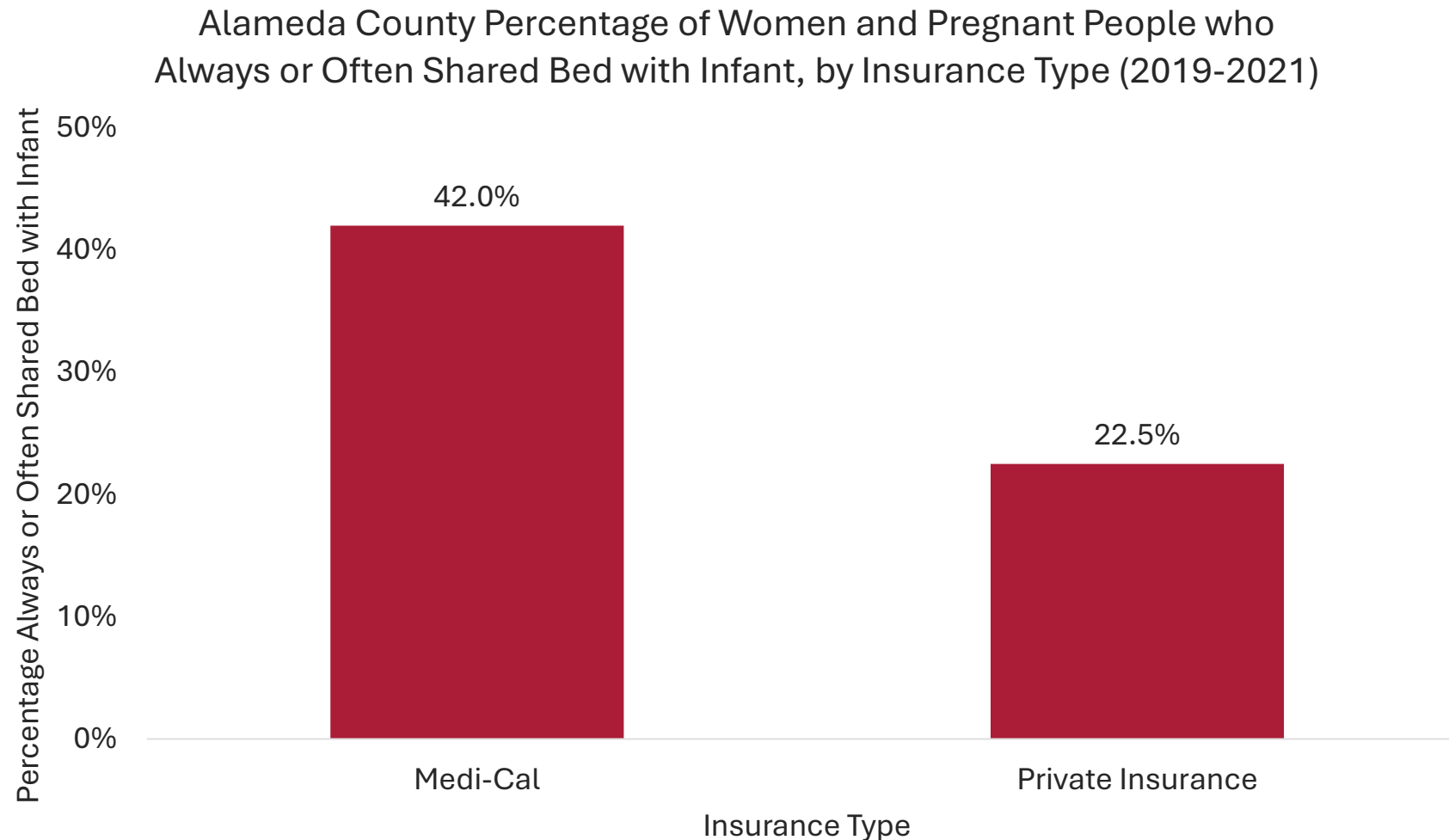
Medi-Cal covered families had higher percentage not placing infant on back to sleep



Inequities in bed sharing



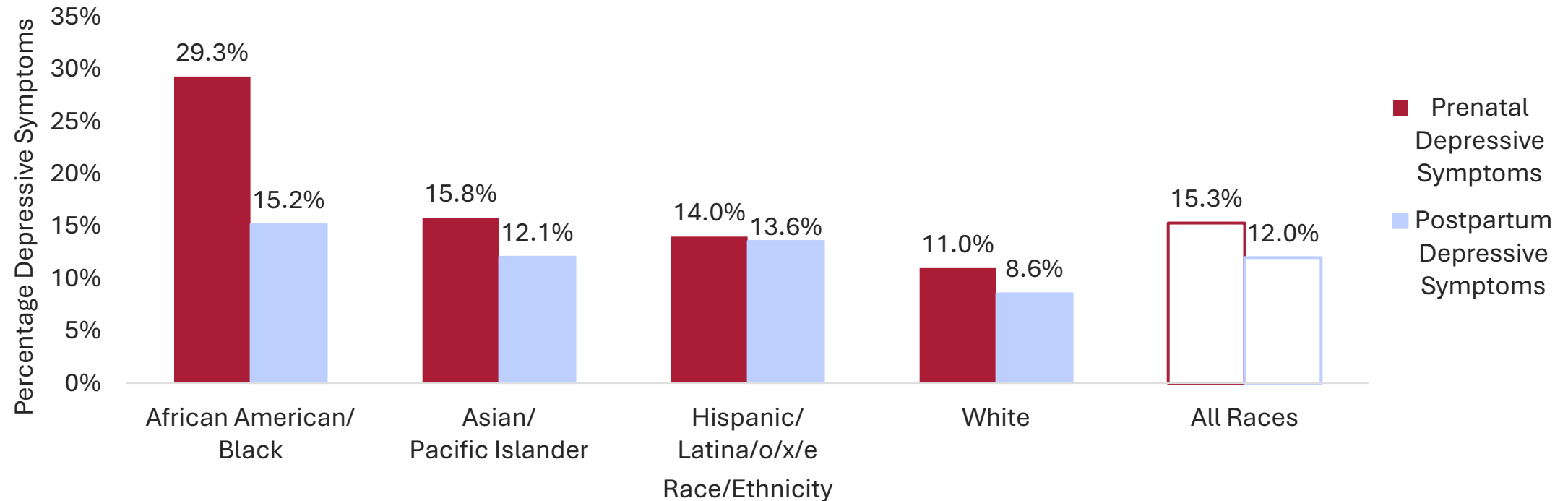
Inequities in bed sharing by insurance type



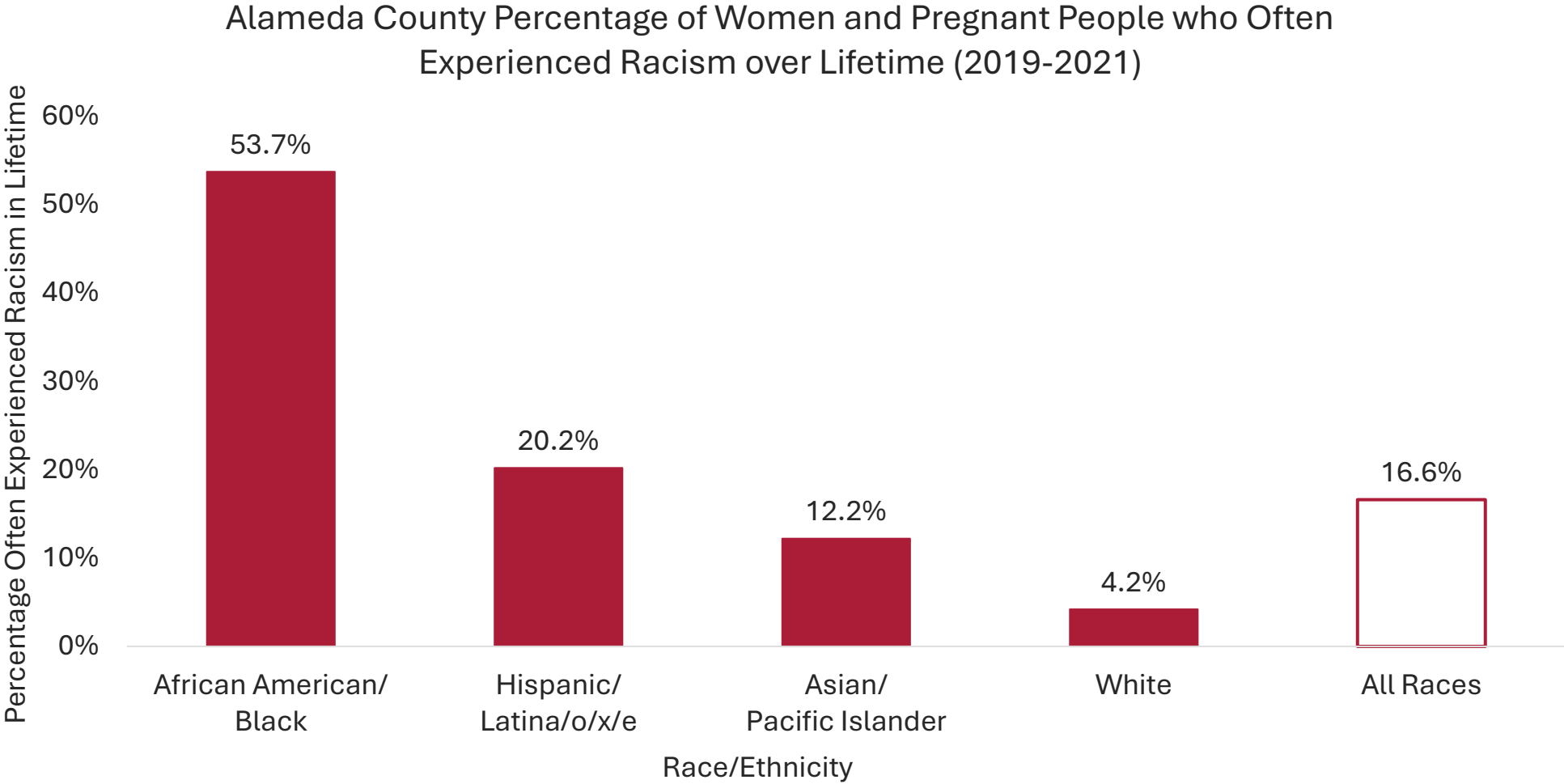
Alameda County Perinatal Mental Health

Inequities in depressive symptoms

Alameda County Percentage of Women and Pregnant People who Experienced Depressive Symptoms During or After Pregnancy (2019-2021)



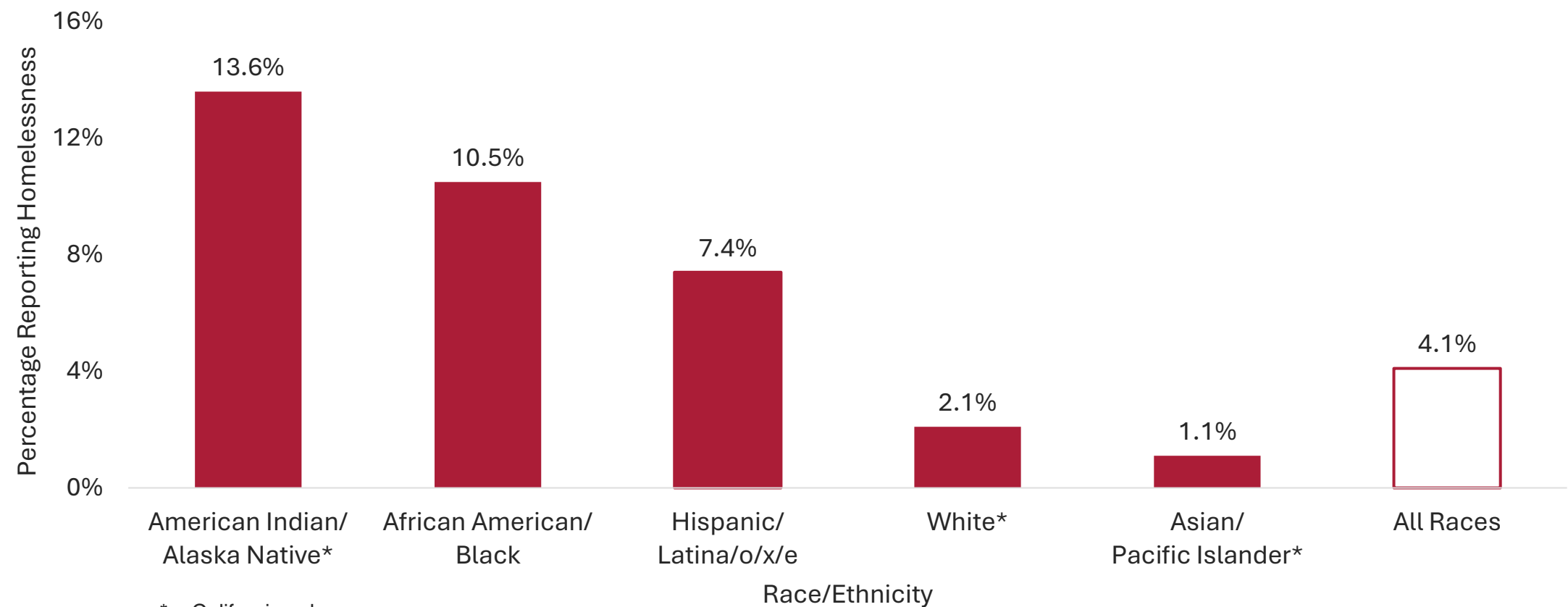
Experiencing racism



Alameda County Perinatal Economic Hardships and Healthcare Utilization

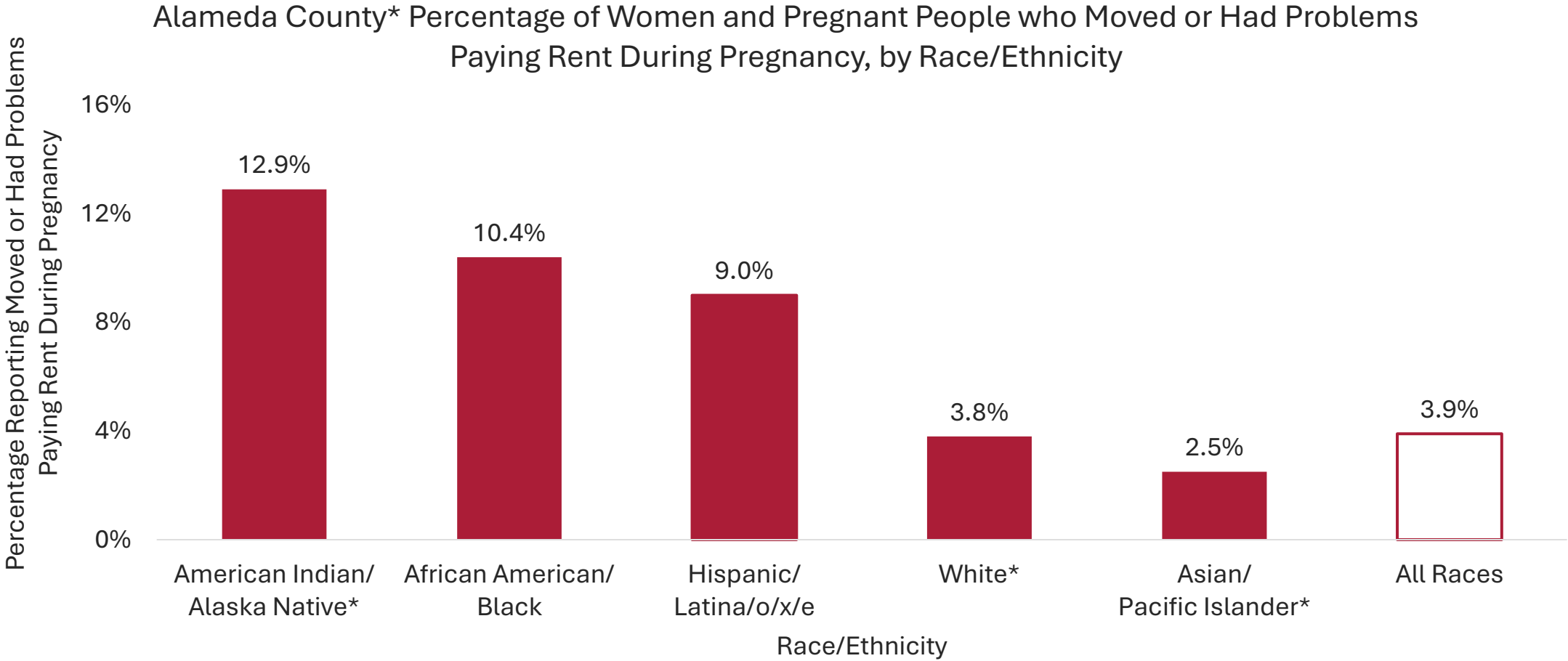
Inequities in homelessness or not have a place to sleep during pregnancy

Alameda County* Percentage of Women and Pregnant People who were Homeless or Did Not Have a Place to Sleep During Pregnancy (2019-2021)



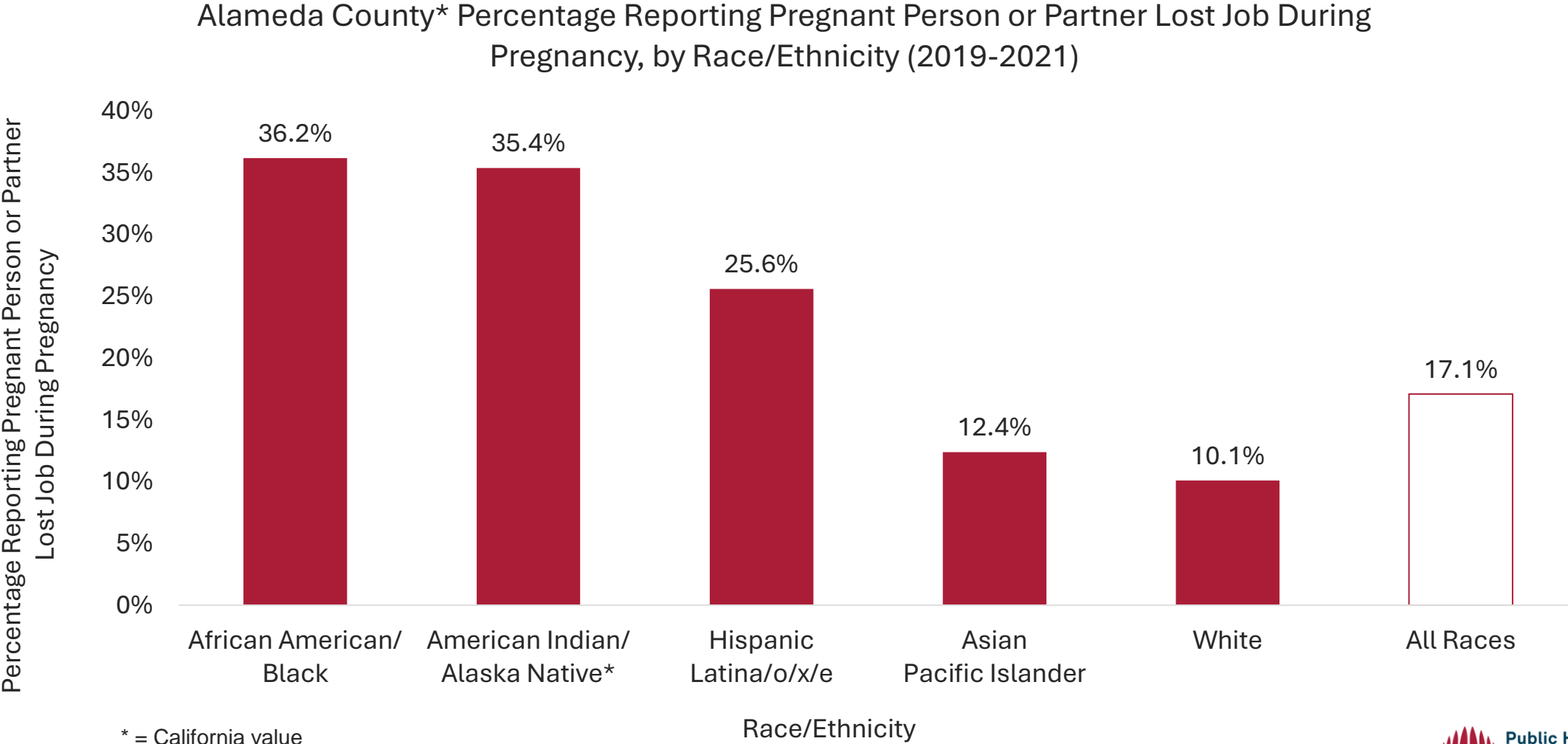
* = California value

Inequities in housing insecurity



* = California value

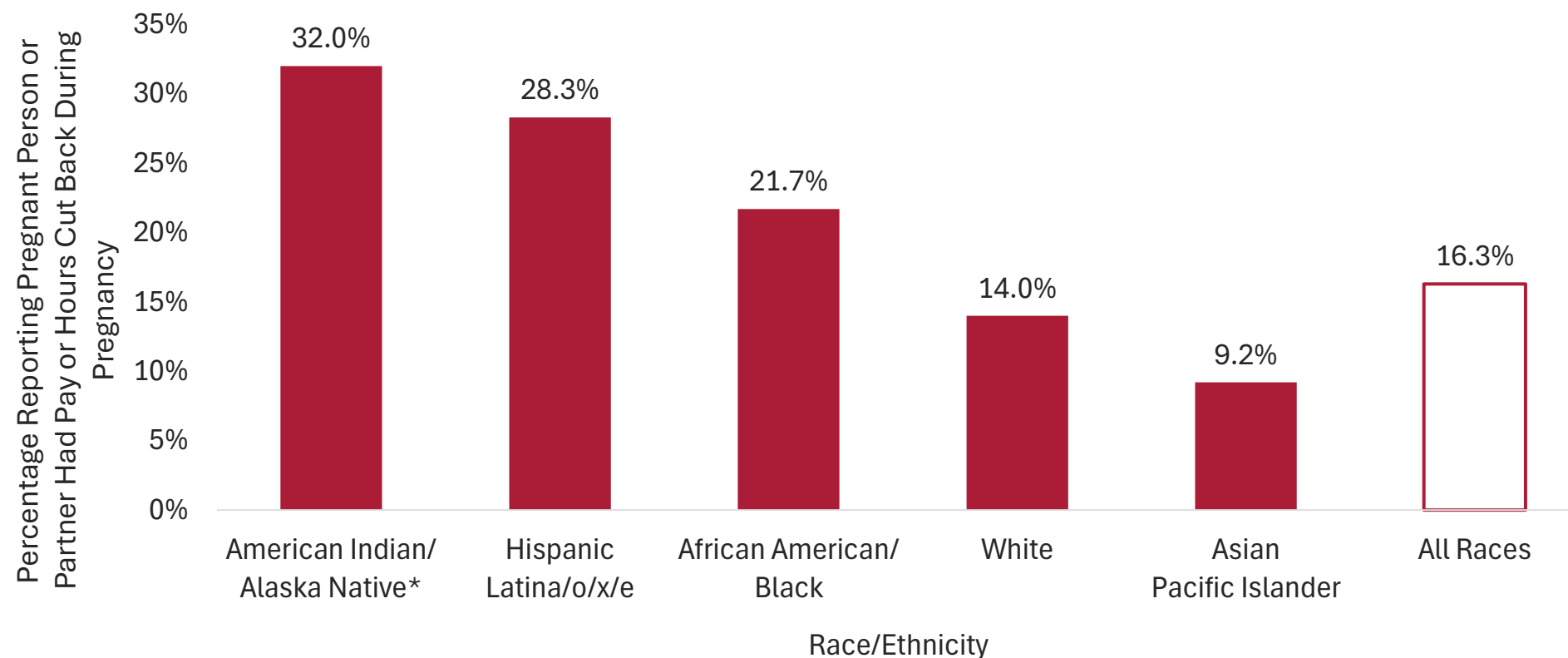
Inequities in pregnant people or their partners experiencing job loss



Source: Maternal and Infant Health Assessment, 2019-2021

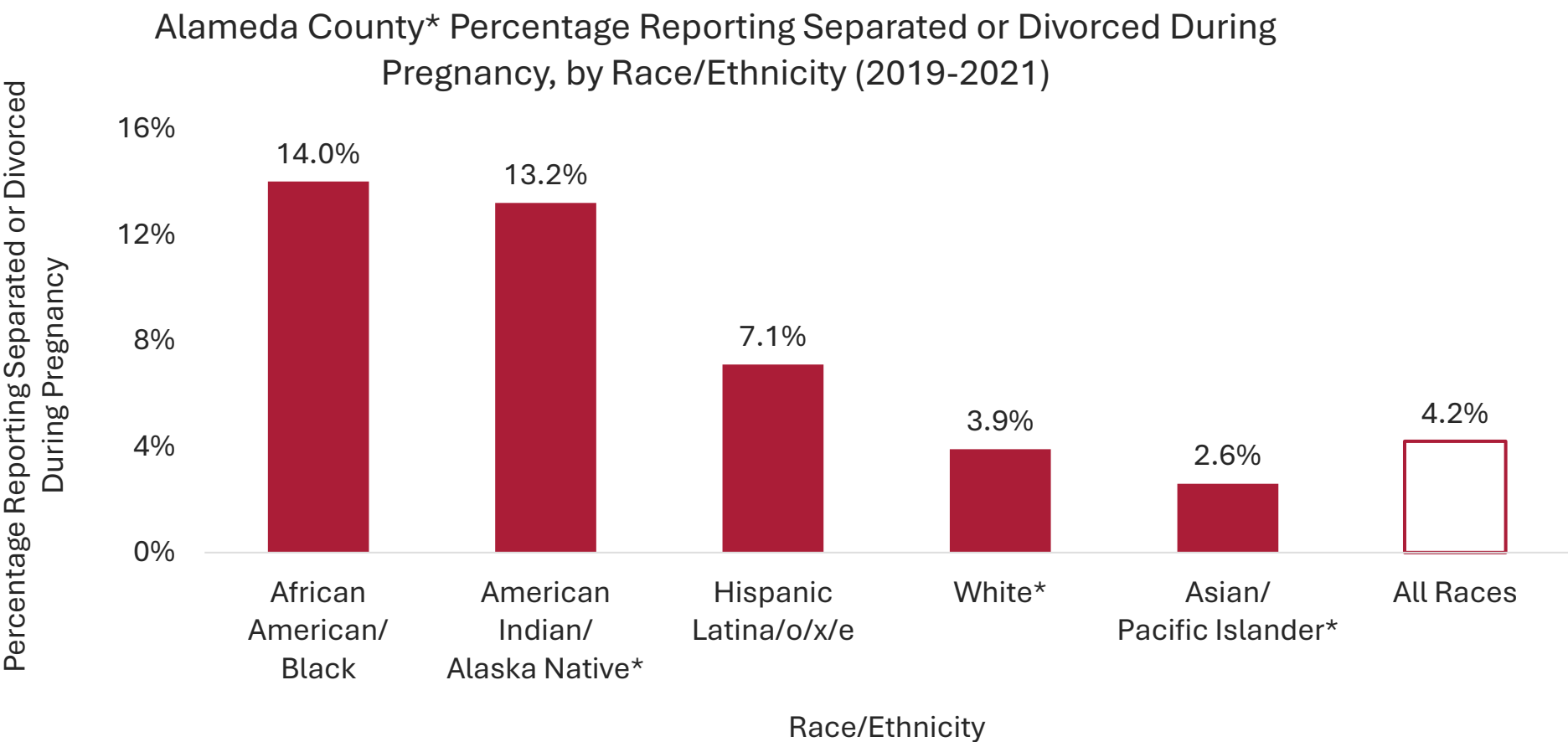
Inequities in Pregnant Person or Partner Had Pay or Hours Cut Back

Alameda County* Percentage Reporting Pregnant Person or Partner Had Pay or Hours Cut Back During Pregnancy, by Race/Ethnicity (2019-2021)



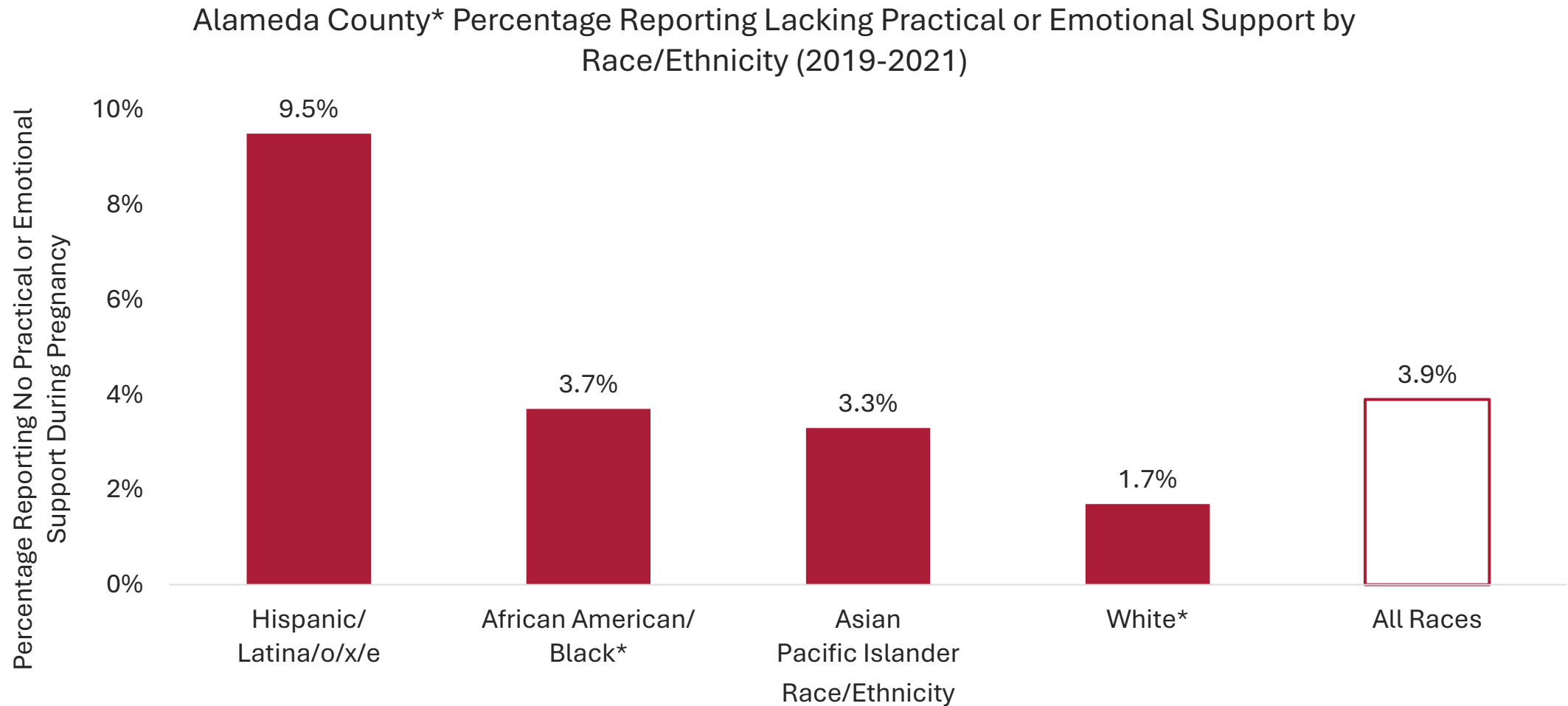
* = California value

Inequities in becoming separated or divorced during pregnancy

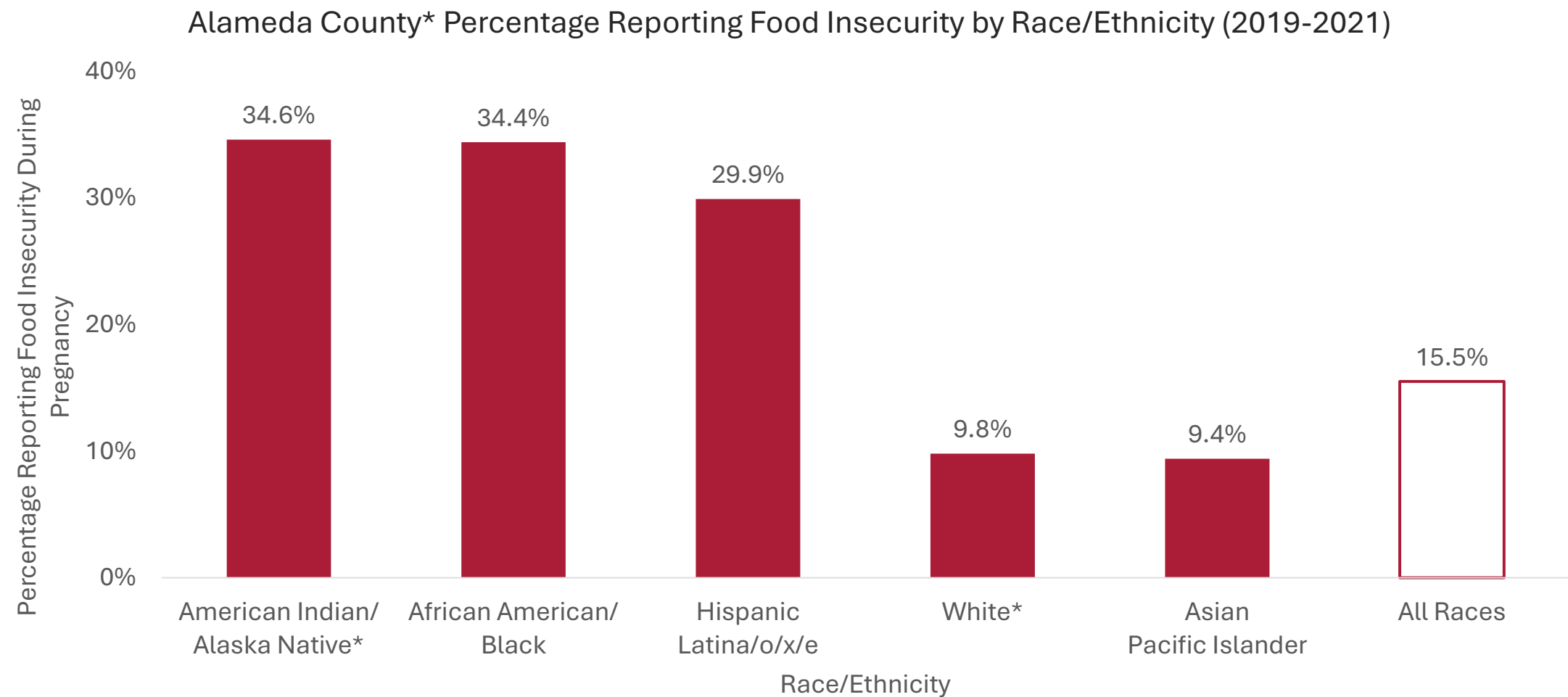


* = California value

Inequities in practical or emotional support



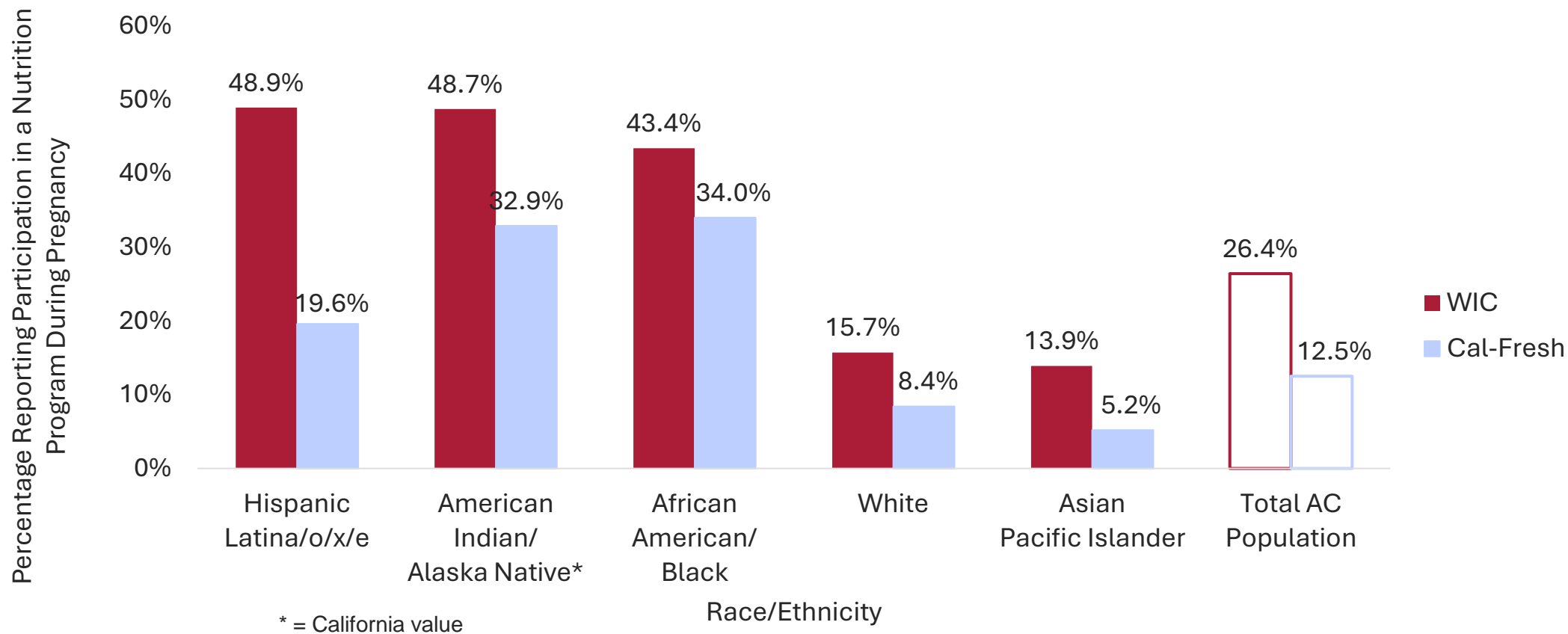
Inequities in food insecurity during pregnancy, 2019-2021



Source: Maternal and Infant Health Assessment, 2019-2021

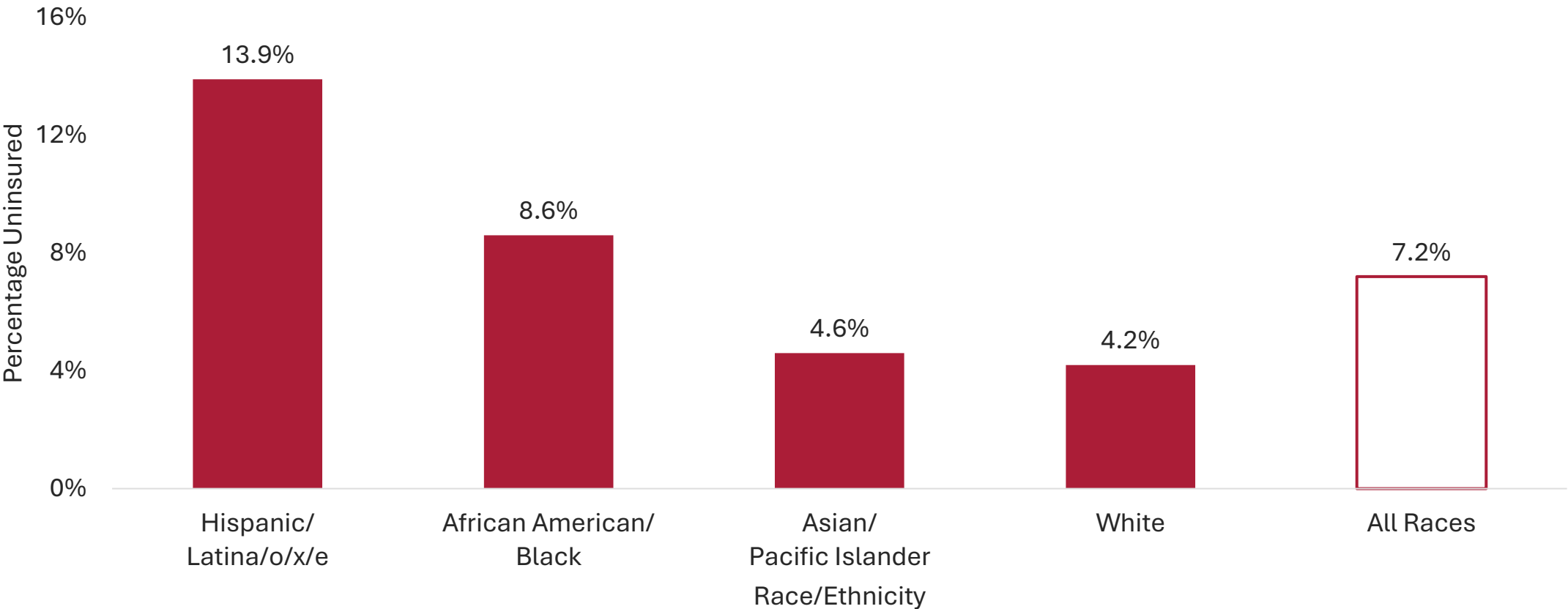
Racial and ethnic differences in participation in nutrition programs during pregnancy

Alameda County Percentage of Women and Pregnant People Supported by Nutrition Programs, by Race/Ethnicity (2019-2021)



Inequities in being uninsured prior to pregnancy

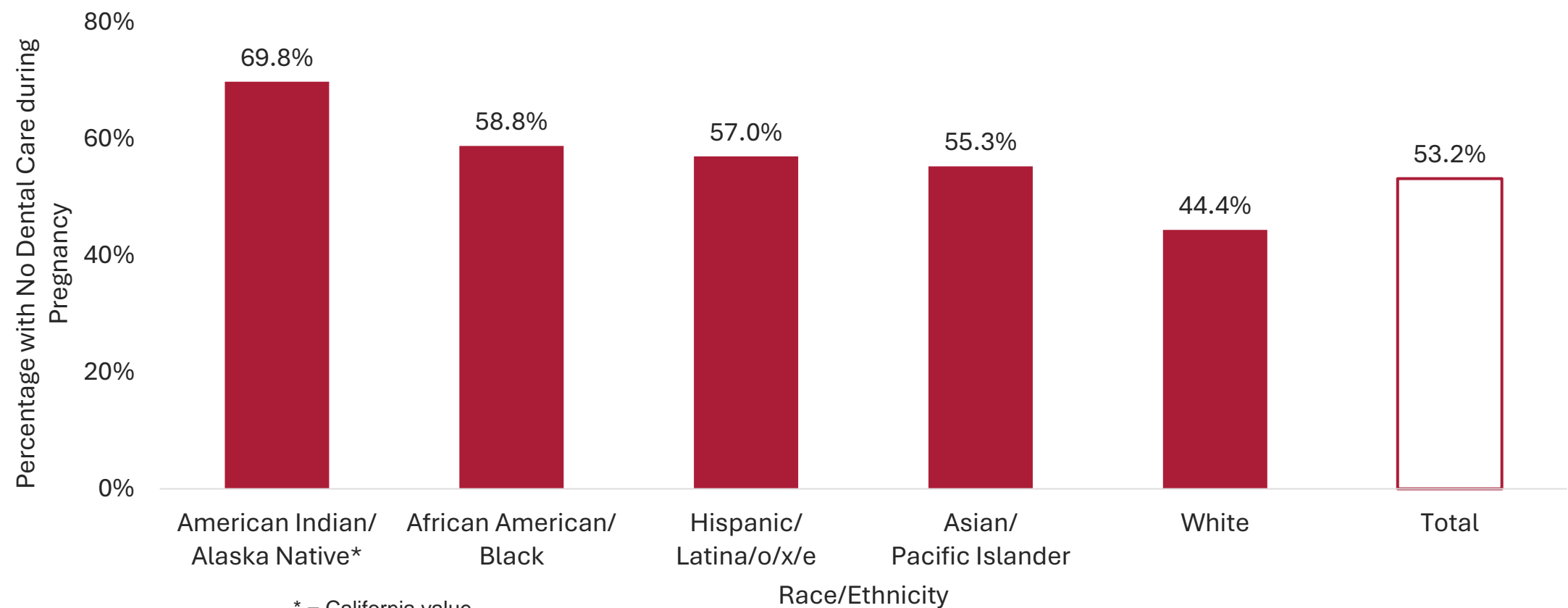
Alameda County Percentage of Women and Pregnant People who were Uninsured Pre-Pregnancy, by Race/Ethnicity (2019-2021)



* Other Race/Ethnicity estimates not shown because the relative standard error is > 50%, or fewer than 5 participants reported
Source: Maternal and Infant Health Assessment, 2019-2021

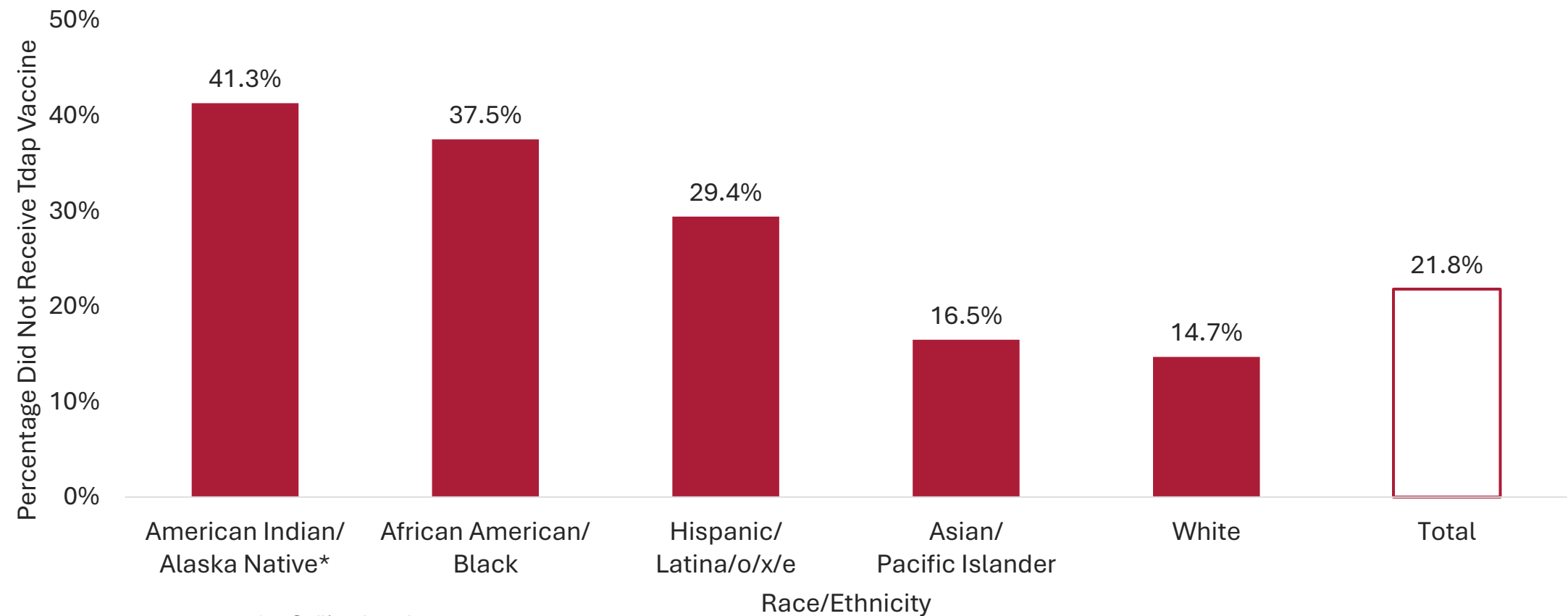
Inequities in receiving dental care during pregnancy, 2019-2021

Alameda County* Percentage of Women and Pregnant People who Did Not Receive Dental Care During Pregnancy, by Race/Ethnicity (2019-2021)



Inequities in Tdap vaccine during pregnancy

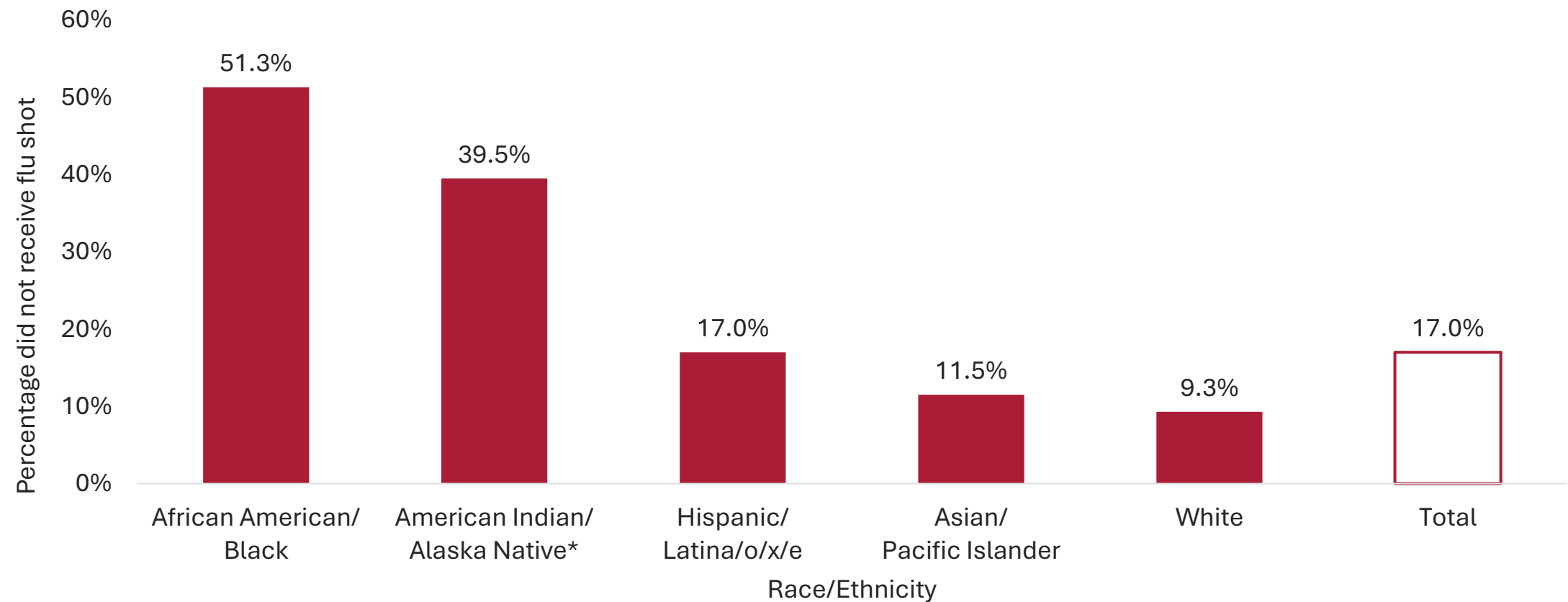
Alameda County Percentage of Women and Pregnant People who Did not Receive Tdap Vaccine During Pregnancy, by Race/Ethnicity (2019-2021)



* = California value

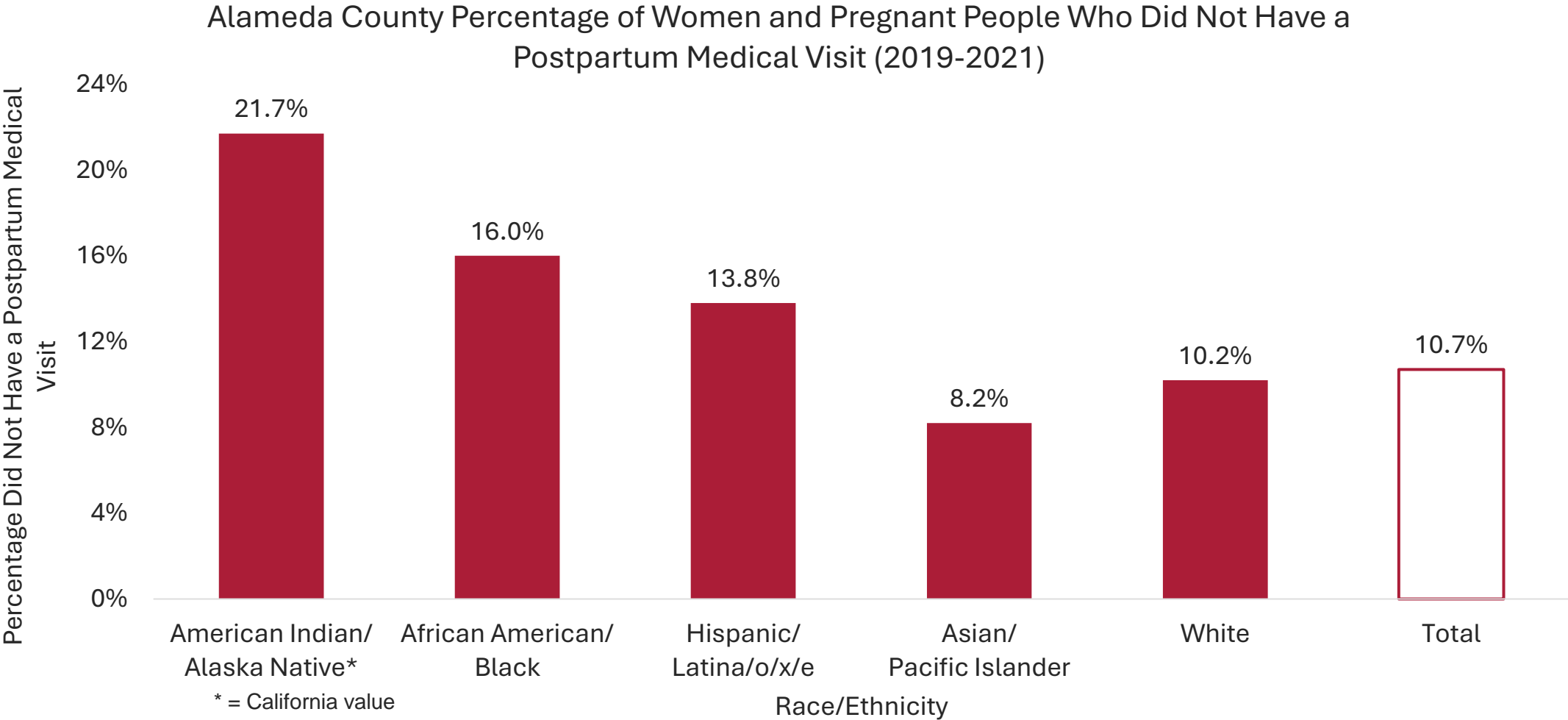
Inequities in receiving flu shot during pregnancy

Alameda County Percentage of Women and Pregnant People who Did Not Receive Flu Shot During Pregnancy, by Race/Ethnicity (2019-2021)



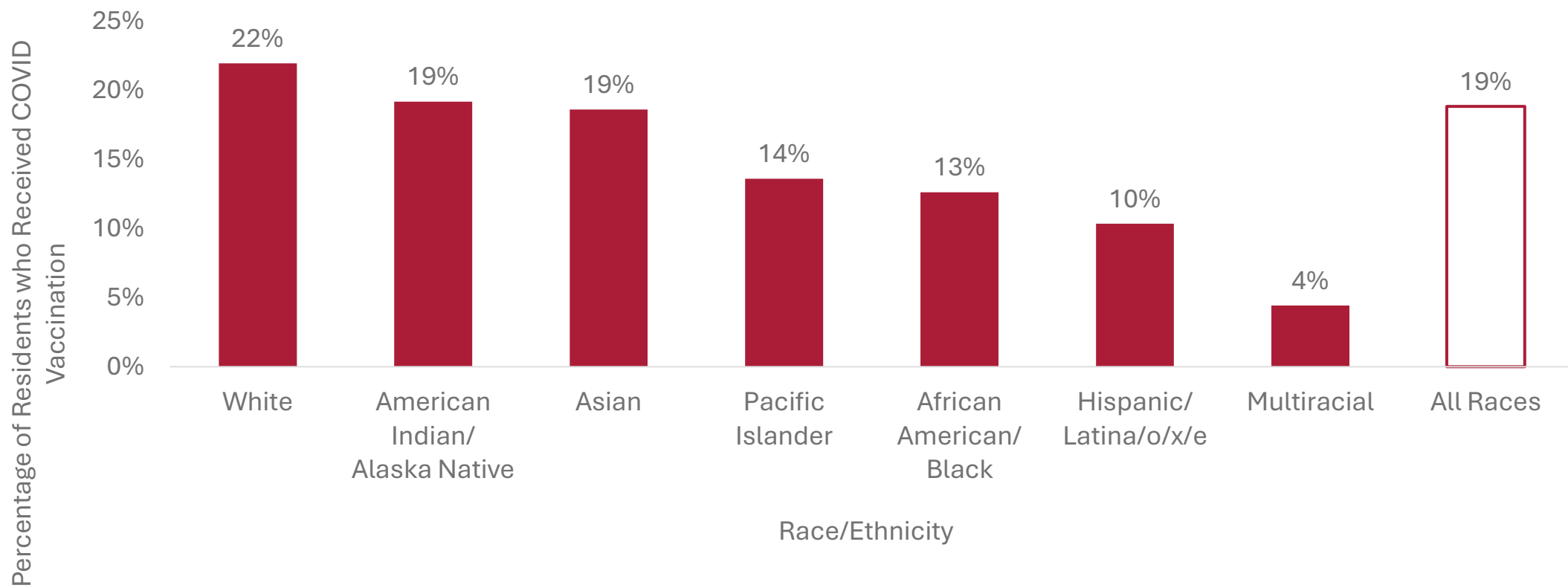
* = California value

Inequities in postpartum medical visit



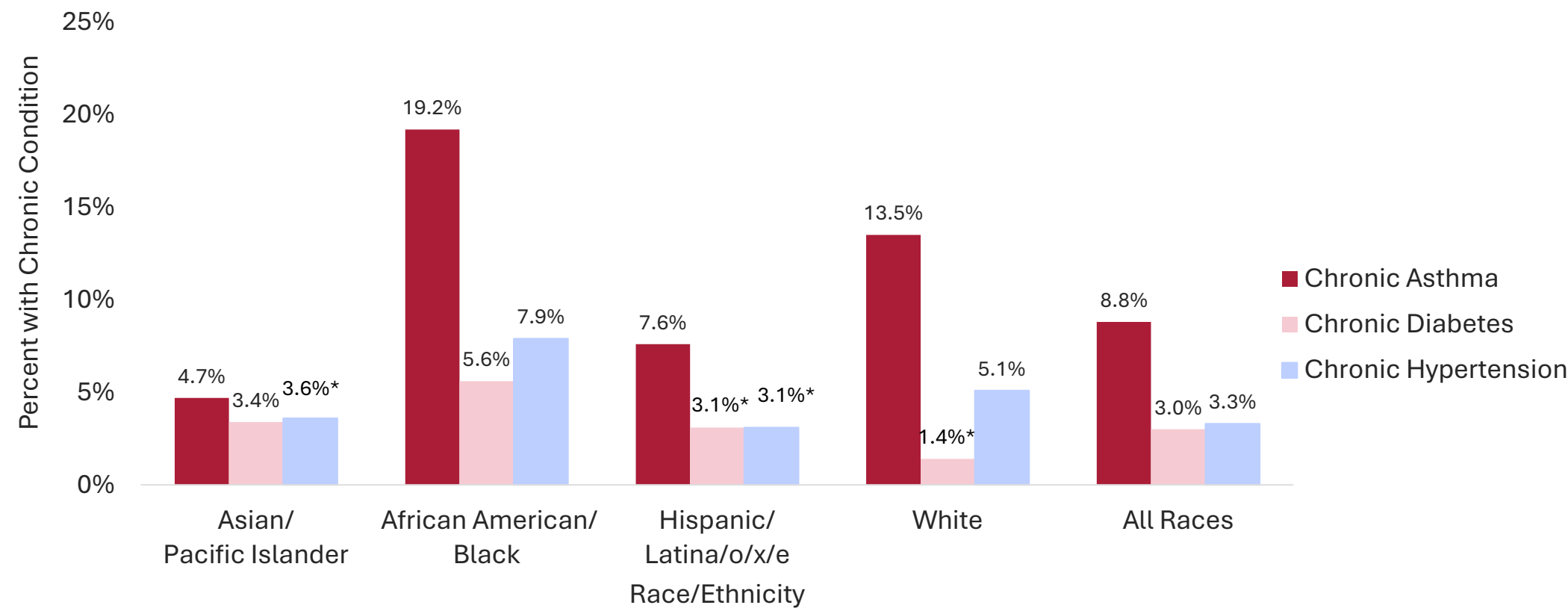
COVID-19 Vaccination Status

Alameda County Percentage of Residents Who Received COVID Vaccination, by Race/Ethnicity (2023)



Inequities in health before pregnancy

Alameda County* Percentage of Women and Pregnant People with Pre-pregnancy Chronic Conditions, by Race/Ethnicity (2019-2021)



*= CA value
Source: Maternal and Infant Health Assessment, 2019-2021

Population Health Data Sources



Databases



**California Comprehensive Birth File - CCBF
(Birth Certificates)**

**California Comprehensive Death File - CCDF
(Death Certificates)**

California Fetal Death File (Fetal Death Records)

California Birth Cohort File (Linked Birth and Death Records)

**California Hospital Data Files – HCAI
(Emergency Department Visits and Hospitalizations)**



Surveys



**California Maternal and Infant Health Assessment - MIHA
(Statewide Survey of Postpartum Women)**

**US American Community Survey
(National Survey of US Households)**

**California Health Interview Survey - CHIS
(Statewide Survey of CA Households)**

Strengths & Limitations of Population Health Data

Strengths

- ❑ Birth and Death Databases most complete and accurate count of all births and deaths in AC.
- ❑ Hospital data best for medical diagnoses and procedures for childbirth, newborns and mothers' outcomes.
- ❑ Surveys best for population health status, behaviors, actions, utilization and social determinants.
- ❑ Population data identifies health inequities and measures trends.
- ❑ Population data allows for comparing within/across groups and meeting goals/objectives (HP2030, county rankings).

Limitations

- ❑ Lag time between when data collected and available.
- ❑ Underreporting data elements in birth and death databases (Medi-Cal births).
- ❑ Inconsistent definitions across data sources (race/ethnicity).
- ❑ Surveys capture small proportion (sample) of entire population at a single point in time.
- ❑ Selection, response and recall bias in surveys.
- ❑ Respondents may be hesitant to report status, behaviors, hardships (**stigma**).
- ❑ No information on birth experiences or quality of care in population data.

Additional Resources

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For Additional Maternal, Paternal,
Child, Adolescent Health
Indicators Go To:

<http://www.acphd.org/data-reports/reports-by-topic/maternal,-child,-and-adolescent-health.aspx>