

# Community Health Profile

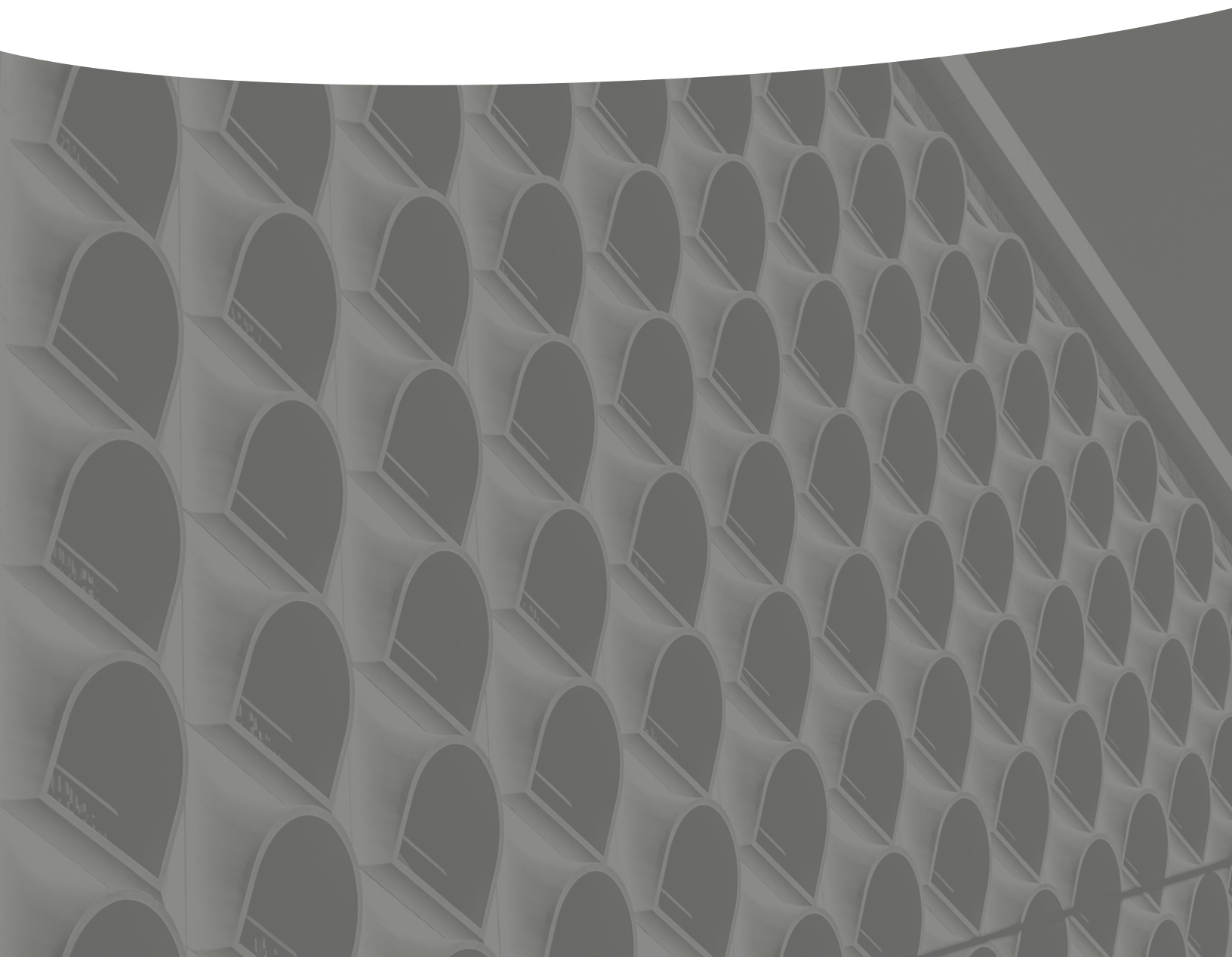
Individual Site Report | Sacramento UIHP Service Area

August 2017



**Urban Indian  
Health Institute**

A Division of the Seattle Indian Health Board



**The mission of the UIHI is to support the health and well-being of urban Indian communities through information, scientific inquiry, and technology.**



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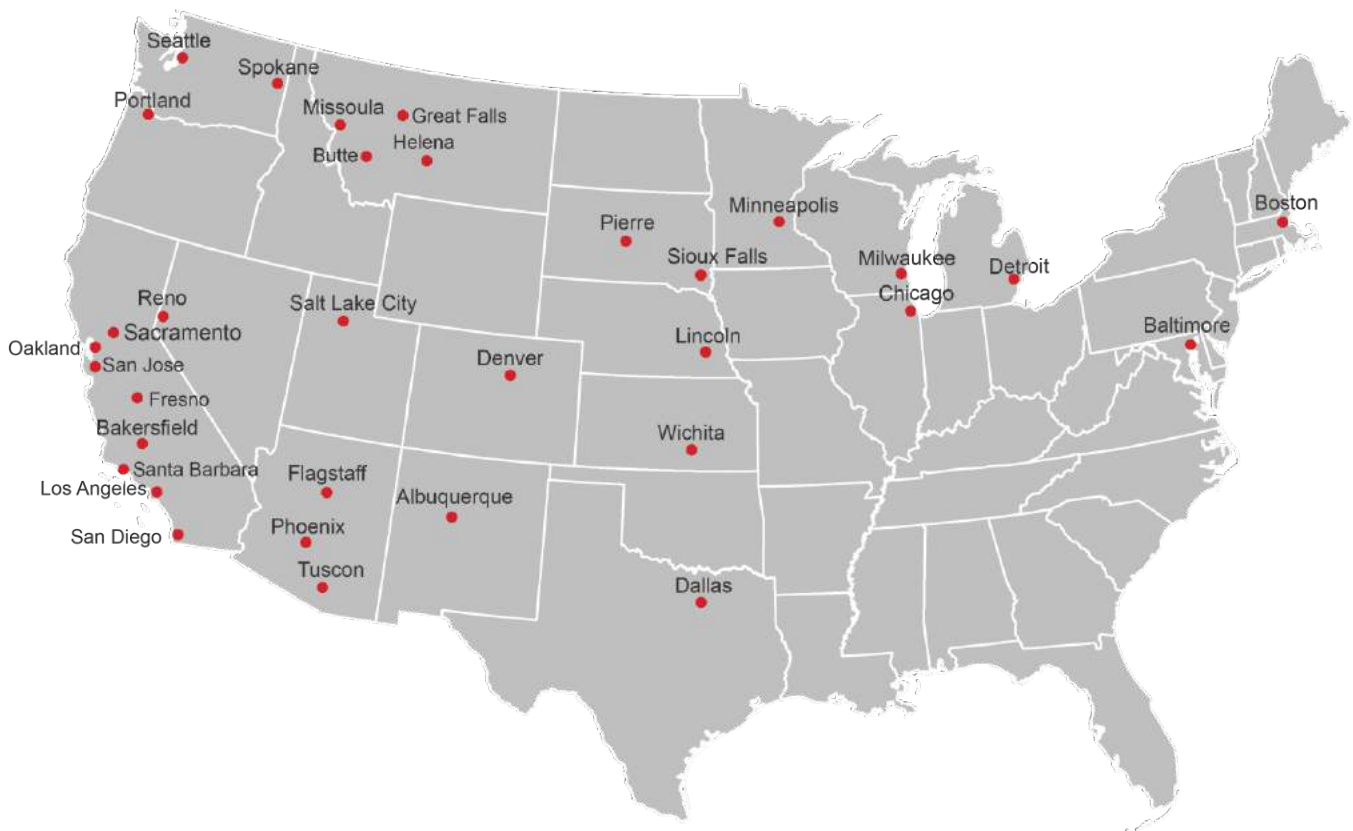
The Urban Indian Health Institute would like to thank the staff at the Urban Indian Health Programs, social service and faith based agencies for the excellent work they do daily on behalf of their communities.

# URBAN INDIAN HEALTH PROGRAMS

Urban Indian Health Programs (UIHPs) are private, non-profit corporations that serve American Indian and Alaska Native (AI/AN) people in select cities with a range of health and social services from outreach and referral to full ambulatory care.

UIHPs are a network of 32 independent health agencies funded in part under Subchapter IV (formerly Title V) of the Indian Health Care Improvement Act and receive limited grants and contracts from the federal Indian Health Service (IHS). UIHPs are located in 18 states and serve individuals in approximately 100 U.S. counties where over 1.2 million AI/ANs reside.<sup>1</sup> In addition, there are numerous social service and faith based organizations serving the public health needs of urban AI/ANs.

UIHPs provide traditional health care services, cultural activities, and a culturally appropriate place for urban AI/ANs to receive health care. Comprehensive clinics provide direct primary care for at least 40 hours per week; Limited clinics provide direct primary care services for under 40 hours per week; and Outreach and Referral sites do not provide direct care services on site but refer patients to external health care providers. The map below identifies these sites, some of whom have multiple clinic locations. It does not include AI/AN social service or faith based agencies.



For more information on individual Urban Indian Health Programs, visit <http://www.uihi.org/urban-indian-health-organization-profiles/>.

# INTRODUCTION AND PURPOSE

## Introduction

This community health profile provides an overview of the health status of AI/ANs living in select urban counties served by the Sacramento Native American Health Center (SNAHC), which is one of 32 Subchapter IV UIHPs across the country. The counties analyzed in this report are defined as Sacramento County by IHS. This report will refer to the service area the Sacramento service area and Sacramento County interchangeably. This document presents data specific to demographics, social determinants of health, mortality, and maternal and child health. The data used are from national data sources and in no way use patient data from SNAHC. The profile examines and addresses the disparities that exist among the urban AI/AN population compared to the non-Hispanic White (NHW) population and demonstrates the disproportionality in outcomes and risk factors that adversely affect them. Data for this profile comes from the U.S. Census, the American Community Survey, and the U.S. Center for Health Statistics.

Not all issues important to the health of urban AI/AN communities are included in this report. Locally collected data may provide additional information about the health of AI/ANs living in Sacramento County. Data presented in this report may be most useful when combined with aggregate data, stories about patients and community members, and local surveillance or survey data when available.

## Purpose

Improving community health through effective planning and decision-making requires good information about the factors that influence the health status of community members.<sup>2</sup> The following examples suggest possible ways to use the data from this report. UIHI is available to provide technical assistance on how to use the following data.

### Program Planning

Data in this report can be used by UIHPs to identify health priorities, allocate resources, and guide the development of new programs.

### Grant Writing

Data and figures in this report may be useful to include as background information for grant applications. This information can illustrate existing health disparities in the AI/AN population compared to NHW. This report can also be cited as the reference.

### Identifying Gaps in Data

This report may also reveal current gaps in nationally collected data. For example, notably low mortality rates may indicate the need for improvements to race determination in death records. State and regional linkage projects can help correctly classify AI/ANs in state death records.<sup>3</sup> Oversampling AI/ANs in national surveys is another way to improve data collection by providing sufficient statistical power to provide more stable estimates.



# METHODOLOGY

## Methods

### Analysis

The data for this report only includes information from Sacramento County residents. For each indicator, prevalence or incidence was calculated for the AI/AN population and compared with the NHW population. Because NHWs are the racial/ethnic majority, this population was chosen as the comparison group. The AI/AN population was defined as AI/AN only (not in combination with other races) unless otherwise indicated. The NHW population was defined as White only and excluded the Hispanic population unless otherwise indicated. Results were calculated using aggregate data from a two- to five-year time-period in order to have sufficient data to provide stable estimates and protect individual privacy.

In some instances, confidence intervals were calculated and used to show differences in outcomes for specific indicators displayed in bar graphs. Confidence intervals are ranges of numbers used to assess the accuracy of a point estimate and measure the variability in the data. The point estimate may be a rate, such as a death rate or an infectious disease rate, or a frequency, such as the percent of individuals living in poverty or the percent of adults experiencing unemployment.

Confidence intervals account for the uncertainty that arises from the natural variation inherent in the world around us. Confidence intervals also

account for the difference between a sample from a population and the population itself.

For analyses included in this report, confidence intervals were calculated at a p-value of  $<0.05$ , the 95 percent confidence level. This means that 95 times out of 100 the confidence interval captures the true value for the population. Differences in outcomes were called statistically significant if confidence intervals of the study group (AI/AN), did not overlap with the comparison group (NHW).

Data analysis for indicators were analyzed using the statistical software StataSE version 13 or SAS version 9.4.

### Indicator Selection

A list of indicators for the community health profile were selected after an analysis of the available data sources. Sample size and stratification of each population based on demographics, such as age groups, gender, and education, were considered and used if the sample size was sufficient.

This profile uses national surveillance data. This report does not pull data from the client database of the SNAHC or any other urban AI/AN serving organization in the area. There may be information not captured by these systems that better represent the unique strengths and challenges in communities served by SNAHC. Local sources of data may provide a more region-specific and comprehensive understanding of the community's health.

# METHODOLOGY

## Data Limitations

The contents of this report are specific to national surveillance data for Sacramento County residents only.

Although data analysis and assessment of results were conducted for 42 indicators, data limitations were observed and experienced during the selection of these indicators and their analyses for this report. In some instances, the number of cases/sample size was limited, thus impacting the analysis and preventing or limiting the reporting of results. Frequently, data were only available for AI/ANs alone and was not inclusive of AI/ANs who also identify with another race or ethnicity. Thus, the estimates provided in this report may be an underestimation of the true value of the outcome or risk factor for any indicator analyzed in this report.

Another factor affecting and limiting the analysis of data are errors in racial misclassification, particularly for demographic and mortality data. Racial misclassification is defined as incorrect coding of an individual's race or ethnicity in public records.<sup>3</sup> This can greatly underestimate the true rate of disease, risk factor, or outcome. AI/ANs are especially likely to experience problems of incorrect classification on death certificates;

therefore, true mortality rates among AI/ANs are assumed to be higher than reported numbers suggest. Because mortality data are extracted from death certificates, the race/ethnicity category is not self-reported and is often completed by a funeral director based on information received from a family member or personal observation. In a national sample, age-adjusted mortality for AI/ANs was underestimated by 9.7%.<sup>4</sup> The bias created by misclassification varies by age, proximity to a reservation, and cause-of-death.<sup>5</sup> Based on documented racial misclassification of AI/ANs in surveillance data, any of the health disparities presented in this community health profile are assumed to be larger than reported.

Lastly, we would like to acknowledge the presence of other gender identities outside of male and female categories including Two-Spirit and transgender identities which are systemically ignored and not included in these larger national surveillance systems.<sup>6</sup> The lack of these other categories for gender can lead to invisibility and lack of information to support the health and well-being of people outside of binary gender identities, thus limiting our data analysis.

# DATA SOURCES

## Data Sources

### 2010 U.S. Census

The U.S. Census takes place every 10 years and provides official population counts for individuals living in the United States and provides information by age, race, Hispanic origin, and sex. In 2010, the U.S. Census allowed individuals to self-report belonging to more than one race group. When determining a population count, this report considers people to be of AI/AN race if they report AI/AN as their only race or if they report being AI/AN in combination with other races. Some Census statistics are not easily accessible when including individuals who report multiple races. For these indicators in the profile, only individuals who report AI/AN alone are included.

For more information about the U.S. census, visit: [www.census.gov](http://www.census.gov).

### American Community Survey

The American Community Survey (ACS) is a nationwide, continuous survey that collects demographic, housing, social, and economic data every year. To provide reliable estimates for small counties, neighborhoods, and population groups, the ACS provides 1-, 3-, and 5-year aggregate estimates. Estimates for this report are from aggregated data from 2010-2014.

Race is self-reported on ACS, with similar race categories as the U.S. Census. However, some ACS data are not easily accessible for multiple race groups. Therefore, ACS data are reported for

AI/AN alone in this report. ACS estimates in this profile are not adjusted for age; observed differences in estimates may be due to a true difference in rates or due to differences in age distribution in the population.

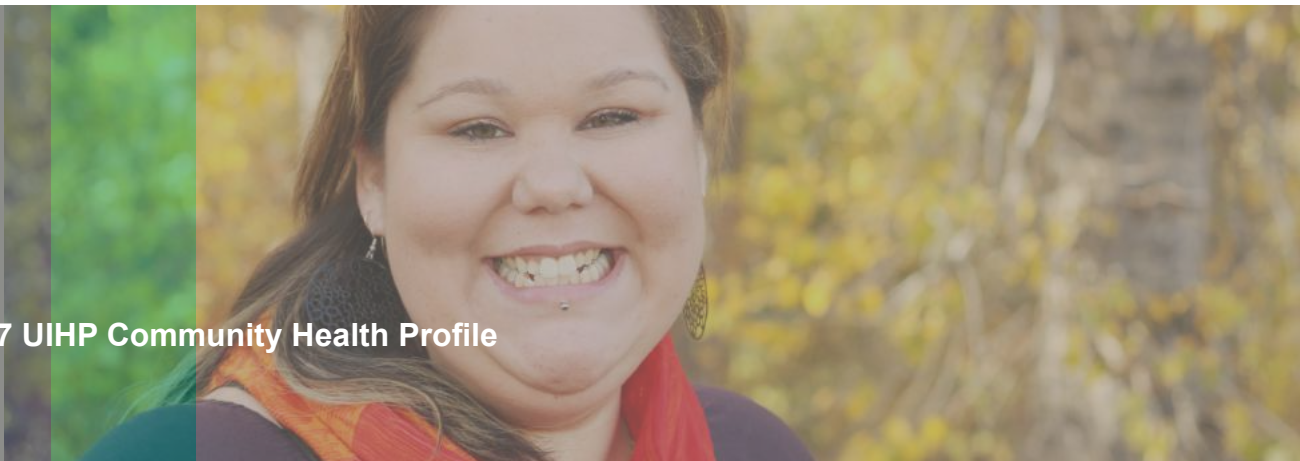
For more information about the ACS, visit: [www.census.gov/acs](http://www.census.gov/acs).

### National Vital Statistics System

Mortality data from the National Vital Statistics System (NVSS) are generated from death certificates. These data are the primary source of demographic, geographic, and cause-of-death information among persons dying in a given year. The five most recent years for which complete mortality data were available was from 2010-2014. The five most recent years for which complete infant mortality data were available was from 2008-2012. Maternal mortality was only available from aggregated data from 2010 to 2012.

All mortality data are age-adjusted to the U.S. population for the year 2000. Age-adjusted death rates are useful when comparing different populations because they remove the potential bias that can occur when comparing populations with different age distributions. For example, AI/ANs historically are a younger population than other race groups.

Birth certificate data from NVSS data files include all documented births occurring within the United States as filed in each state. These data include





# DATA SOURCES

demographic information about parents, information on the infant, the mother's risk factors, and information on the birth. The five most recent years for which complete natality data were available was from 2008-2012.

Since not all states allow individuals to identify as more than one race, National Center for Health Statistics (NCHS) releases bridged-race population estimates for calculation of rates. As a result, estimates in this report may not match local and county estimates because of differing projection methods.

For more information about Vital Statistics, visit:

<http://www.cdc.gov/nchs/nvss.html>.



# SOCIODEMOGRAPHICS

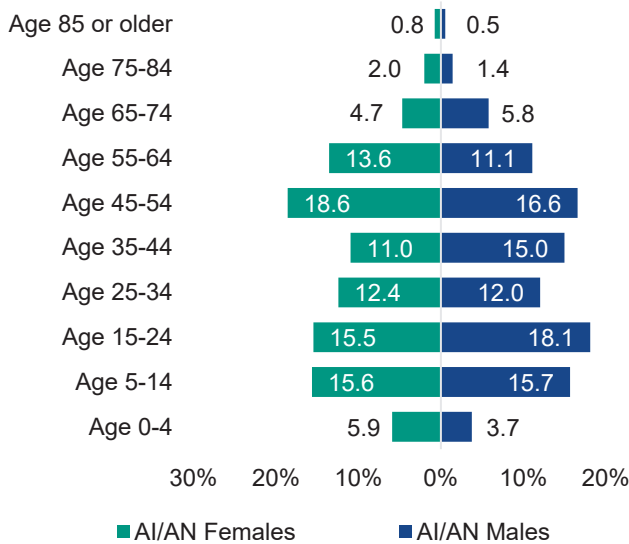
## Introduction

The health of individuals and populations is greatly influenced by social determinants – the conditions in which people live, learn, work, and play.<sup>7,8</sup> Evidence from decades of research on the relationship between key social determinants and health outcomes overwhelmingly suggests that greater social disadvantage leads to poorer health.<sup>9</sup> These determinants, including race, lack of access to education or employment, poverty, and housing, among other things, produce extensive inequities within and between populations.<sup>7,8</sup> This section presents data on measures of demographics and social determinants of health to illustrate differences between urban AI/ANs and NHWs that may contribute to overall health inequities between these populations.

## Age and Gender

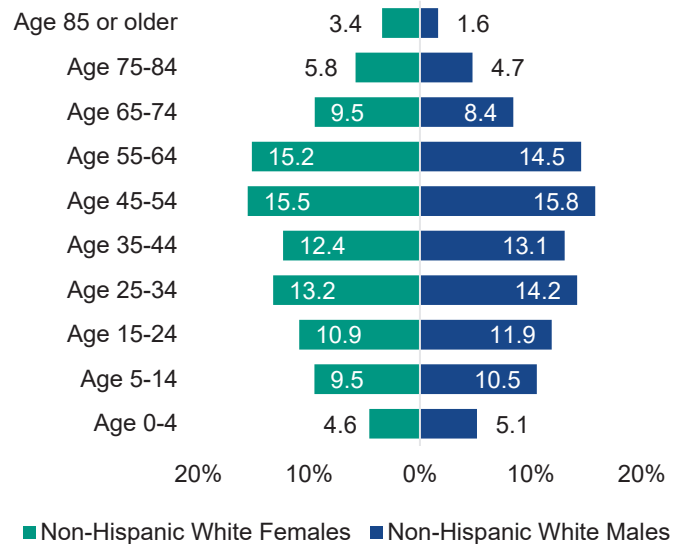
Relative to the NHW population, the AI/AN population in Sacramento County was younger (Figure 1 and Figure 2). In Sacramento County, 37.3% of AI/ANs were under the age of 25 years, compared with 26.2% of NHWs. In contrast, 7.6% of AI/ANs were over the age of 65 years, compared with 16.8% of NHWs.

**Figure 1. AI/AN Population by Age and Gender, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014

**Figure 2. NHW Population by Age and Gender, Sacramento Service Area, 2010-2014**



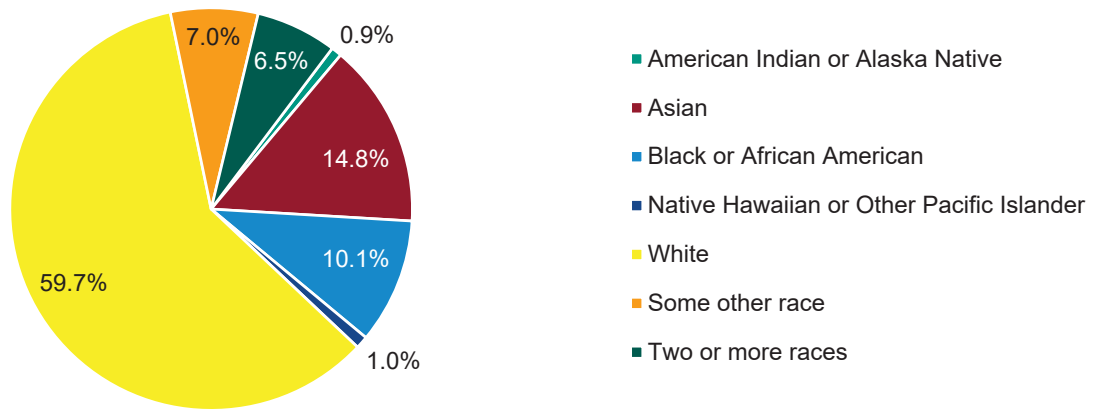
Source: American Community Survey, 2010-2014

# SOCIODEMOGRAPHICS

## Race

As shown in Figure 3, an estimated 12,376 (0.9%) individuals identified as AI/AN alone in Sacramento County, and an estimated 34,296 (2.4%) individuals identified as AI/AN alone or in combination with one or more races (data not shown). Those who identified as White alone comprised the largest proportion (59.7%) of the total population (1,450,277) in Sacramento County. In addition, Asians alone were the second largest population identified in Sacramento County, consisting of 214,640 individuals or 14.8% of the total population.

**Figure 3. Population by Race, Sacramento Service Area, 2010-2014**

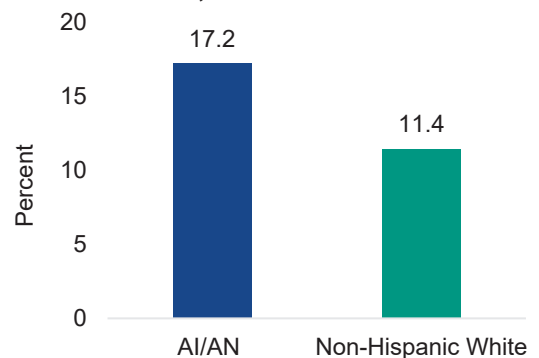


Source: American Community Survey, 2010-2014

## Employment

Extensive evidence has shown that unemployment has a negative effect on health.<sup>10</sup> Unemployed individuals may experience financial insecurity and reduction in social status, social relations, and self-esteem.<sup>11</sup> In addition, unemployed individuals are also more likely to lack health insurance coverage.<sup>12</sup> In Sacramento County, the proportion of AI/ANs aged 16 and older experiencing unemployment was 1.5 times higher than NHWs (17.2% vs. 11.4%; Figure 4). These rates do not include individuals in the military or individuals who are institutionalized.

**Figure 4. Civilian Labor Force 16 Years and Older, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014

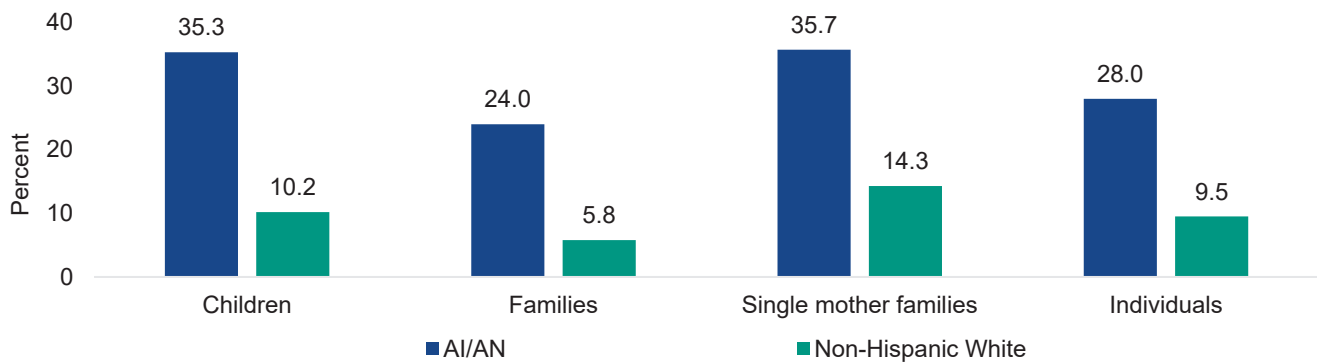
# SOCIODEMOGRAPHICS

## Poverty

Poverty and health are inextricably connected.<sup>13</sup> Poverty may lead to poor health outcomes by limiting access to healthy foods, quality housing, safe neighborhoods, and adequate health care, among other things. Poverty can also impact many aspects of a child's health and well-being. Children in poverty have lower academic achievement and higher rates of high school dropout, accidents, injuries, and food insecurity compared with their more affluent peers. Living in poverty as a child affects health throughout a person's lifespan.<sup>14</sup> The American Community Survey defines individuals and families as being in poverty if their income is less than the poverty threshold (less than 100% of the federal poverty level).<sup>15</sup>

In Sacramento County, more than a quarter of AI/AN individuals lived in poverty (28.0%), compared to just one tenth for NHWs (9.5%; Figure 5). A higher proportion of AI/AN children live in poverty compared to NHWs. Slightly more than one in three AI/AN children aged 17 and under (35.3%) in Sacramento County lived in households with an income below the federal poverty level. This proportion is 3.5 times higher than that of the NHW population (10.2%). In addition, nearly one in four AI/AN families in Sacramento County (24.0%) lived in households with an income below the federal poverty level. This is 4.1 times the proportion among NHWs (5.8%). Finally, among those families in households headed by single mothers, over one in three AI/ANs lived in poverty (35.7%), nearly 2.5 times the proportion among NHWs (14.3%).

**Figure 5. Income Below the Federal Poverty Level in Past Year, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014

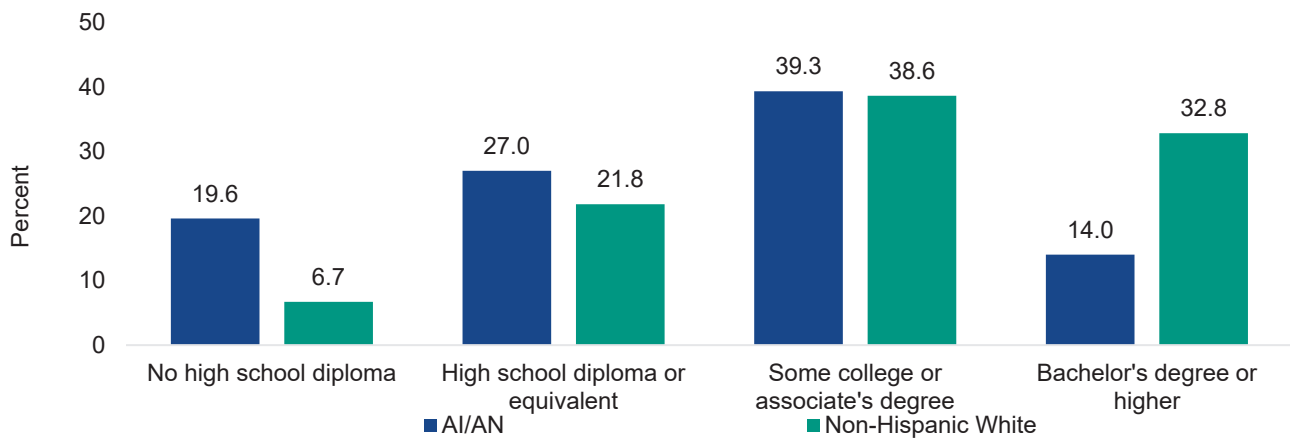
*Data note: Federal poverty thresholds are used to determine poverty status. The thresholds are based on family size and the ages of family members. Federal poverty thresholds are not intended as a comprehensive description of families' needs, but rather as a statistical indicator that can be tracked over time.*

# SOCIODEMOGRAPHICS

## Educational Attainment

The relationship between education and health, or the “health-education gradient,” is well documented.<sup>16</sup> Significant disparities in life expectancy by level of education are found among all demographic groups and are arguably increasing over time.<sup>17</sup> In Sacramento County, a significantly higher percentage of AI/ANs aged 25 and older had not completed high school or passed the General Educational Development (GED) exam (19.6%) compared with the NHW population (6.7%; Figure 6). A lower percentage of AI/ANs (14.0%) reported an undergraduate or graduate degree as their highest level of education compared with the NHW population (32.8%).

**Figure 6. Educational Attainment for the Population 25 Years and Older, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014

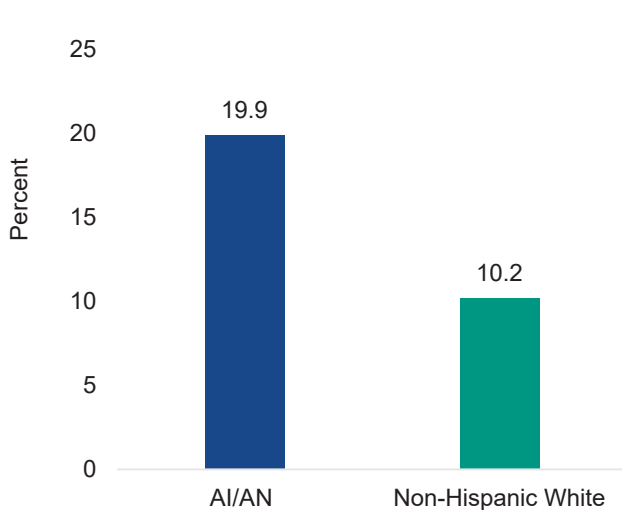


# SOCIODEMOGRAPHICS

## Health Insurance Coverage

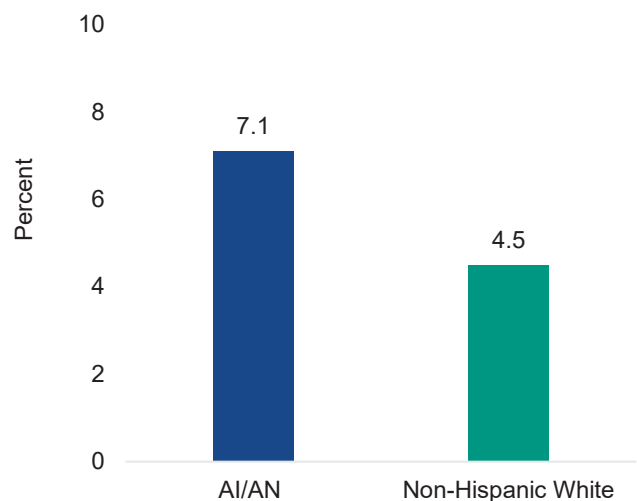
Compared to those with health insurance coverage, those without health insurance coverage have higher mortality rates.<sup>18</sup> Individuals without health insurance are also less likely to receive care and take longer to return to health after an unintentional injury or the onset of a chronic disease compared to those with health insurance.<sup>19</sup> In Sacramento County, one in five AI/ANs under age 65 (19.9%) reported having no health insurance, a proportion nearly 2.0 times higher than that of NHWs (10.2%; Figure 7). The proportion of uninsured AI/AN children under the age of 18 in Sacramento County is over 1.6 times higher than that of NHW children (7.1% vs. 4.5%, Figure 8).

**Figure 7. Population Under 65 with No Health Insurance Coverage, Sacramento Service Area, 2010-2014**

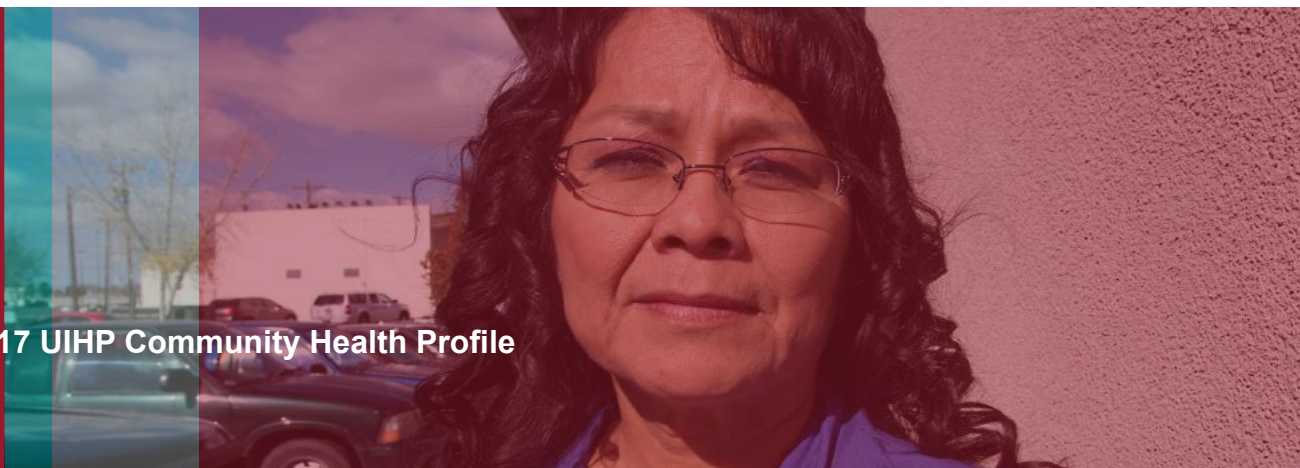


Source: American Community Survey, 2010-2014

**Figure 8. Population Under 18 with No Health Insurance Coverage, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014



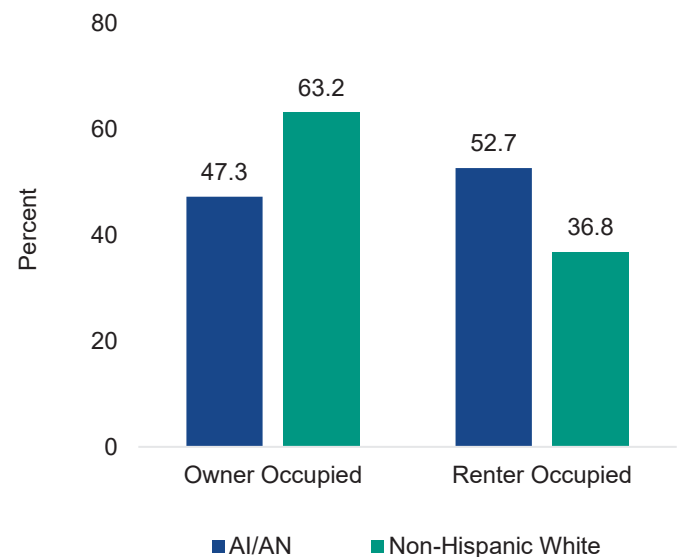
# SOCIODEMOGRAPHICS

## Housing

Housing and health are also closely linked. Several studies have found that home ownership is associated with many health benefits, including greater psychosocial wellbeing and lower mortality risk. These benefits may be explained by the fact that homeowners likely experience higher socioeconomic status, fewer problems of overcrowding, and lower exposure to neighborhood violence. In contrast, renters are more likely to experience poorer self-reported health, higher rates of coronary heart disease, and more risk factors, such as smoking.<sup>20</sup>

In Sacramento County, the proportion of renter occupation among AI/ANs was 1.4 times higher than NHWs (52.7% vs. 36.8%, Figure 9). Over half of all homes of AI/ANs were renter occupied, compared with slightly more than one-third of homes for NHWs. In contrast, the proportion of home ownership among NHWs in Sacramento County was approximately 1.3 times higher than among AI/ANs (63.2% vs. 47.3%). Less than half of all homes of AI/ANs were owner occupied, compared with nearly two-thirds of homes for NHWs.

**Figure 9. Type of Occupied Housing Units, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014



# SOCIODEMOGRAPHICS

## Food Stamps

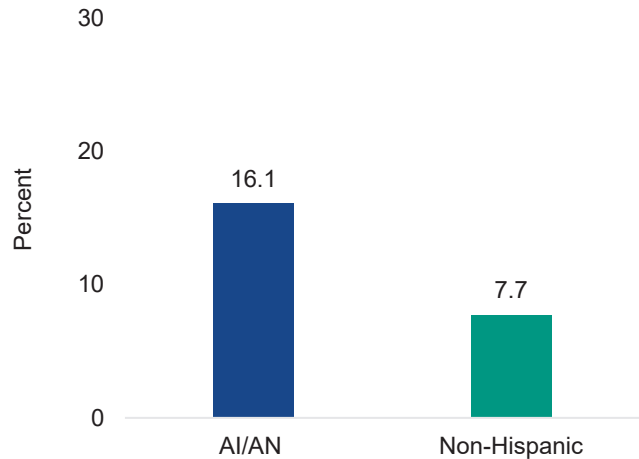
As the largest food assistance program in the United States, the Supplemental Nutrition Assistance Program (SNAP; formally known as the Federal Food Stamp program) is a crucial part of the social safety net.<sup>21</sup>

Households with an income below 130% of the federal poverty level are eligible to receive SNAP benefits. According to a study done by the U.S. Department of Agriculture, which administers the SNAP program, 55% of households receiving SNAP benefits remained food insecure after receiving SNAP.<sup>22</sup>

Moreover, children in households that receive SNAP benefits are significantly more likely to suffer from an array of health problems than those in households that do not receive SNAP.<sup>21</sup>

In Sacramento County, 16.1% of AI/AN households received SNAP benefits in the past year (Figure 10). The proportion of SNAP participation among AI/AN households in this area was 2.1 times higher than the proportion of NHW households.

**Figure 10. Households that Received SNAP Benefits in the Past Year, Sacramento Service Area, 2010-2014**



Source: American Community Survey, 2010-2014



# MORTALITY

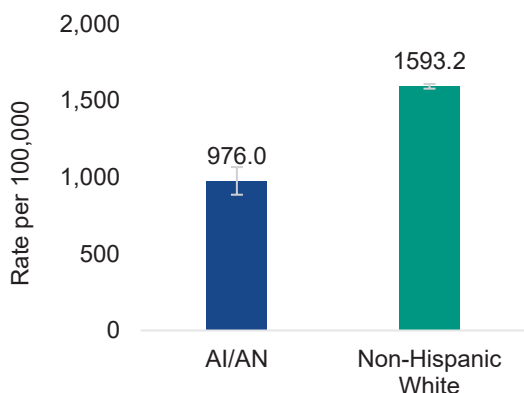
## Introduction

Mortality data provides an indication of a community's or population's health and socioeconomic development status. Mortality data are also a key component in understanding population size, future growth, and change. Examining mortality data is one way to measure the burden of disease in a community or population. Tracking death rates may identify groups that are at an increased risk for premature death and may identify specific diagnoses resulting in death that are more prevalent in certain populations. In addition, high mortality rates may indicate an issue with environmental factors, communicable diseases, risk factors, and/or socioeconomic factors. This section examines age-adjusted mortality by race, gender, age groups, and specific causes of mortality. It is important to note that racial misclassification leads to an underestimation of mortality rates in AI/AN populations.<sup>23</sup> True mortality rates among AI/ANs in Sacramento County are assumed to be higher than the rates described for this section.

### All-Cause Mortality Rate

The all-cause mortality rate was significantly lower for the AI/AN population than for the NHW population, 38.7% lower (Figure 11).

**Figure 11. All-Cause Mortality Rate, Sacramento Service Area, 2010-2014**

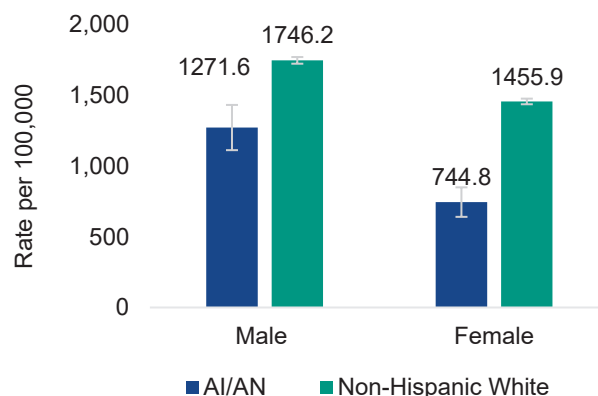


Source: US Center for Health Statistics, Death Certificates, 2010-2014

### Mortality Rate by Gender

The mortality rates for both males and females were lower among AI/ANs compared to their NHW counterparts (27.2% & 48.8% lower, respectively; Figure 12). In addition, the mortality rate for AI/AN women was 41.4% lower than AI/AN men.

**Figure 12. Mortality Rate by Gender, Sacramento Service Area, 2010-2014**



Source: US Center for Health Statistics, Death Certificates, 2010-2014

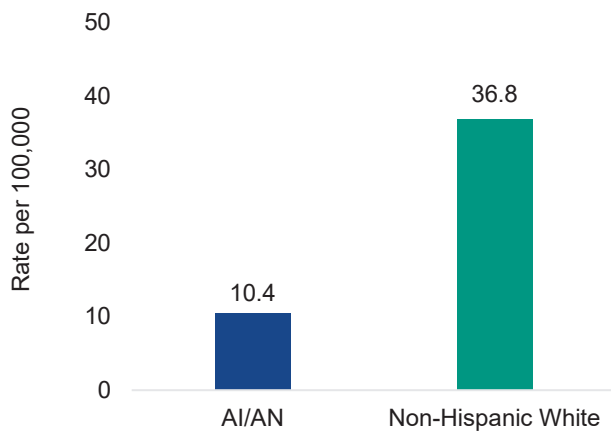


# MORTALITY

## Suicide

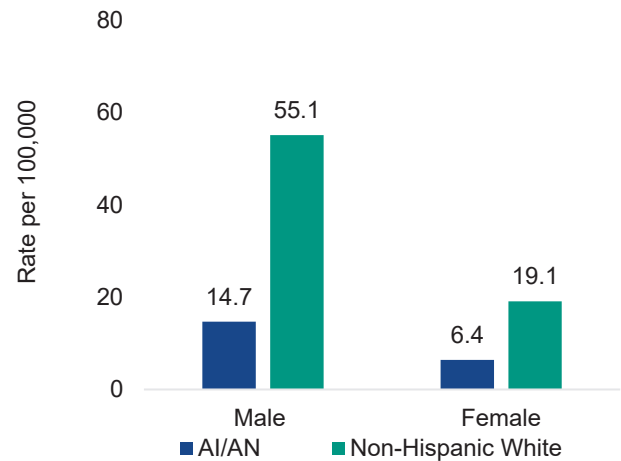
The suicide rate was 3.5 times higher among NHWs compared to AI/ANs (Figure 13). In addition, the suicide rate by gender was higher for both NHW men and women compared to AI/AN men and women at 3.7 and 3.0 times higher respectively (Figure 14). When comparing gender among AI/ANs, the suicide rate for AI/AN males was 2.3 times higher compared to AI/AN females.

**Figure 13. Overall Suicide Rate, Sacramento Service Area, 2010-2014**



Source: US Center for Health Statistics, Death Certificates, 2010-2014

**Figure 14. Suicide Rate by Gender, Sacramento Service Area, 2010-2014**



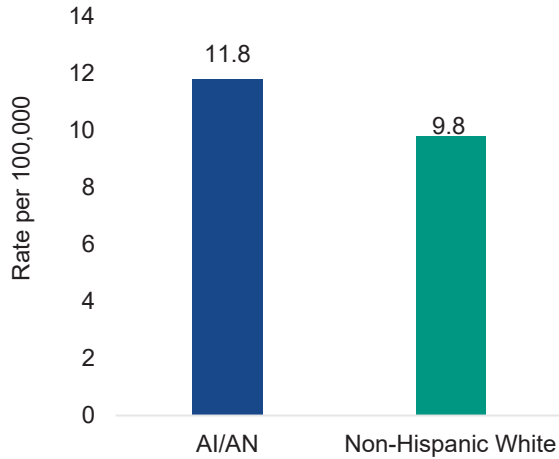
Source: US Center for Health Statistics, Death Certificates, 2010-2014

# MORTALITY

## Homicide

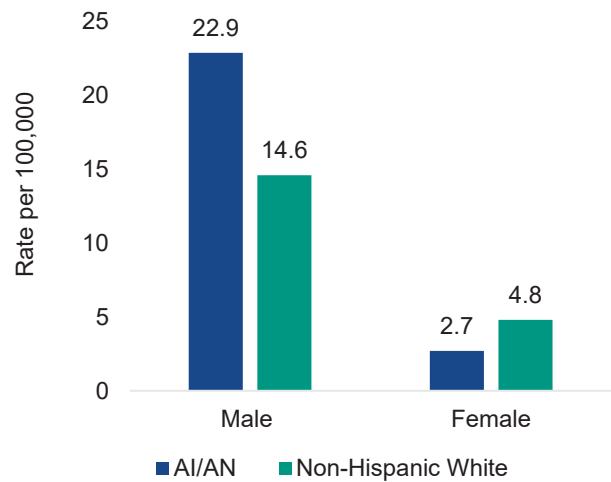
Homicides rates were 1.2 times higher for the AI/AN population compared to the NHW population (Figure 15). True disparities in homicide rates become apparent when looking at homicide by gender. Homicides for AI/AN males were 22.9 per 100,000 (Figure 16). This rate is 1.6 times higher than NHW males, 8.5 times higher than AI/AN females, and more than 4.7 times higher than NHW females.

**Figure 15. Overall Homicide Rate, Sacramento Service Area, 2010-2014**



Source: US Center for Health Statistics, Death Certificates, 2010-2014

**Figure 16. Homicide Rate by Gender, Sacramento Service Area, 2010-2014**



Source: US Center for Health Statistics, Death Certificates, 2010-2014



# MORTALITY

## Top Causes of Mortality

**Table 1. Overall Top Causes of Mortality, Sacramento Service Area, 2010-2014**

AI/AN			NHW		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	913.2	1	Vascular disease	1,194.9
2	Cancer	350.2	2	Cancer	713.8
3	Chronic lower respiratory disease	129.8	3	Chronic lower respiratory disease	218.7
4	Chronic liver disease and cirrhosis	81.7	4	Alzheimer's disease	176.0
5	Diabetes	60.6	5	Flu and pneumonia	92.8

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 1 summarizes the top causes of mortality for both AI/AN and NHW.

**Table 2. Top Male Causes of Mortality, Sacramento Service Area, 2010-2014**

AI/AN Males			NHW Males		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	365.5	1	Vascular disease	559.5
2	Cancer	303.4	2	Cancer	379.1
3	Chronic lower respiratory disease	68.5	3	Chronic lower respiratory disease	94.4
4	Chronic liver disease and cirrhosis	52.9	4	Intentional self-harm	55.1
5	Diabetes	30.1	5	Alzheimer's disease	54.5

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 2 summarizes the top causes of mortality for both AI/AN and NHW men.



# MORTALITY

**Table 3. Top Female Causes of Mortality, Sacramento Service Area, 2010-2014**

AI/AN Female			NHW Females		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	197.3	1	Vascular disease	436.8
2	Cancer	117.6	2	Cancer	329.5
3	Chronic lower respiratory disease	74.1	3	Chronic lower respiratory disease	100.0
4	Alzheimer's disease	30.7	4	Alzheimer's disease	78.9
5	Chronic liver disease and cirrhosis	28.4	5	Flu and pneumonia	35.1

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 3 summarizes the top causes of mortality for both AI/AN and NHW women

## Cancer Mortality

**Table 4. Overall Top Causes of Cancer Mortality, Sacramento Service Area, 2010-2014**

AI/AN			NHW		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	118.4	1	Tracheal/Bronchus/ Lung cancer	172.9
2	Prostate cancer	45.5	2	Colon cancer	54.5
3	Bladder cancer	33.9	3	Breast cancer	48.3
4	Leukemia	32.9	4	Pancreatic cancer	39.2
5	Colon cancer	32.3	5	Bladder cancer	33.6

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 4 summarizes the top causes of cancer mortality for both AI/AN and NHW.



# MORTALITY

**Table 5. Top Male Causes of Cancer Mortality, Sacramento Service Area, 2010-2014**

AI/AN Males			NHW Males		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	89.1	1	Tracheal/Bronchus/ Lung cancer	91.9
2	Prostate cancer	56.0	2	Prostate cancer	38.0
3	Colon cancer	24.4	3	Colon cancer	31.6
4	Leukemia	19.7	4	Bladder cancer	29.0
5	Bladder cancer	19.3	5	Pancreatic cancer	24.3

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 5 summarizes the top causes of cancer mortality for both AI/AN and NHW men.

**Table 6. Top Female Causes of Cancer Mortality, Sacramento Service Area, 2010-2014**

AI/AN Females			NHW Females		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	29.6	1	Tracheal/Bronchus/ Lung cancer	84.6
2	Colon cancer	15.4	2	Breast cancer	48.8
3	Cervical cancer	11.8	3	Cervical cancer	31.2
4	Bladder cancer	11.7	4	Colon cancer	27.0
5	Breast cancer	9.5	5	Pancreatic cancer	19.0

Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 6 summarizes the top causes of cancer mortality for both AI/AN and NHW women.

# MATERNAL AND CHILD HEALTH

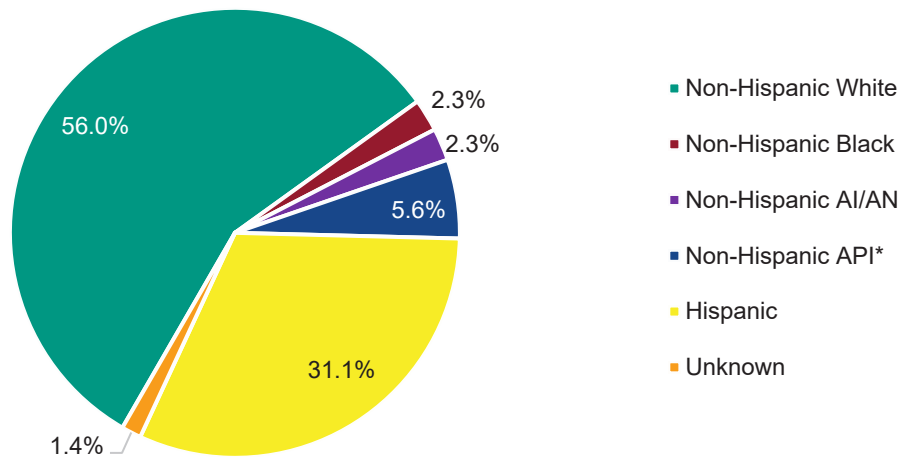
## Introduction

Maternal and child health (MCH) is the foundation for healthy children, mothers, and families. Monitoring indicators such as maternal smoking, gestational diabetes, prenatal care, and premature births can help SNAHC make decisions regarding programs that impact pregnant mothers, newborns, and infants. This section of the community health profile focuses on key indicators for MCH. The data can be used to further examine why these disparities exist and consider programs to eliminate these health disparities.

## Total Births

From 2008 to 2012, there were a total of 37,892 births in Sacramento County. Among those births, 2.3% were identified as non-Hispanic AI/AN alone (Figure 17). The largest proportions of births among racial/ethnic groups were from NHW (56.0%) and Hispanic (31.1%) women. Non-Hispanic Blacks were 2.3%, and non-Hispanic Asians and Pacific Islanders were 5.6% of all births.

**Figure 17. Births by Race/Ethnicity, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates, 2008-2012

\*API-Asian/Pacific Islander

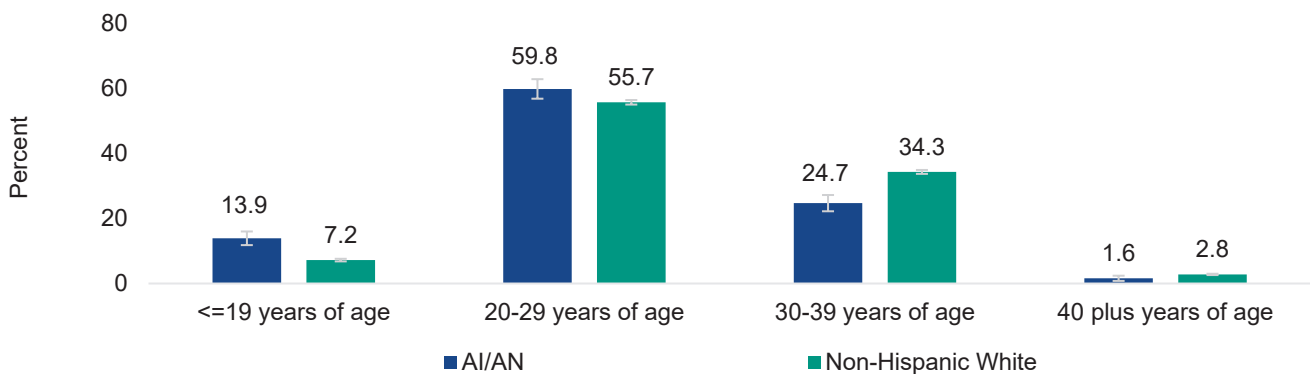


# MATERNAL AND CHILD HEALTH

## Age

In general, AI/AN women tend to give birth at younger ages than their NHW counterparts (Figure 18). 13.9% percent of births among AI/AN women in Sacramento County were to teenage women (less than 19 years of age) compared to 7.2% of NHW births. The proportion of births to teenage mothers was 1.9 times higher among AI/AN women than their NHW counterparts. In addition, approximately 59.8% of all births among AI/AN women were to women in their 20s, compared to 55.7% among NHWs. Conversely, a higher proportion of births were to women in their 30s among NHW women compared to AI/AN women. 34.3% of all births among NHW women were to women in their 30s, whereas approximately one in four births were to AI/AN women in their 30s.

**Figure 18. Births by Maternal Age Group, Sacramento Service Area, 2008-2012**

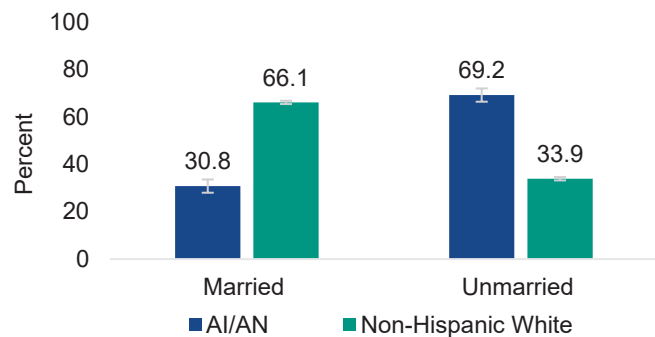


Source: National Vital Statistics Birth Certificates, 2008-2012

## Marital Status

30.8% of all births to AI/ANs in Sacramento County were to women who were married and 69.2% were to women who were not married (Figure 19). This was significantly different compared to NHWs in which 66.1% of births were to married mothers. The proportion of unmarried mothers was 2.0 times higher among AI/AN women compared to NHW women.

**Figure 19. Births by Marital Status, Sacramento Service Area 2008-2012**



Source: National Vital Statistics, Birth Certificates, 2008-2012

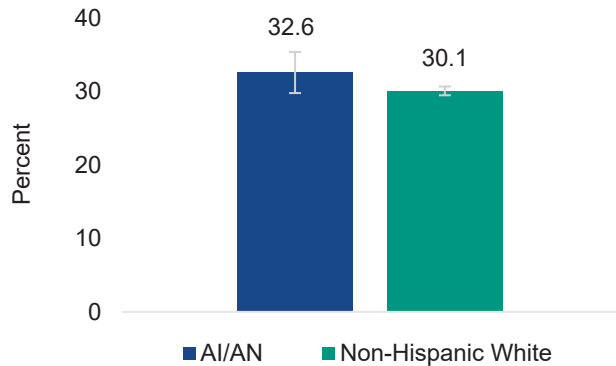


# MATERNAL AND CHILD HEALTH

## Cesarean Section

In Sacramento County, approximately 30% of births were delivered by cesarean section among NHW females. This was slightly lower than the proportion of deliveries by cesarean section among AI/AN births (32.6%, Figure 20). AI/AN women had an 8.3% higher proportion of birth by cesarean section when compared to NHW women.

**Figure 20. Births by Cesarean Section, Sacramento Service Area, 2008-2012**

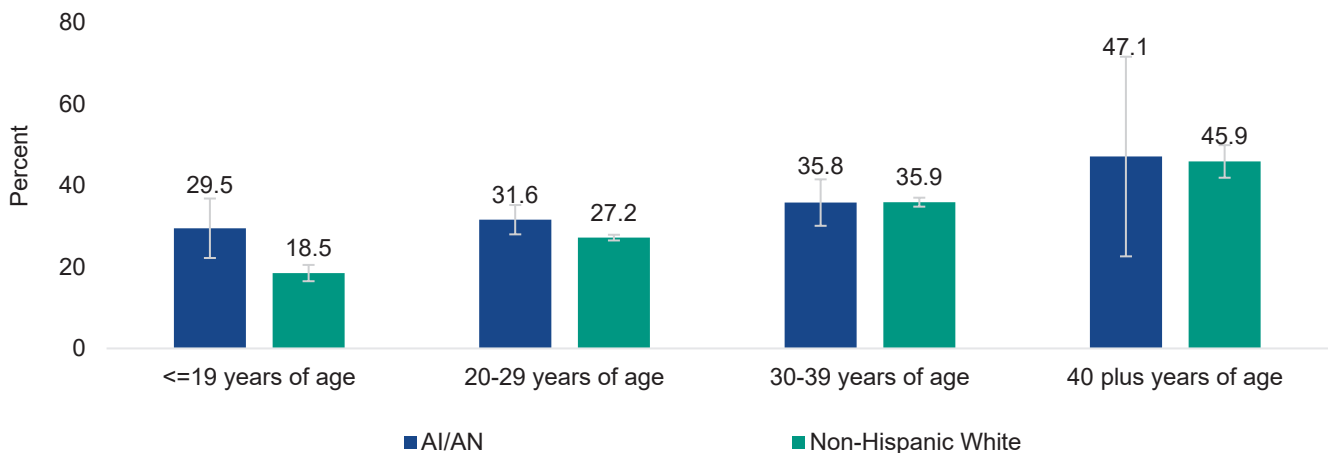


Source: National Vital Statistics, Birth Certificates 2008-2012

## Cesarean Section by Maternal Age

The proportion of cesarean deliveries increased as maternal age increased for NHW women and women in their 20s (Figure 21). AI/AN teenage mothers had a significantly higher proportion of births by cesarean section.

**Figure 21. Cesarean Sections by Maternal Age Group, Sacramento Service Area, 2008-2012**



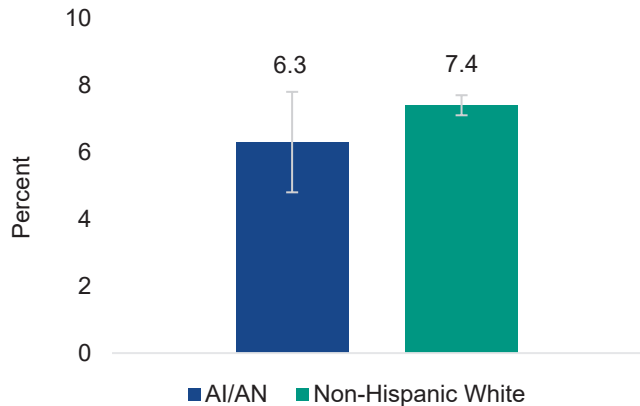
Source: National Vital Statistics, Birth Certificates, 2008-2012

# MATERNAL AND CHILD HEALTH

## Maternal Smoking

In Sacramento County, 6.3% of AI/AN women smoked while pregnant (Figure 22). This was similar to the proportion of NHW women who smoked while pregnant (7.4%).

**Figure 22. Maternal Smoking, Sacramento Service Area, 2008-2012**

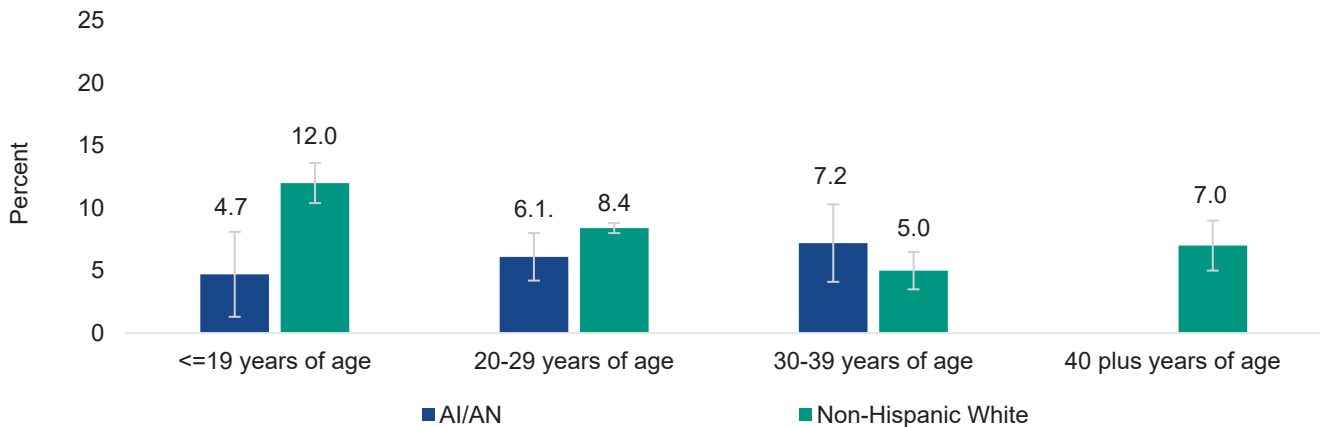


Source: National Vital Statistics, Birth Certificates, 2008-2012

## Smoking by Maternal Age

Maternal smoking largely decreased as maternal age increased for NHW women. Conversely, AI/AN women experienced similar smoking rates across age groups (Figure 23).

**Figure 23. Maternal Smoking by Age Group, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates, 2008-2012

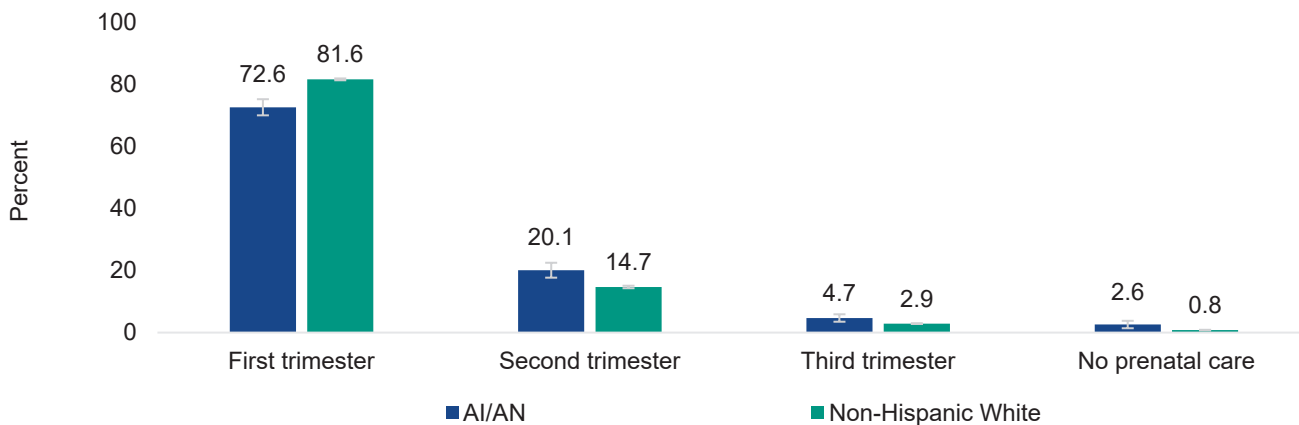
# MATERNAL AND CHILD HEALTH

## Prenatal Care

Prenatal care refers to the medical attention received by women before or during their pregnancy, specifically addressing the mother's well-being during her pregnancy and caring for the development of her baby. The goal of prenatal care is to detect potential problems early on in the pregnancy and to prevent potential complications. Early prenatal care is a significant component in ensuring a good pregnancy outcome and it is recommended for women to begin prenatal care during the first trimester. Women who receive late or no prenatal care are at risk for having undetected complications during their pregnancy that can result in severe maternal morbidity and mortality, and serious consequences to the unborn infant including low birth weight, premature birth, morbidity and mortality.<sup>24</sup>

Among pregnant women in the Sacramento County, 72.6% of AI/AN women began prenatal care in the first trimester compared to 81.6% of NHW women, a significant difference (Figure 24). The proportion of NHW women beginning prenatal care in the first trimester was approximately 12.3% higher compared to AI/AN women. In addition, approximately 7.3% of pregnant AI/AN women either began prenatal care in the third trimester or did not receive any prenatal care during their pregnancy compared to approximately 3.7% percent of NHW pregnant women. AI/AN women had a 2.0 times higher proportion of either beginning prenatal care in the third trimester or not receiving any prenatal care during their pregnancy compared to NHW women. There was a large amount of missing prenatal care information in the birth certificate database.

**Figure 24. Prenatal Care by Trimester, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates, 2008-2012

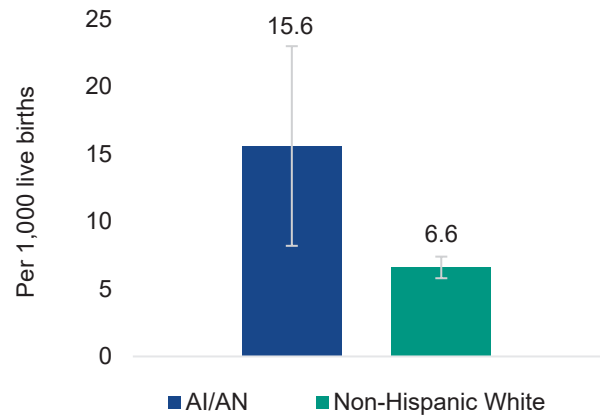
# MATERNAL AND CHILD HEALTH

## Infant Mortality

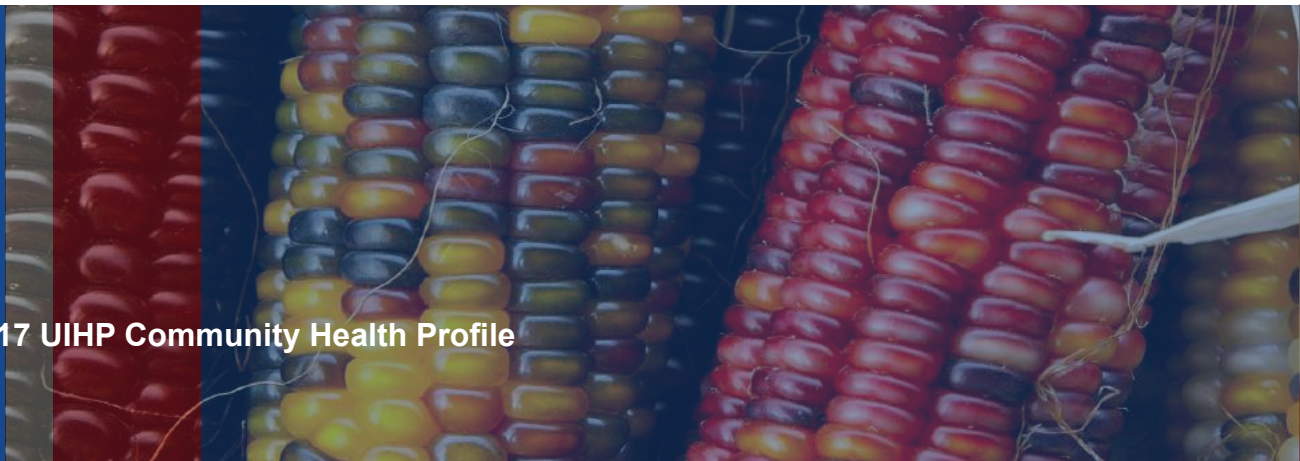
Infant mortality is a useful indicator for the level of health in a community. It is defined as the number of deaths of infants younger than one year of age per 1,000 live births for a given period of time. Infant mortality is related to the underlying health of the mother, public health practices, socioeconomic conditions, and the availability and use of appropriate health care for infants and pregnant women.<sup>25</sup> Two thirds of infant deaths occur in the first month after birth and are primarily due to health problems of the infant or the pregnancy, such as preterm delivery or birth defects. Infant deaths occurring after the first month are influenced greatly by social or environmental factors, such as exposure to cigarette smoke or problems with access to health care.<sup>25</sup>

The infant mortality for AI/ANs in Sacramento County was 15.6 per 1,000 live births (Figure 25). This was significantly higher than the infant mortality rate for NHWs (6.6 per 1,000 live births), with AI/AN infants having 2.4 times higher rates of death within their first year of life compared to NHW infants.

**Figure 25. Infant Mortality Rate, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Death Certificates, 2008-2012



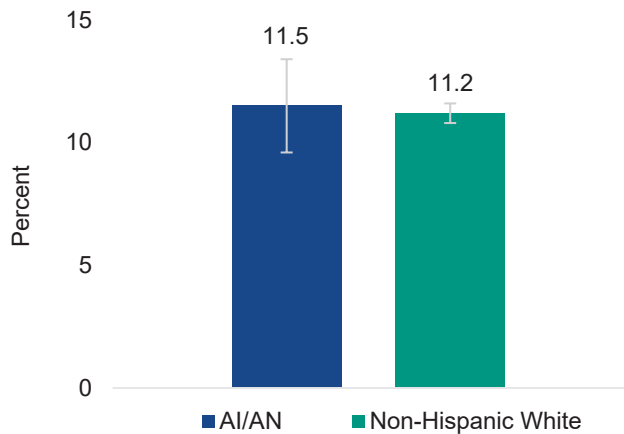
# MATERNAL AND CHILD HEALTH

## Premature Births

A premature birth is defined as childbirth occurring earlier than 37 completed weeks of pregnancy.<sup>26</sup> In Sacramento County, approximately 11.2% of all infants born to NHW women were born prematurely, which is similar to infants born prematurely among AI/AN women at 11.5% (Figure 26).

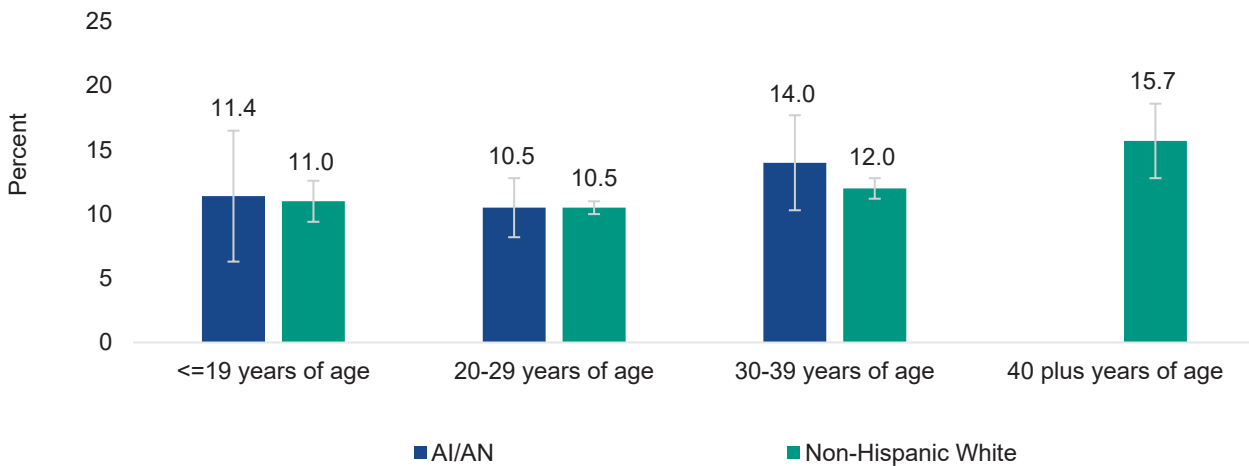
Patterns of premature births were similar for both NHW and AI/AN pregnant woman by age stratification (Figure 27).

**Figure 26. Premature Births (<37 weeks), Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates, 2008-2012

**Figure 27. Premature Births (<37 weeks) by Maternal Age Group, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates 2008-2012

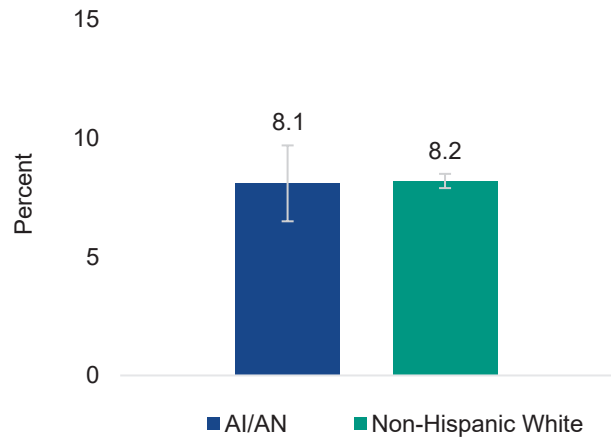


# MATERNAL AND CHILD HEALTH

## Low Birth Weight

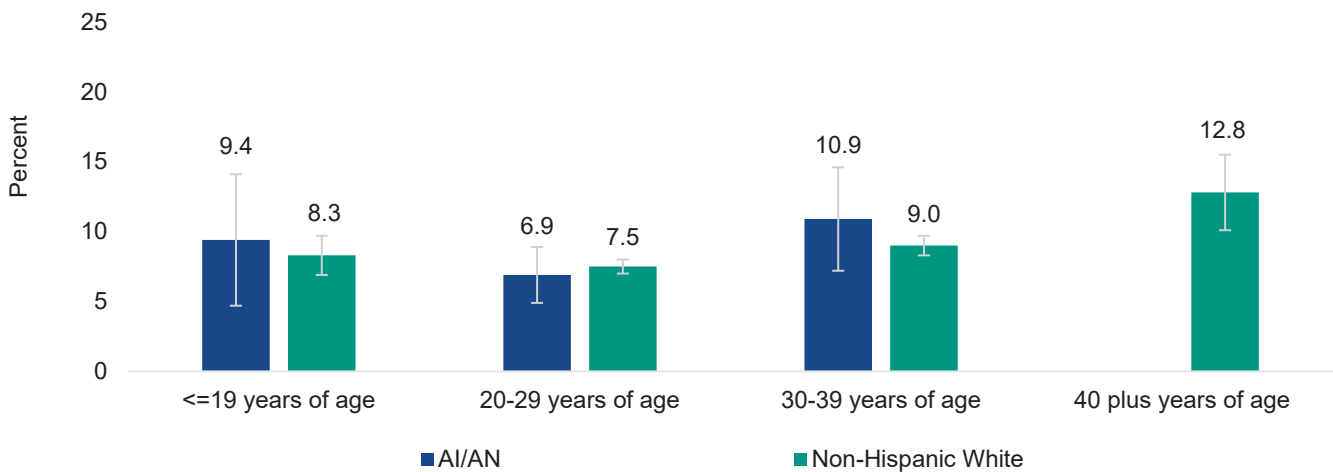
Low birth weight is defined as less than 2,500 grams (5.5 pounds).<sup>27</sup> In Sacramento County, approximately 8.1% of all births born to AI/AN women were low birth weight, which is similar to all infants born to NHW women who were low birth weight at 8.2% (Figure 28). Low birth weight patterns by age stratification were similar for both NHW and AI/AN pregnant woman (Figure 29). The proportion of low birth weight infants for AI/AN women was relatively consistent across maternal age groups.

**Figure 28. Low Birth Weight (<2,500 g), Sacramento Service Area, 2008-2012**

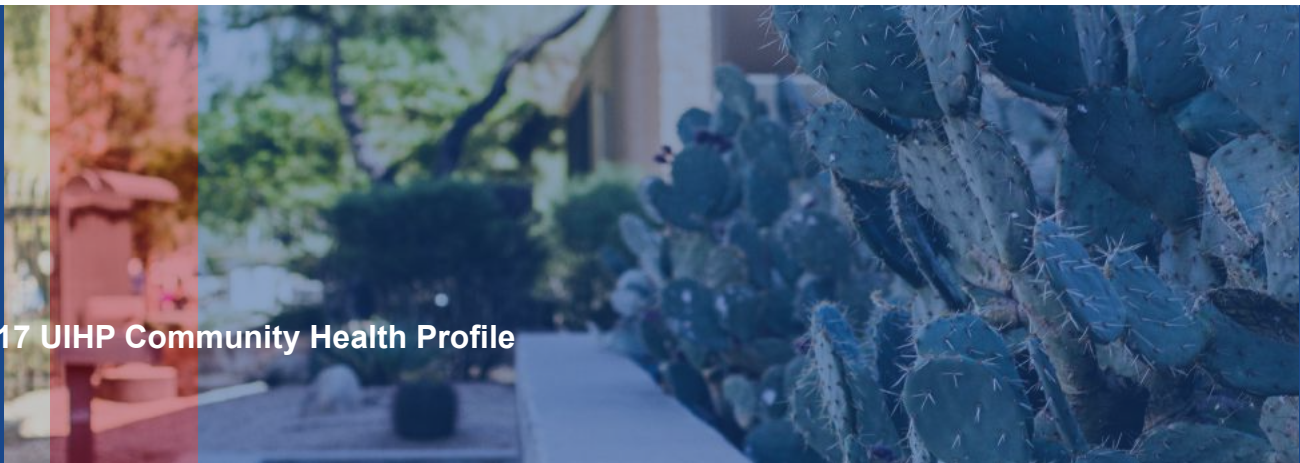


Source: National Vital Statistics, Birth Certificates, 2008-2012

**Figure 29. Low Birth Weight (<2,500 g), by Maternal Age Group, Sacramento Service Area, 2008-2012**



Source: National Vital Statistics, Birth Certificates 2008-2012



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# APPENDIX

## Glossary of Terms

ACS – American Community Survey

AI/AN – American Indian / Alaska Native

IHS – Indian Health Service

MCH – Maternal and Child Health

NCHS – National Center for Health Statistics

NHW – Non-Hispanic White

NICU – Neonatal Intensive Care Unit

NVSS – National Vital Statistics System

SNAHC – Sacramento Native American Health Center

SNAP – Supplemental Nutrition Assistance Program, commonly referred to as Food Stamps

TEC – Tribal Epidemiology Center

UIHI – Urban Indian Health Institute, a division of the Seattle Indian Health Board

UIHP – Urban Indian Health Program

# APPENDIX

## About Us – Our Mission & History

The mission of UIHI is to support the health and well-being of urban Indian communities through information, scientific inquiry, and technology.

The UIHI was established as a Division of the Seattle Indian Health Board, a community health center for urban American Indians and Alaska Natives (AI/ANs). The UIHI is one of 12 tribal epidemiology centers (TECs) funded by the Indian Health Service (IHS). While the other 11 TECs work with tribes regionally, the UIHI focuses on the nationwide urban AI/AN population. As a crucial component of the health care resources for all AI/ANs, tribal epidemiology centers are responsible for:

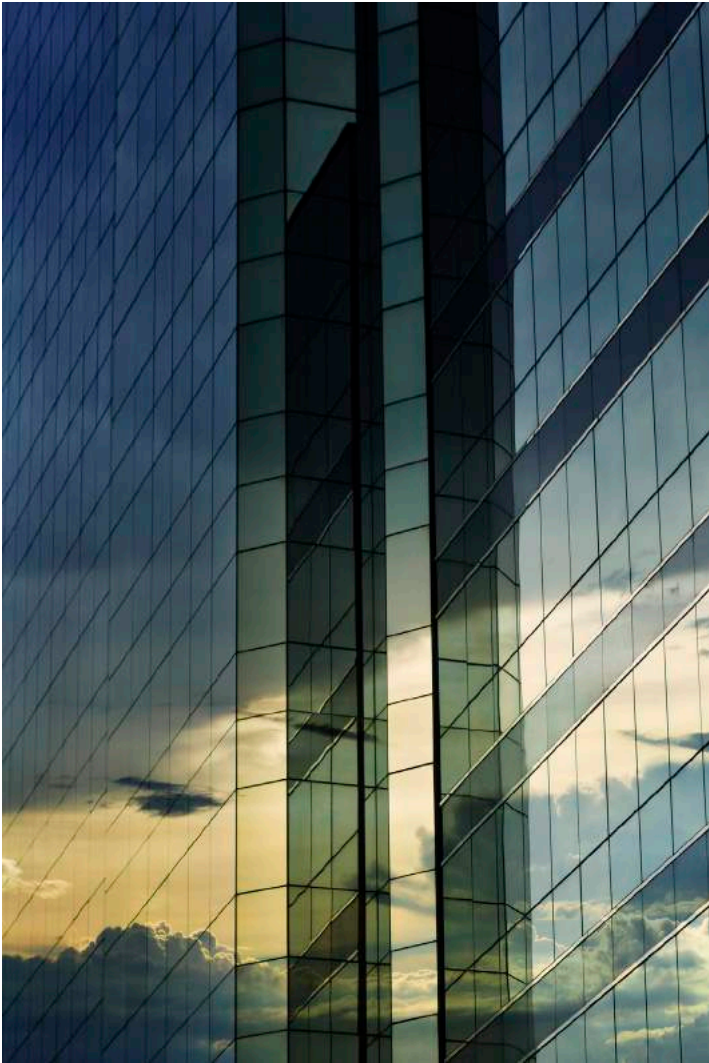
- Managing public health information systems
- Investigating diseases of concern
- Managing disease prevention and control programs
- Communicating vital health information and resources
- Responding to public health emergencies
- Coordinating these activities with other public health authorities

## Contact Information

For general questions, please contact: [info@uihi.org](mailto:info@uihi.org)

UIHI distributes a Weekly Resource Email – if you would like to be included in our subscription to receive updates, you can email the address above.

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