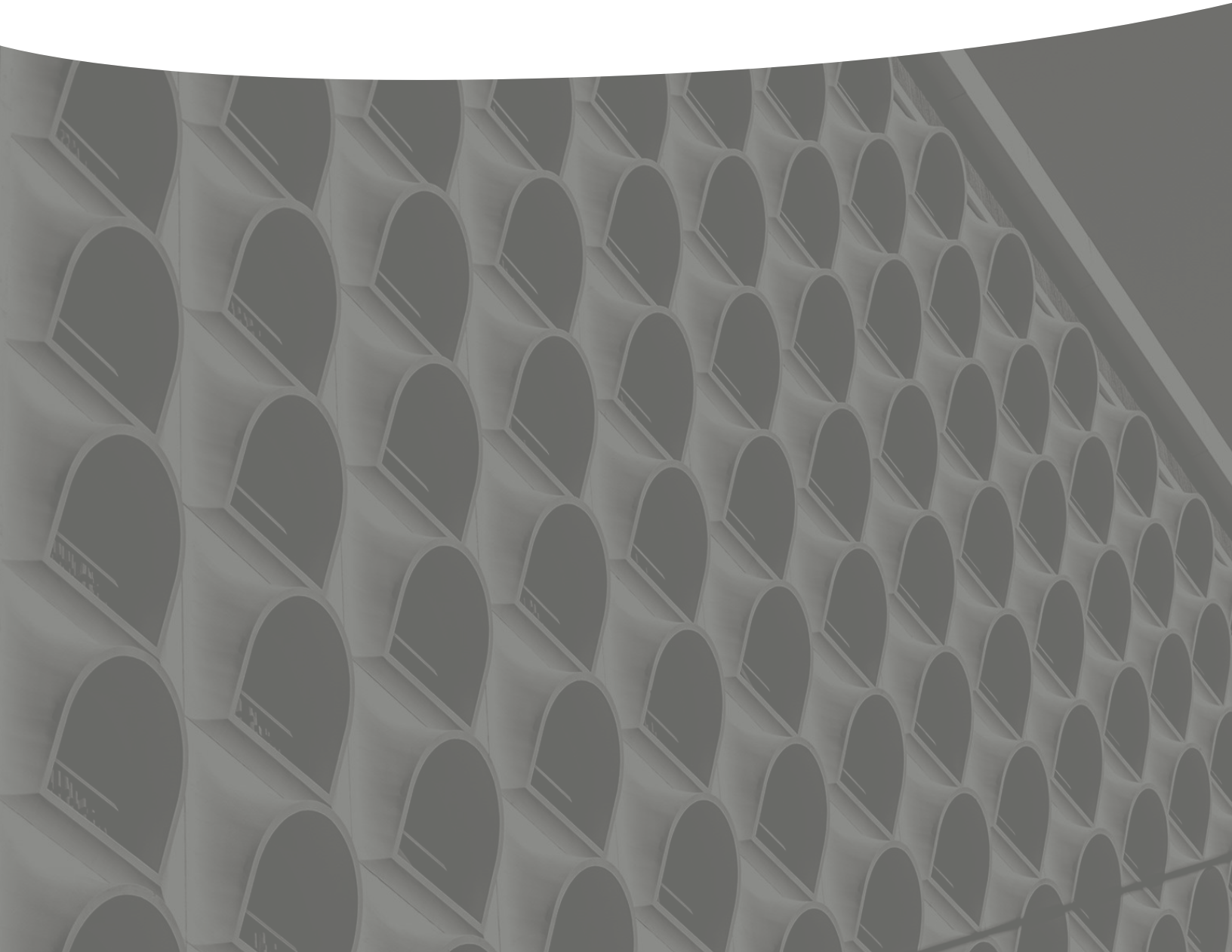
Community Health Profile

Individual Site Report | Reno 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.

This report was prepared by: Adrian Dominguez, MS; Joshua Smith, BS; Kelsey Liu, MPH; with the support of Alyssa Yang, MPH; Brinda Sivaramkrishinan, MPH; Colin Gerber, MPH; and Leah Dodge, MPH.

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Acknowledgements

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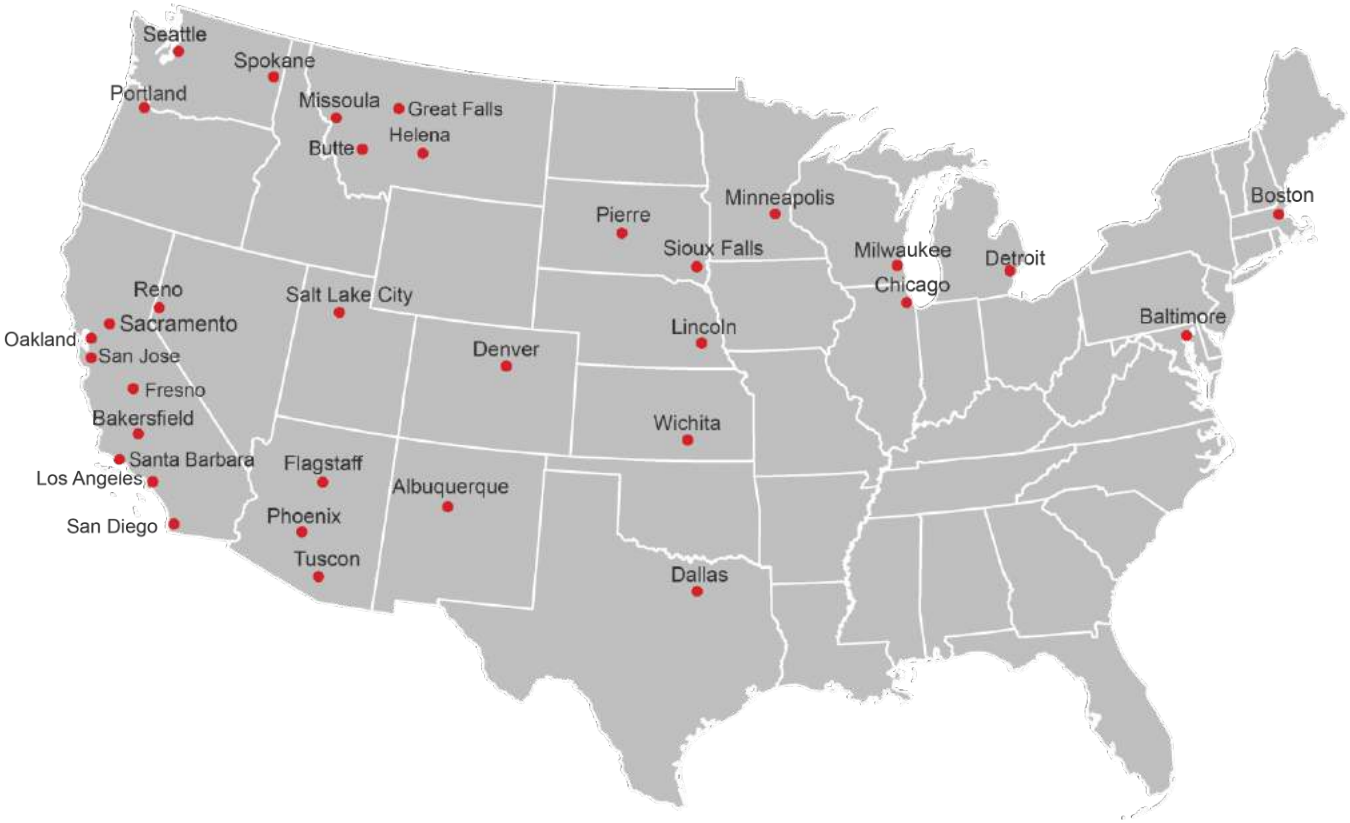
The Urban Indian Health Institute would like to thank the staff at the Urban Indian Health Programs, social service and faith based agencies for the excellent work they do daily on behalf of their communities.

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.[1] 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 Nevada Urban Indians (NUI), which is one of 32 Subchapter IV UIHPs across the country. The counties analyzed in this report are defined as Churchill County, Douglas County, Storey County, Washoe County and Carson County by IHS. This report will refer to the service area the Reno service area and Nevada Urban Indians interchangeably. This document presents data specific to demographics, social determinants of health, mortality, and maternal and child health. The data used is from national data sources and in no way uses patient data from NUI. 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 the Reno service area. 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.[2] 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.[3] 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

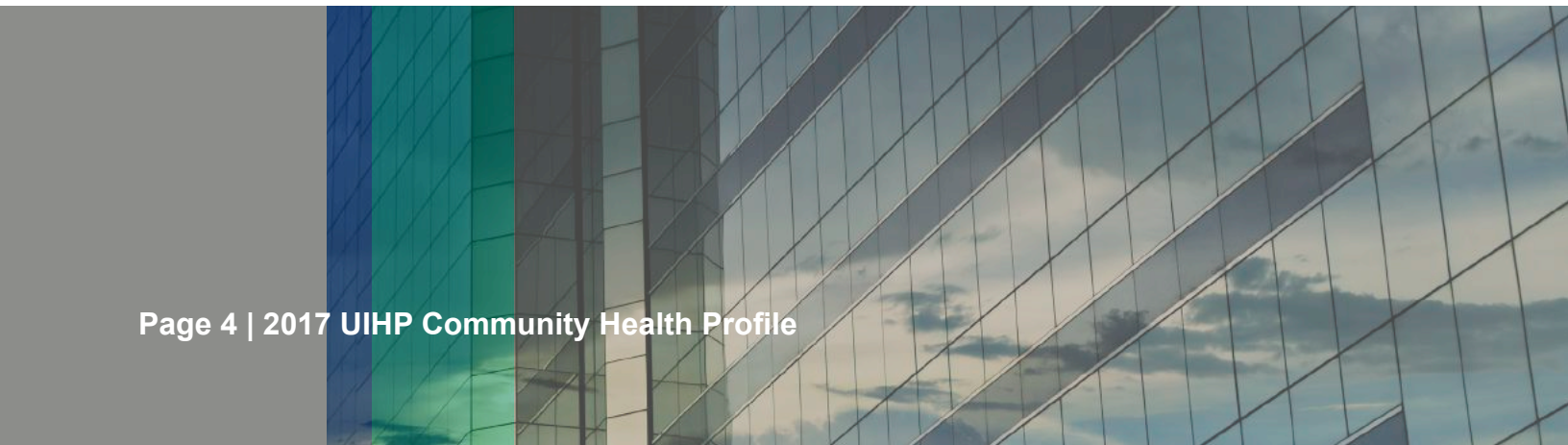
The data for this report only includes information from Churchill County, Douglas County, Storey County, Washoe County and Carson County residents. For each indicator, prevalence or incidence was calculated for the AI/AN population and compared with the NHW population. Because NHWs are the racial/ethnic 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. The mortality data presented is only representative of Churchill County, Douglas County, Storey County and Washoe County due to the lack of data from all other counties in the service area.

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 NUI 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 NUI. 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 Churchill County, Douglas County, Storey County, Washoe County and Carson 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 was 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.[4] 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%.[5] The bias created by misclassification varies by age, proximity to a reservation, and cause-of-death.[6] 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.[7] 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.

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.

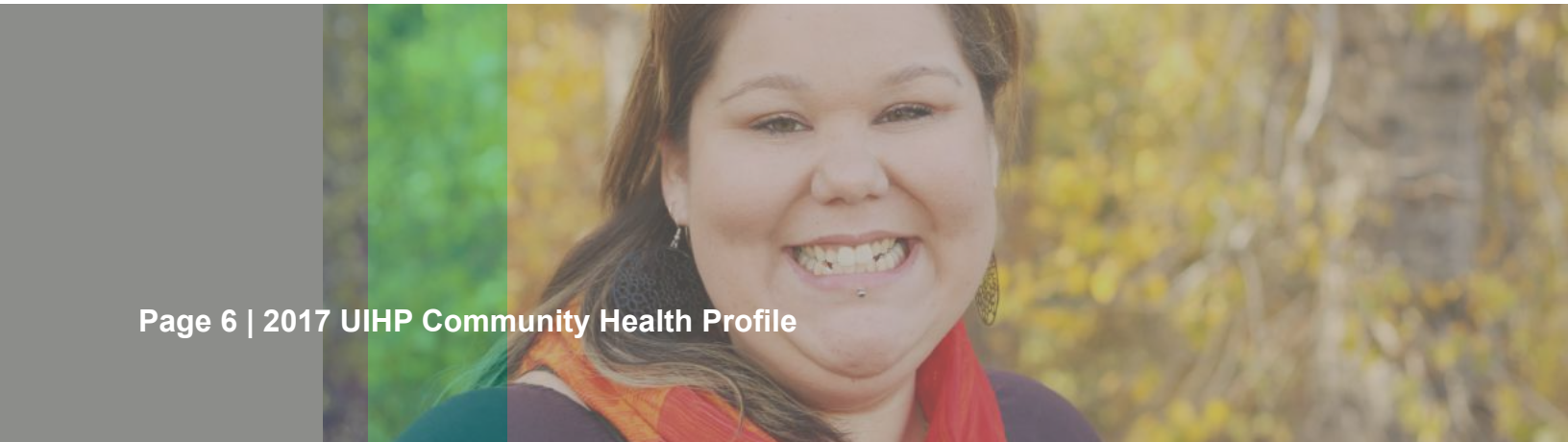
Race is self-reported on ACS, with similar race categories as the U.S. Census. However, some ACS data are not easily accessible for multiple race groups. Therefore, ACS data are reported for AI/AN alone in this report. ACS estimates in this profile are not adjusted for age; observed differences in estimates 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.

National Vital Statistics System

Mortality data from the National Vital Statistics System (NVSS) is generated from death certificates. This data is 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 was available was from 2010-2014. The five most recent years for which complete infant mortality data was 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 demographic information about parents,



DATA SOURCES

information on the infant, the mother's risk factors, and information on the birth. The five most recent years for which complete natality data was 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.htm.

SOCIODEMOGRAPHICS

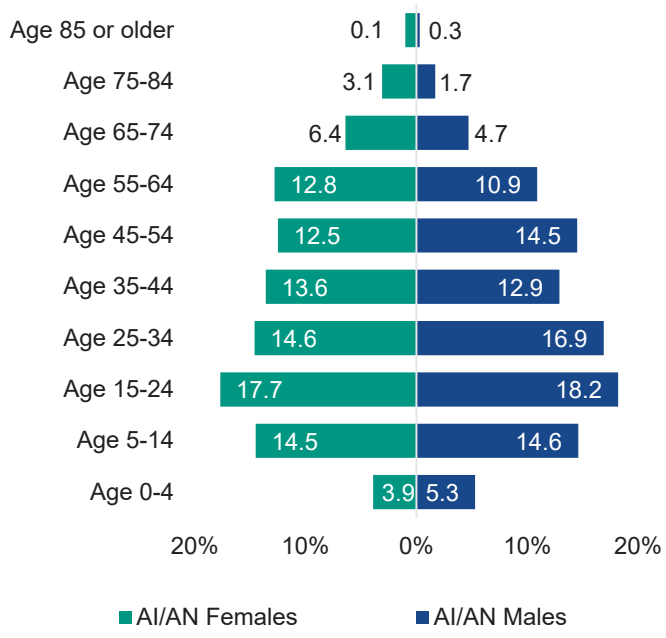
Introduction

The health of individuals and populations is greatly influenced by social determinants – the conditions in which people live, learn, work, and play.[8,9] 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.[10] These determinants, including race, lack of access to education or employment, poverty, and housing, among other things, produce extensive inequities within and between populations.[8,9] 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

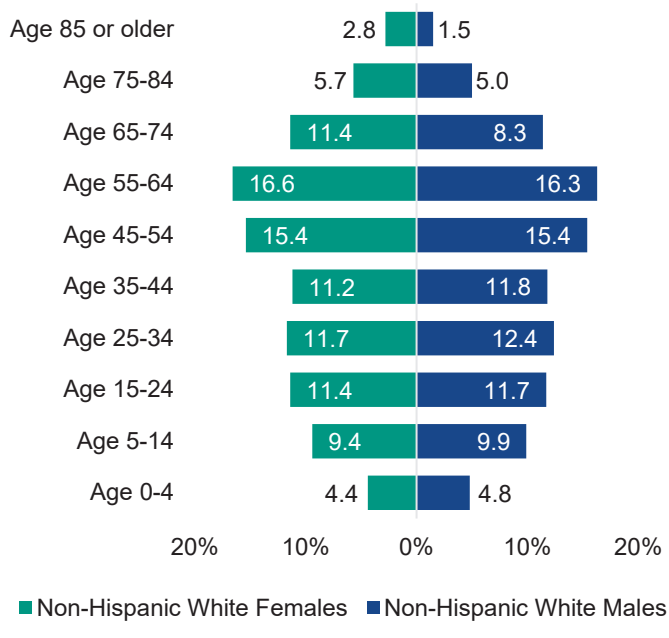
Relative to the NHW population, the AI/AN population in Reno service areas was younger (Figure 1 and Figure 2). In all Reno service areas combined, 37.1% of AI/ANs were under the age of 25 years, compared with 25.7% of NHWs. In contrast, 8.6% of AI/ANs were over the age of 65 years, compared with 18.9% of NHWs.

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

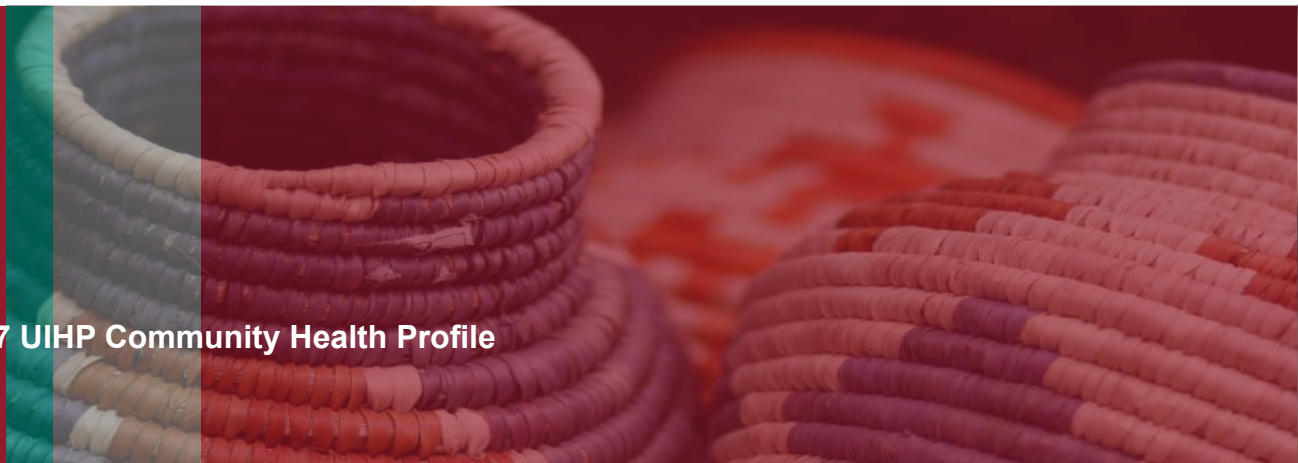


Source: American Community Survey, 2010-2014

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



Source: American Community Survey, 2010-2014

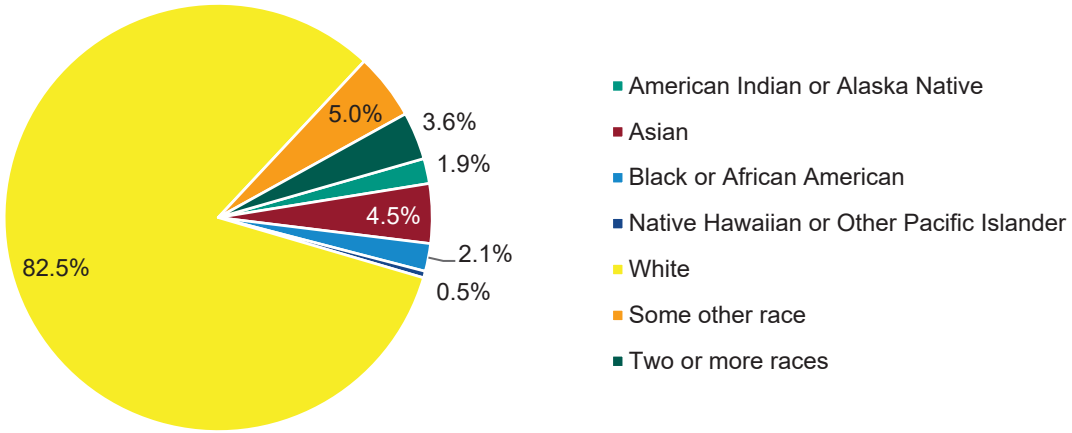


SOCIODEMOGRAPHICS

Race

As shown in Figure 3, an estimated 10,481 (1.9%) individuals identified as AI/AN alone in all Reno service areas combined, and an estimated 15,241 (2.7%) 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 (82.5%) of the total population (378,241) in Reno service areas. The next largest population was the group identified as some other race (5.0%) In addition, Asians alone were identified as consisting of 4.5% of the total population (24,201 individuals).

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

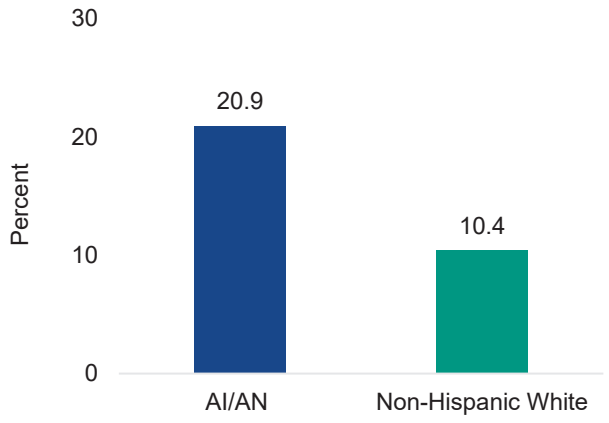


Source: American Community Survey, 2010-2014

Employment

Extensive evidence has shown that unemployment has a negative effect on health.[11] Unemployed individuals may experience financial insecurity and reduction in social status, social relations, and self-esteem.[12] In addition, unemployed individuals are also more likely to lack health insurance coverage.[12] In all Reno service areas combined, AI/ANs aged 16 and older experienced unemployment at two times the proportion of NHWs (20.9% vs. 10.4%; Figure 4). These ratios do not include individuals in the military or individuals who are institutionalized.

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



Source: American Community Survey, 2010-2014

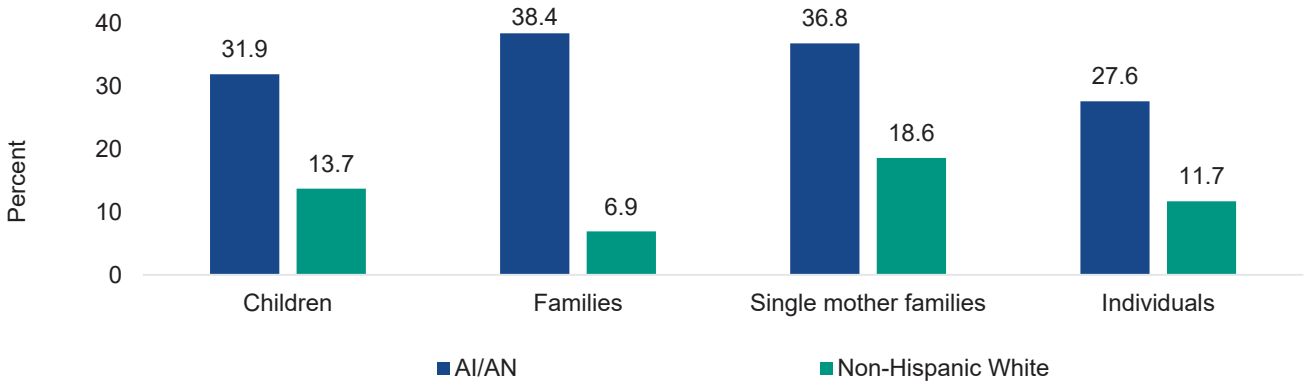
SOCIODEMOGRAPHICS

Poverty

Poverty and health are inextricably connected.[13] 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 likely affects health throughout a person's lifespan.[14] The American Community Survey defines individuals and families as being in poverty if their income is less than their poverty threshold (less than 100% of the federal poverty level).[15]

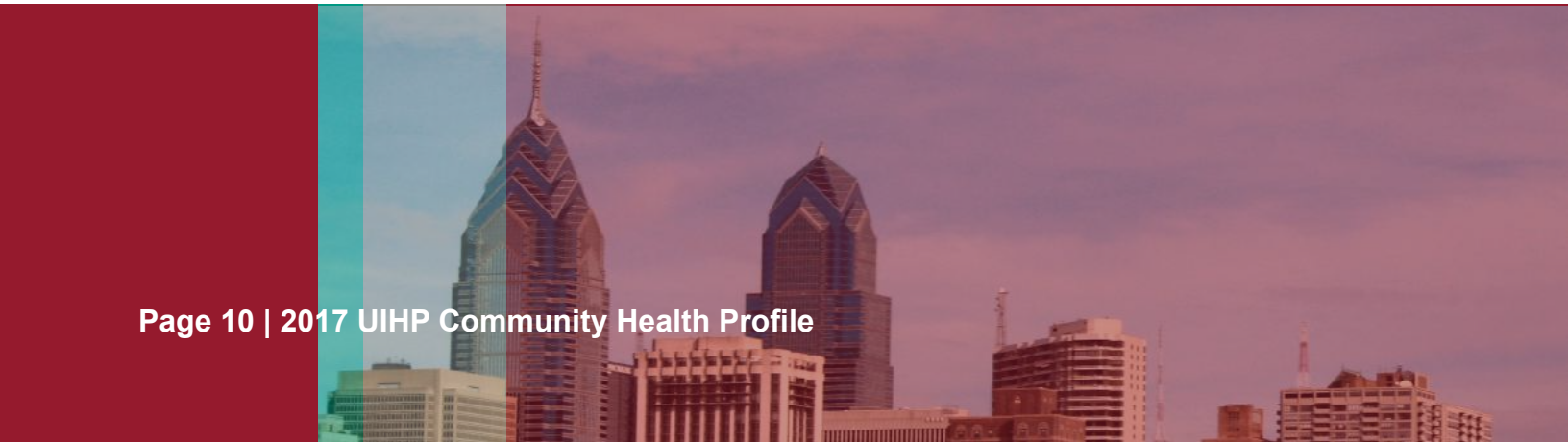
In all Reno service areas combined, more than a quarter of AI/AN individuals lived in poverty (27.6%; Figure 5), compared to approximately one tenth for NHWs (11.7%). Nearly one in three AI/AN children aged 17 and under (31.9%) in all Reno service areas combined lived in households with an income below the federal poverty level. This proportion is 2.3 times that of the NHW population (13.7%). Nearly two fifths of AI/AN families in all Reno service areas combined (38.4%) lived in households with an income below the federal poverty level; this is 5.6 times the proportion of NHWs (6.9%) living at federal poverty level. Among those families in households headed by single mothers, over one-third of AI/AN families lived in poverty (36.8%), nearly twice the proportion of comparable NHW families (18.6%).

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



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.

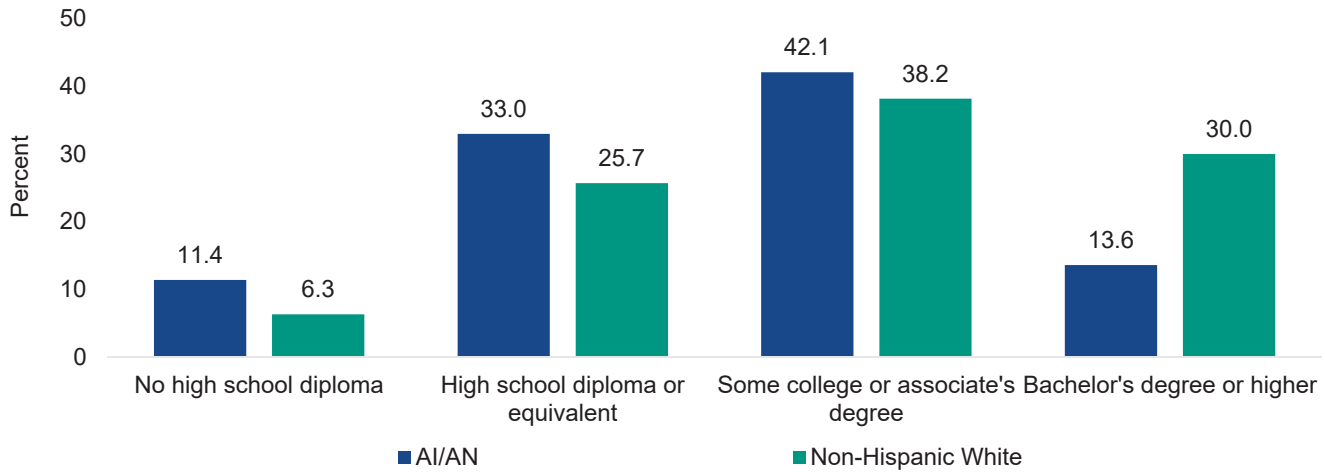


SOCIODEMOGRAPHICS

Educational Attainment

The relationship between education and health, or the "health-education gradient," is well documented.[16] Significant disparities in life expectancy by level of education are found among all demographic groups and are arguably increasing over time.[17] In all Reno service areas combined, a slightly higher percentage of AI/ANs aged 25 and older had not completed high school or passed the General Educational Development (GED) exam (11.4%; Figure 6) compared to the NHW population (6.3%). A lower percentage of AI/ANs (13.6%) reported an undergraduate or graduate degree as their highest level of education compared with the NHW population (30.0%).

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



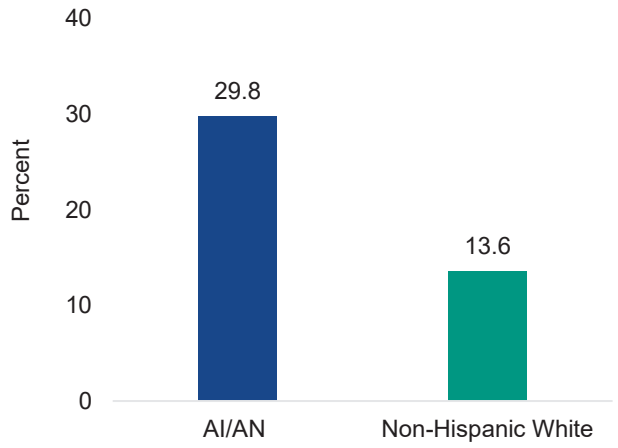
Source: American Community Survey, 2010-2014

SOCIODEMOGRAPHICS

Health Insurance Coverage

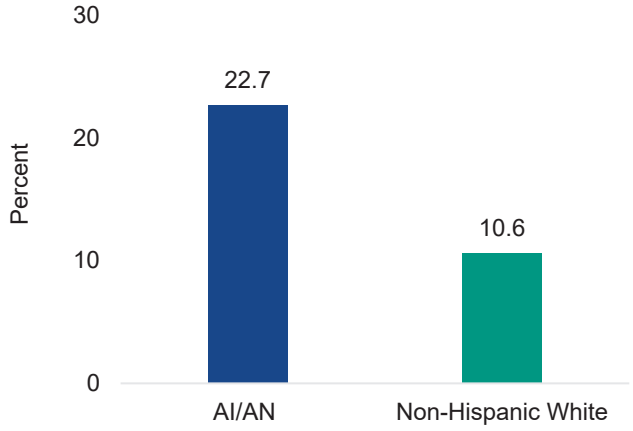
Compared to those with health insurance coverage, those without health insurance coverage have higher mortality rates.[18] Individuals without health insurance are also less likely to receive care and take longer to return to health after an unintentional injury or the onset of a chronic disease compared to those with health insurance.[19] In all Reno service areas combined, nearly one in three AI/ANs under age 65 (29.8%) reported having no health insurance, 2.2 times the proportion of NHWs (13.6%; Figure 7) without health insurance. The proportion of uninsured AI/AN children under the age of 18 in all Reno service areas was 2.1 times higher than that of NHW children (22.7% vs. 10.6%, Figure 8).

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

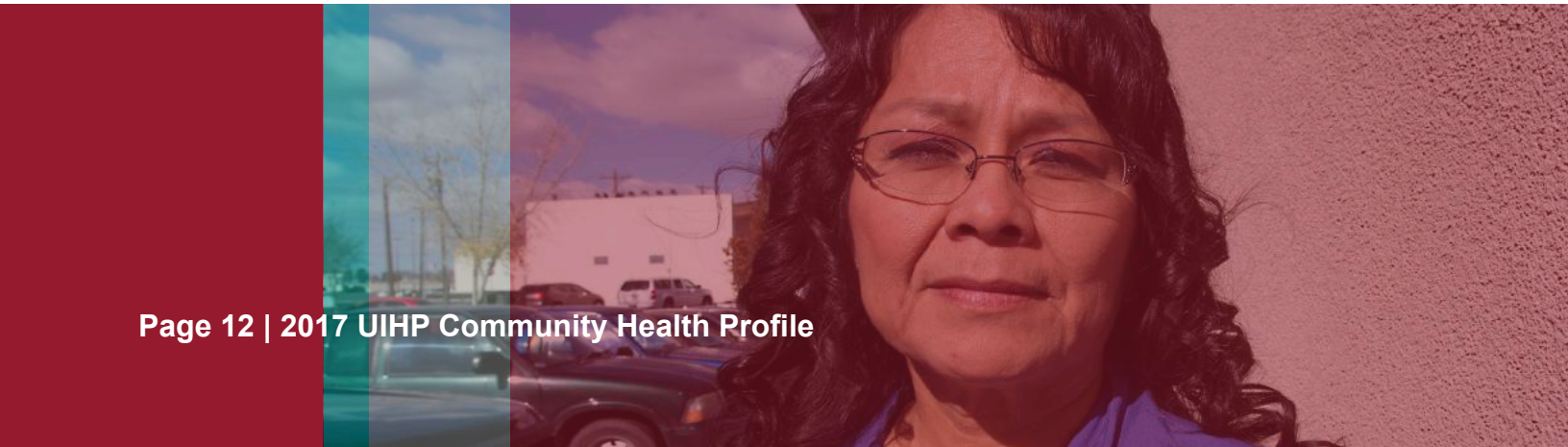


Source: American Community Survey, 2010-2014

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



Source: American Community Survey, 2010-2014



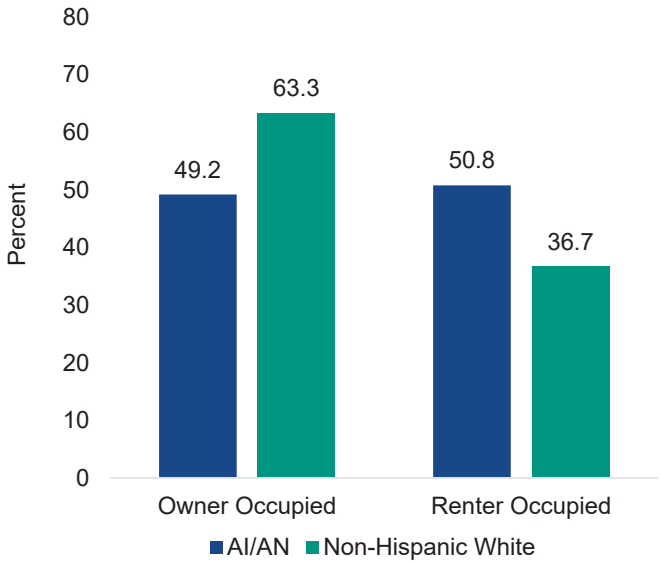
SOCIODEMOGRAPHICS

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, increased coronary disease, and more risk factors such as smoking.[20]

In all Reno service areas combined, the proportion of renter occupation among AI/ANs was 1.4 times higher than NHWs (50.8% vs. 36.7%, Figure 9). Over half of all homes of AI/ANs were renter occupied, compared with over one-third of NHW homes. In contrast, the proportion of home ownership among NHWs in all Reno service areas was over 1.3 times higher than among AI/ANs (63.3% vs. 49.2%). Half of all AI/AN homes were owner occupied, compared with nearly two-thirds of homes for NHWs.

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



Source: American Community Survey, 2010-2014

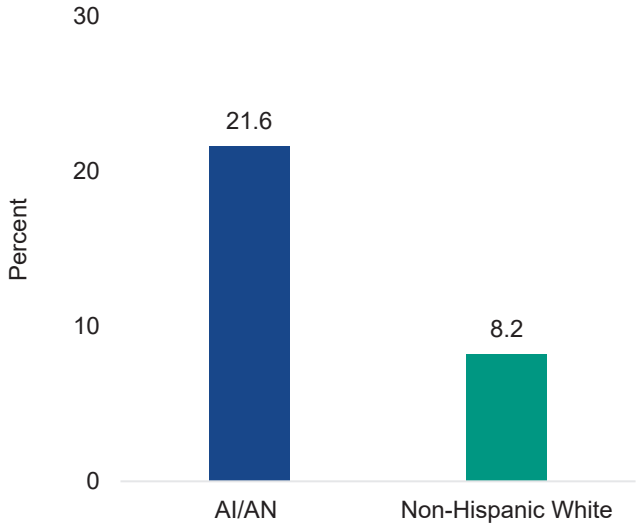
SOCIODEMOGRAPHICS

Food Stamps

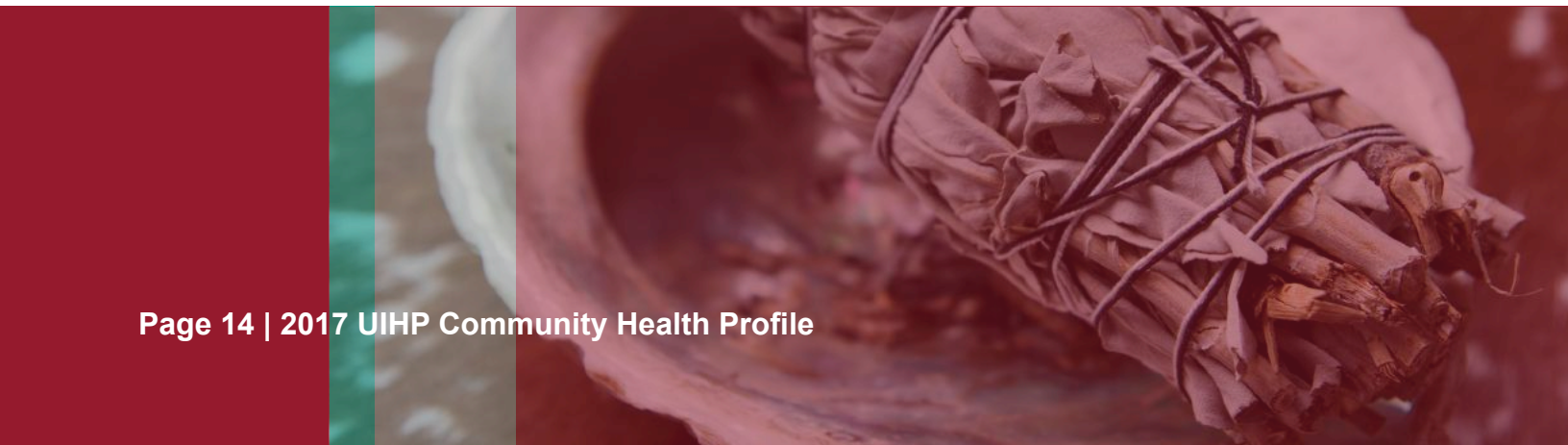
As the largest food assistance program in the United States, the Supplemental Nutrition Assistance Program (SNAP; formally known as the federal Food Stamp program) is a crucial part of the social safety net.[21] Households with an income below 130% of the federal poverty level are eligible to receive 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. [22] 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.[21]

In all Reno service areas combined, more than one fifth of AI/AN households received SNAP benefits in the past year (Figure 10). The rate of SNAP participation among AI/ANs in Reno service area was nearly 2.6 times higher than the proportion of NHW receiving SNAP benefits.

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



Source: American Community Survey, 2010-2014



MORTALITY

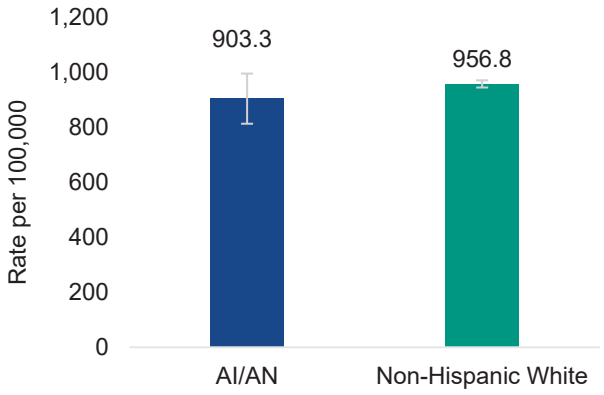
Introduction

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.[23] True mortality rates among AI/ANs in Reno service areas are assumed to be higher than the rates described for this section.

All-Cause Mortality Rate

The all-cause mortality rate was similar for the AI/AN and NHW populations (Figure 11). Mortality rate of AI/ANs in Reno service area was 903.3 per 100,000, compared to 956.8 among the NHW population.

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

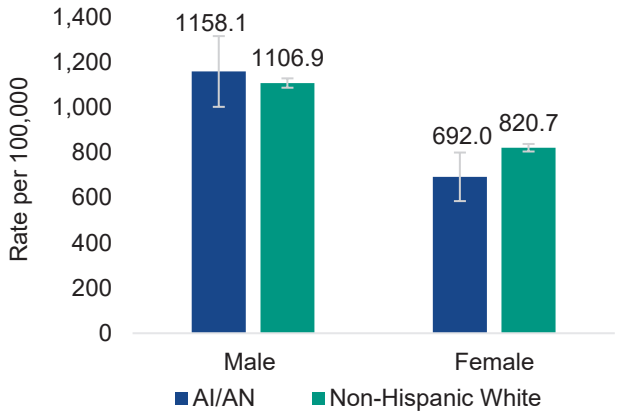


Source: US Center for Health Statistics, Death Certificates, 2010-2014

Mortality Rate by Gender

The mortality rates were similar between sexes for AI/AN and NHW (Figure 12). In addition, the mortality rate for AI/AN women was 40.2% lower than AI//AN men.

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



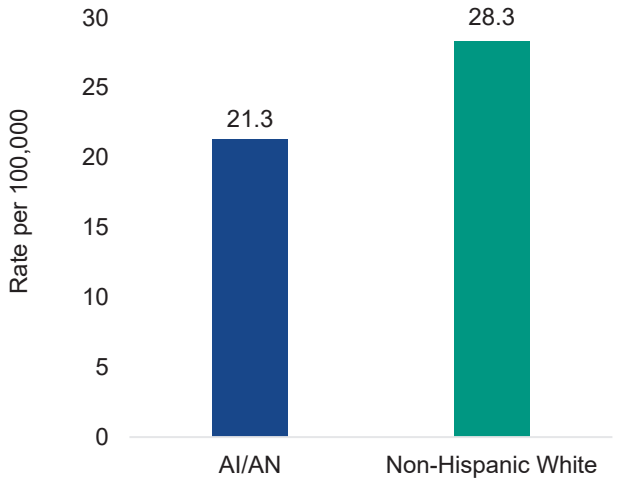
Source: US Center for Health Statistics, Death Certificates, 2010-2014

MORTALITY

Suicide

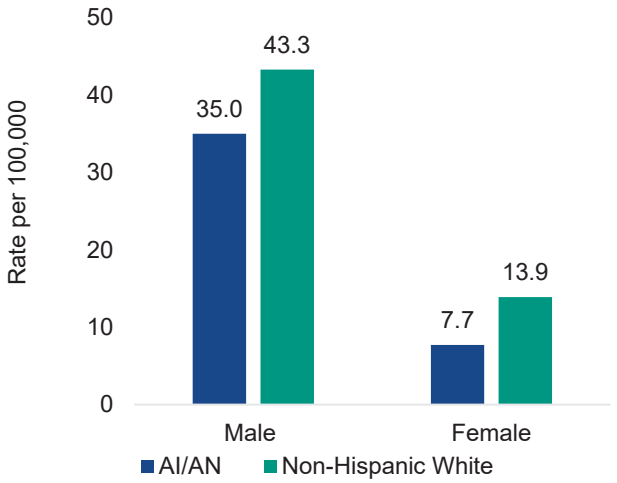
The suicide rate of NHWs was 1.3 times higher than that of AI/ANs in Reno service areas (Figure 13). Compared to AI/AN men and women, the rate of suicide among NHW men was 1.2 times higher, and 1.8 times higher among NHW women respectively (Figure 14). When comparing between AI/ANs, the suicide rate for males was 4.5 times higher than females.

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



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

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



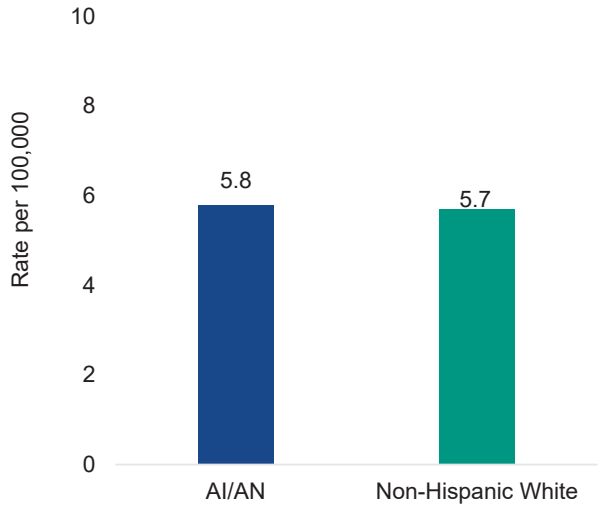
Source: US Center for Health Statistics, Death Certificates, 2010-2014

MORTALITY

Homicide

Homicide rate in the AI/AN population was 5.8 per 100,000 in Reno service area; this was similar to the NHW homicide rate of 5.7 per 100,000 (Figure 15).

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

AI/AN			NHW		
Rank	**Cause**	**Rate (per 100,000)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	1019.6	1	Vascular disease	735.2
2	Cancer	249.4	2	Cancer	412.8
3	Chronic liver disease and cirrhosis	132.2	3	Chronic lower respiratory disease	128.6
4	Diabetes	85.3	4	Alzheimer's disease	72.6
5	Flu and pneumonia	75.8	5	Intentional self-harm	55.5

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, Reno Service Area, 2010-2014

AI/AN Males			NHW Males		
Rank	**Cause**	**Rate (per 100,000)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	336.0	1	Vascular disease	360.2
2	Cancer	145.8	2	Cancer	227.5
3	Chronic liver disease and cirrhosis	78.0	3	Chronic lower respiratory disease	56.8
4	Chronic lower respiratory disease	55.4	4	Intentional self-harm	43.3
5	Diabetes	50.6	5	Alzheimer's disease	27.4

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, Reno Service Area, 2010-2014

AI/AN Female			NHW Females		
Rank	**Cause**	**Rate (per 100,000)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	202.5	1	Vascular disease	257.6
2	Cancer	111.8	2	Cancer	173.4
3	Chronic liver disease and cirrhosis	54.8	3	Chronic lower respiratory disease	62.1
4	Flu and pneumonia	38.2	4	Alzheimer's disease	31.5
5	Diabetes	29.5	5	Flu and pneumonia	18.2

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, Reno Service Area, 2010-2014

AI/AN			NHW		
Rank	**Cause**	**Rate (per 100,000)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Tracheal/Bronchus/ Lung cancer	57.0	1	Tracheal/Bronchus/ Lung cancer	100.2
2	Prostate cancer	31.3	2	Colon cancer	33.7
3	Cervical cancer	29.9	3	Breast cancer	26.5
4	Colon cancer	28.7	4	Pancreatic cancer	25.5
5	Pancreatic cancer	18.6	5	Prostate cancer	19.9

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, Reno 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	42.5	1	Tracheal/Bronchus/ Lung cancer	54.0
2	Prostate cancer	31.3	2	Prostate cancer	25.0
3	Pancreatic cancer	15.5	3	Colon cancer	21.5
4	Colon cancer	12.1	4	Bladder cancer	15.4
5	Leukemia	8.9	5	Pancreatic cancer	14.4

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

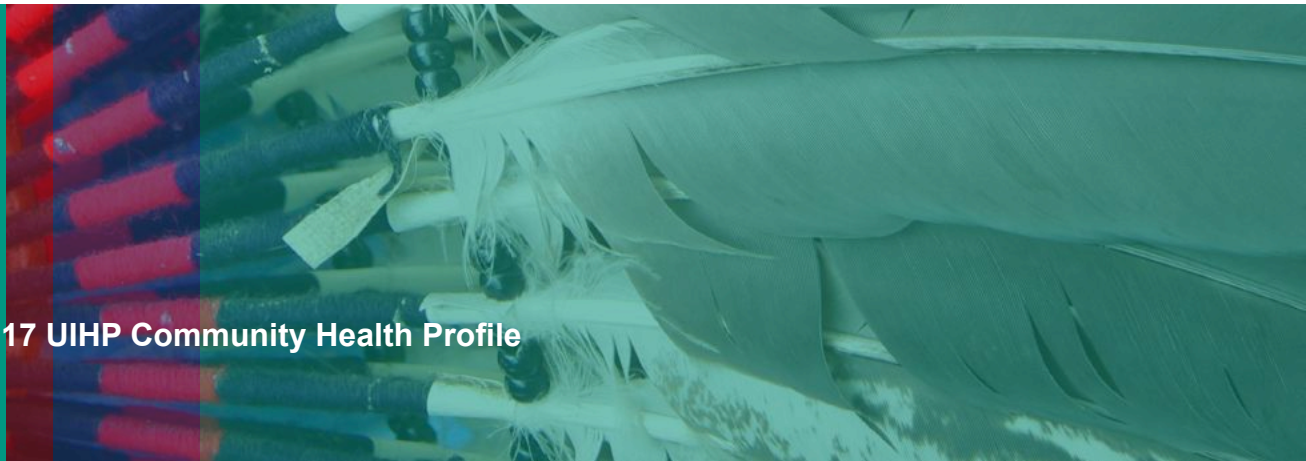
Table 5 summarizes the top causes of cancer mortality for both AI/AN and NHW men.

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

AI/AN Females			NHW Females		
Rank	**Cause**	**Rate (per 100,000)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Cervical cancer	23.7	1	Tracheal/Bronchus/ Lung cancer	48.1
2	Tracheal/Bronchus/ Lung cancer	22.1	2	Breast cancer	27.5
3	Colon cancer	14.1	3	Colon cancer	15.4
4	Pancreatic cancer	6.9	4	Cervical cancer	15.3

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

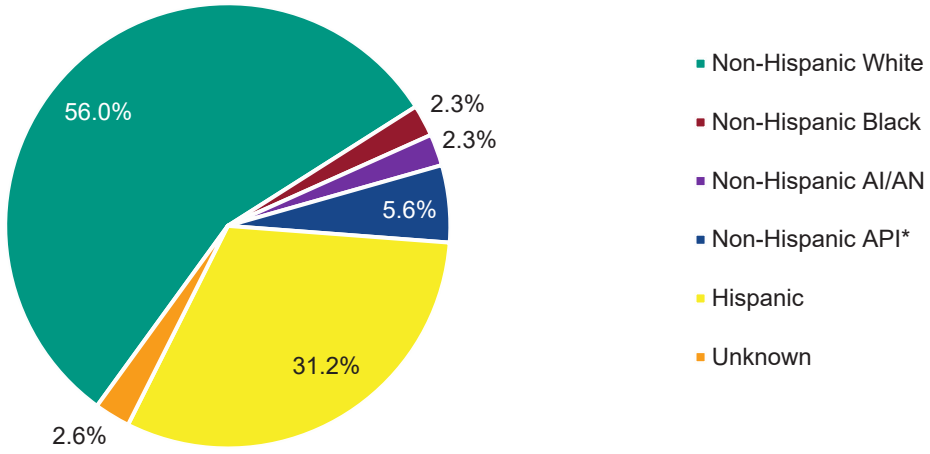
Introduction

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 NUI 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 Reno service areas. Among those births, 2.3% were identified as non-Hispanic AI/AN alone (Figure 16). The largest proportions of births among racial/ethnic groups were to NHW (56.0%) and Hispanic (31.2%) women. Non-Hispanic Asians and Pacific Islanders were 5.6%, and Non-Hispanic Blacks were 2.3% of all births.

Figure 16. Births by Race/Ethnicity, Reno Service Area, 2008-2012



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

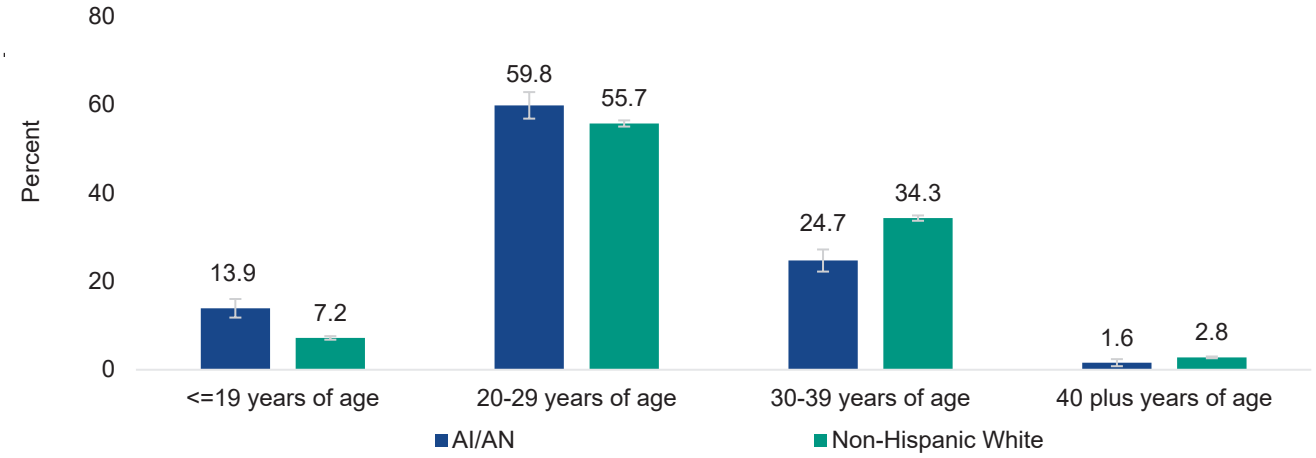
*API-Asian/Pacific Islander

MATERNAL AND CHILD HEALTH

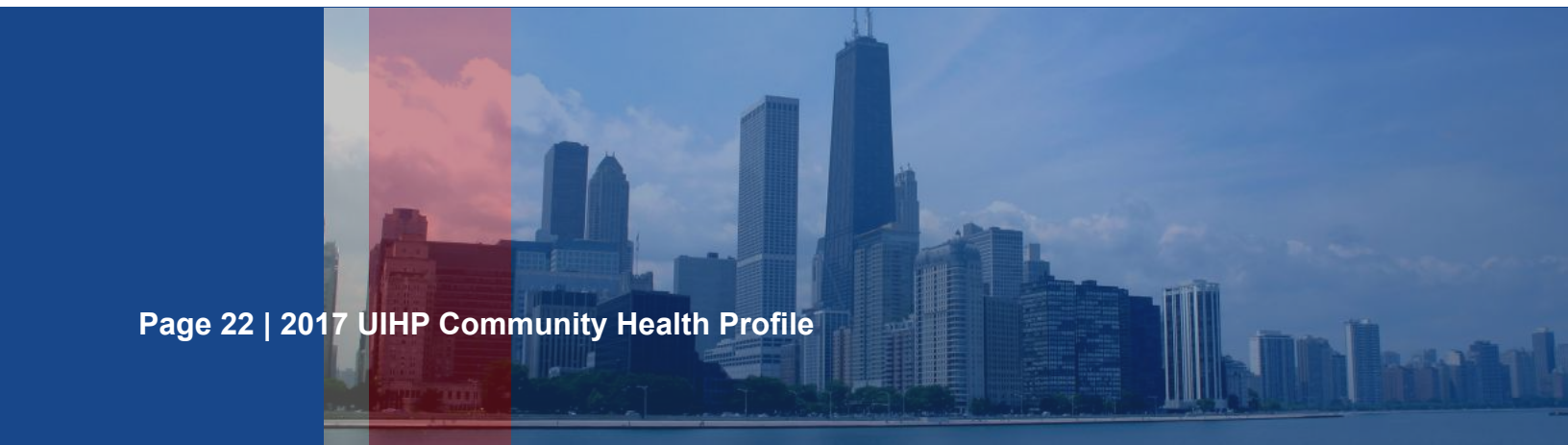
Age

In general, AI/AN women tend to give birth at younger ages than their NHW counterparts (Figure 17). 13.9% of births among AI/ANs in Reno service areas were to teenage women (less than 19 years of age) compared to 7.2% of NHW births. The proportion of AI/AN teenagers giving birth was 1.9 times higher than NHW teenagers. Of all births to women in their 20's, 59.8% were to AI/AN women compared to 55.7% among NHWs. Conversely, NHW women had higher rates of childbirth in their 30s compared to AI/AN women. More than one third of births to NHW women were to women in their 30's (34.3 %) compared to approximately one quarter of births (24.7) among AI/AN women in their 30's.

Figure 17. Births by Maternal Age Group, Reno Service Area, 2008-2012



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

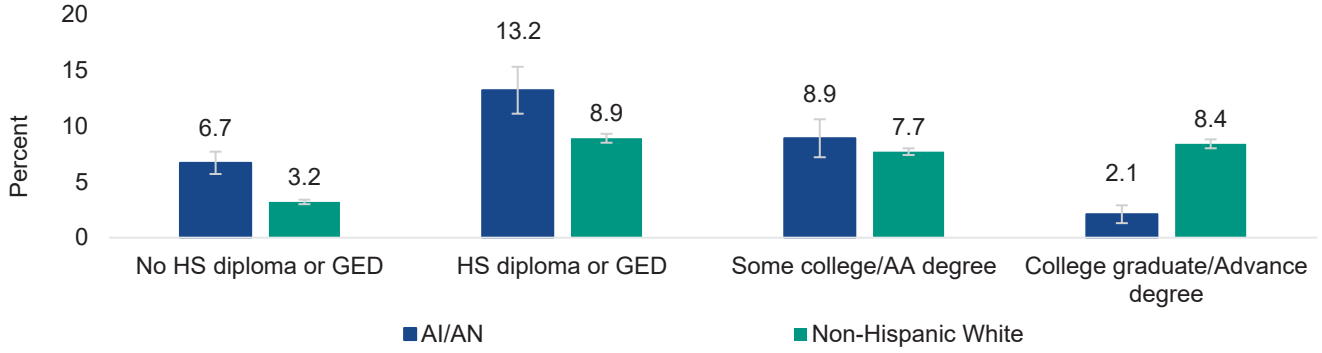


MATERNAL AND CHILD HEALTH

Education

Of all AI/ANs births in Reno service areas, 6.7% were to women who did not complete high school and 13.2% were to women whose highest level of education was a high school diploma or GED (Figure 18). Among NHW women, 3.2% of all births were to women who did not complete high school and 8.9% were to women whose highest level of education was a high school diploma or GED. The proportion of infants born to women with a high school diploma or less formal education was 1.6 times higher among AI/AN than NHW women. In addition, 8.4% of all births among NHWs were to women with a college or advanced degree compared to only 2.1% among their AI/AN counterparts. The proportion of infants born to women with a college or advanced degree was 4.0 times higher among NHW women than AI/AN women in Reno service areas.

Figure 18. Births by Maternal Education, Reno Service Area, 2008-2012

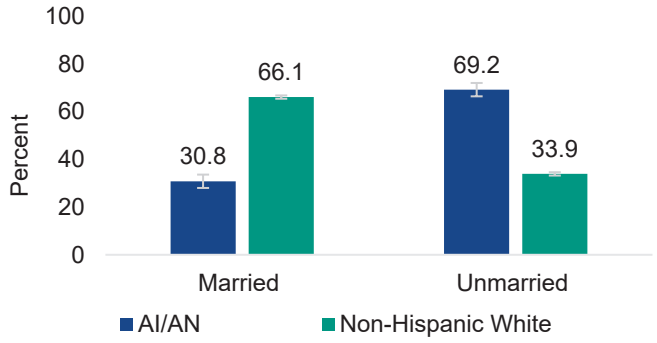


Source: National Vital Statistics Birth Certificates, 2008-2012

Marital Status

Of all AI/AN births in Reno service areas, 30.8% 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, where 66.1% of births were to married mothers, and 33.9% were to unmarried mothers. The proportion of unmarried AI/AN women giving birth was 2.0 times the proportion of unmarried NHW women giving birth.

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



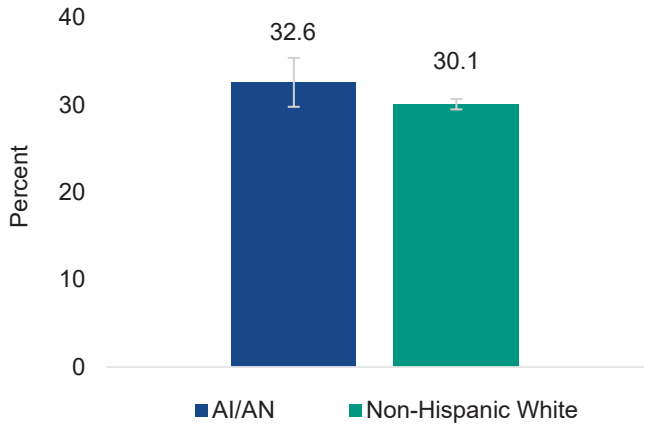
Source: National Vital Statistics, Birth Certificates 2008-2012

MATERNAL AND CHILD HEALTH

Cesarean Section

Among AI/AN females in Reno service areas 32.6% of births were delivered by cesarean section. This was similar to the proportion of deliveries by cesarean section births among NHWs (30.1%, Figure 20).

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

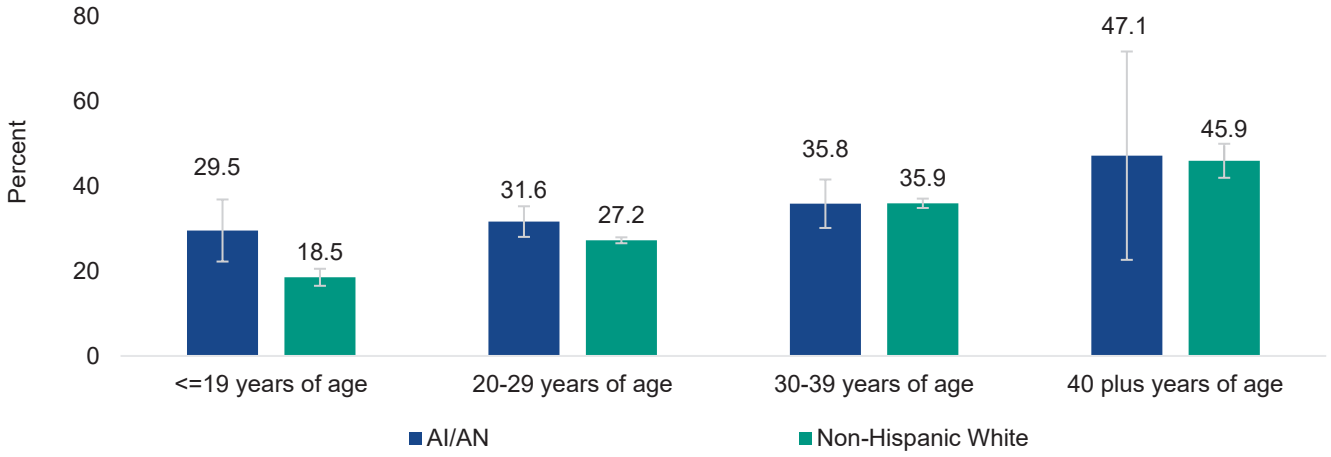


Source: National Vital Statistics, Birth Certificates 2008-2012

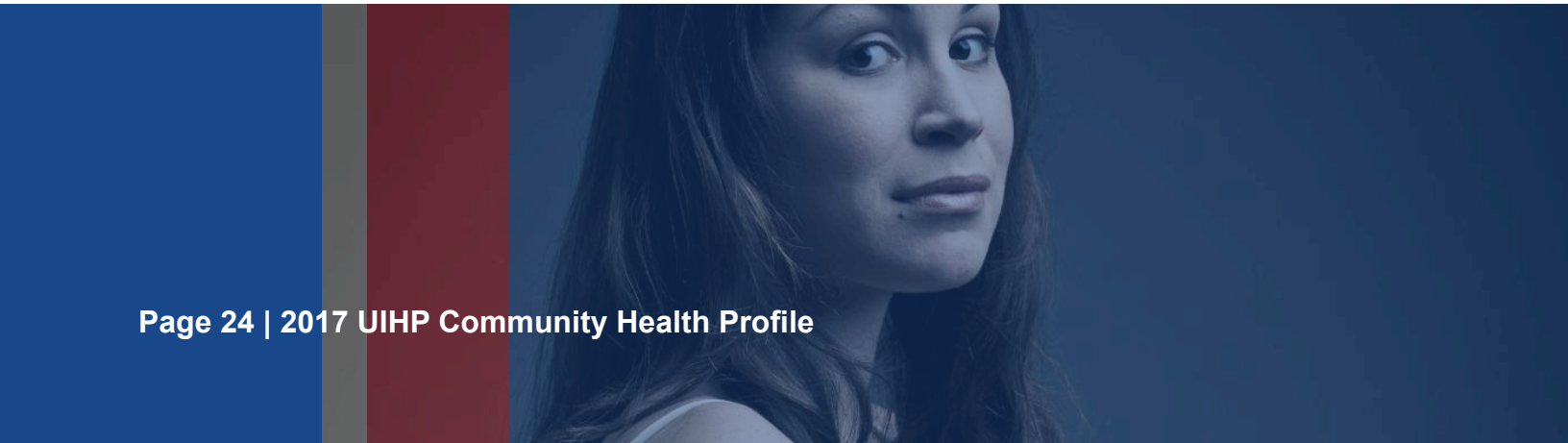
Cesarean Section by Maternal Age

The proportion of cesarean deliveries increased as maternal age increased for both AI/AN and NHW women (Figure 21). Statistically, the proportion of cesarean sections remained the same among AI/AN women across all age groups.

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



Source: National Vital Statistics, Birth Certificates 2008-2012

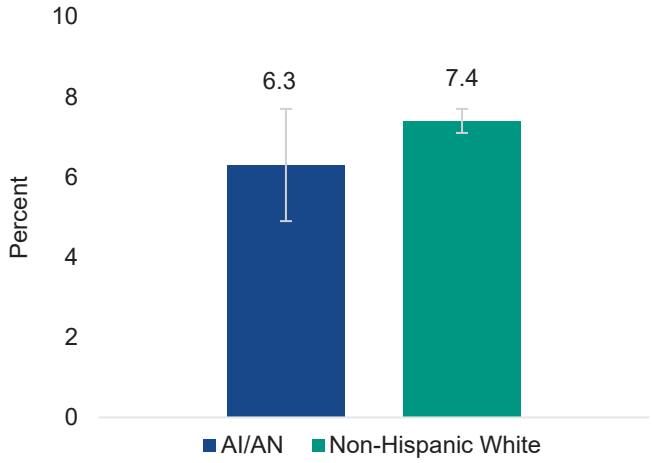


MATERNAL AND CHILD HEALTH

Maternal Smoking

In Reno service areas, 6.3% of AI/AN women smoked while pregnant, compared to 7.4% of NHW women (Figure 22). Statistically, there was no difference.

Figure 22. Maternal Smoking, Reno Service Area, 2008-2012

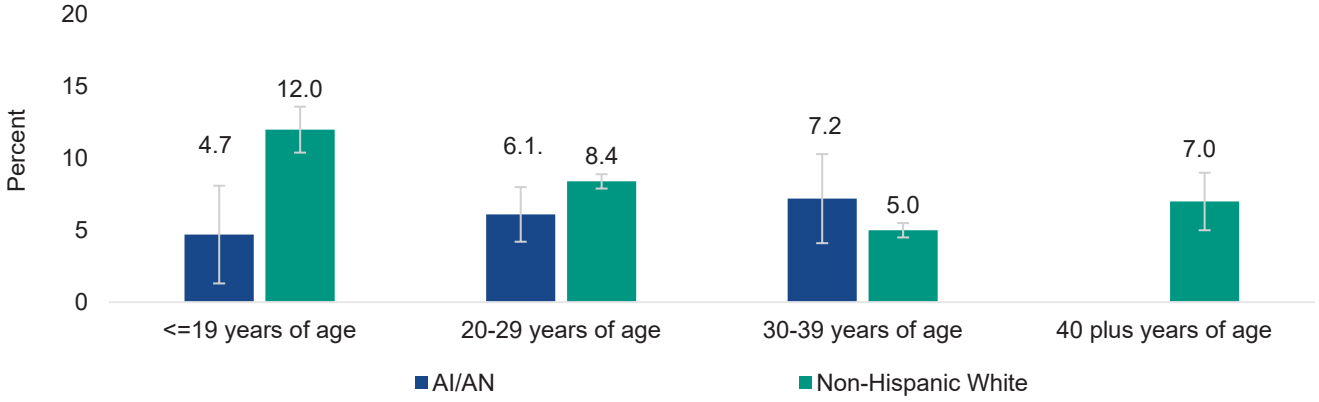


Source: National Vital Statistics, Birth Certificates, 2008-2012

Smoking by Maternal Age

In Reno service area, maternal smoking decreased as age decreased for NHW women. Among AI/AN women, maternal smoking remained consistent across all age groups. The proportion of maternal smoking for AI/AN teenage women and women in their 20s was significantly lower than NHW teenage women and women in their 20s.

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



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

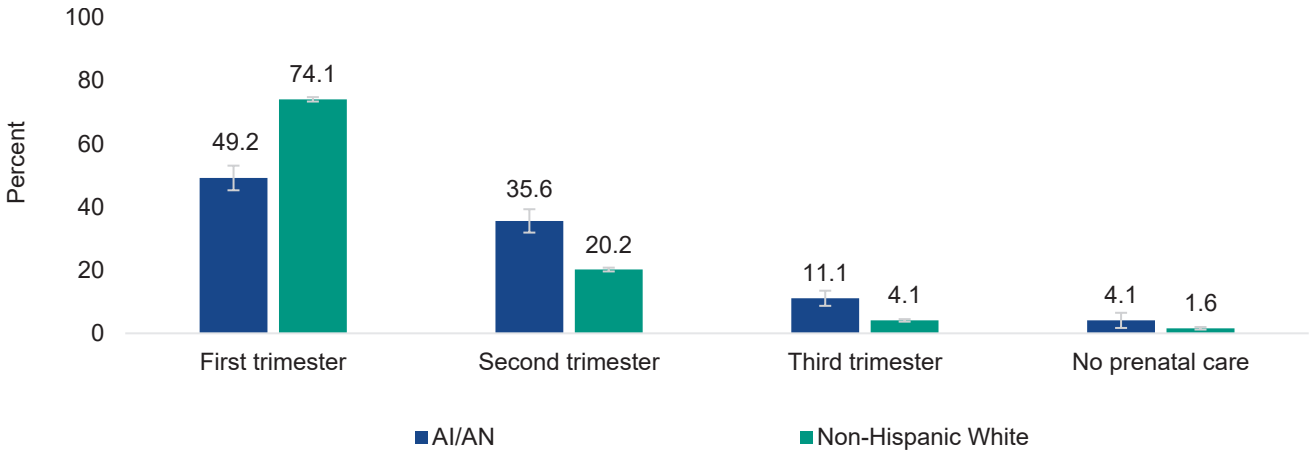
MATERNAL AND CHILD HEALTH

Prenatal Care

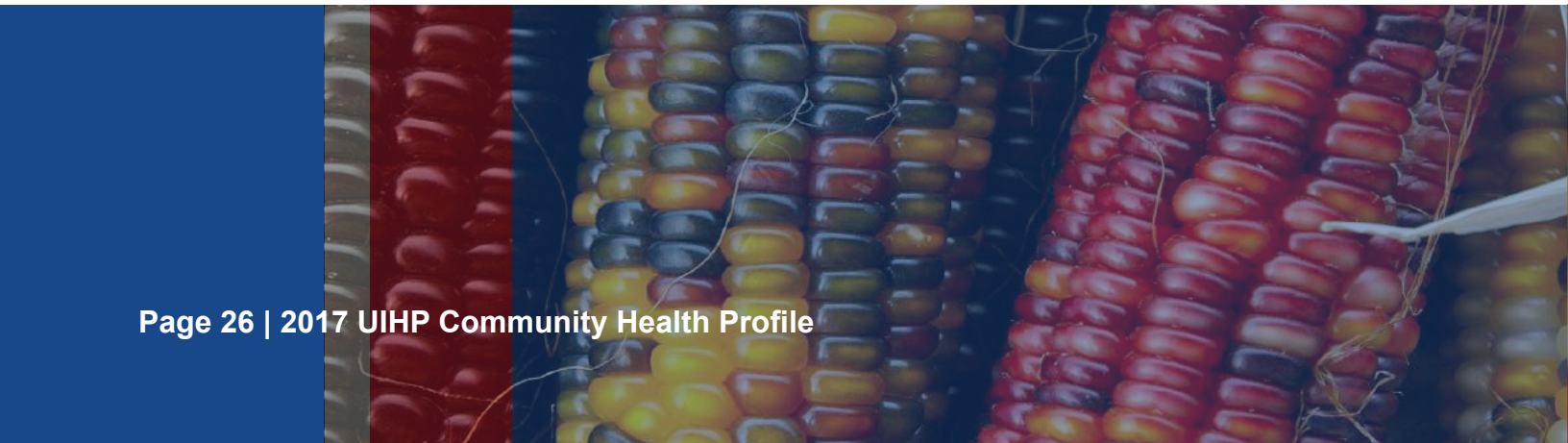
Prenatal care refers to the medical attention received by women before or during their pregnancy, specifically addressing the mother's well-being during her pregnancy and caring for the development of her baby. The goal of prenatal care is to detect potential problems early on in the pregnancy and to 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.[24]

Among pregnant women in the Reno service areas, 49.2% of AI/AN women began prenatal care in the first trimester compared to 74.1% of NHW women (Figure 24). NHW women had approximately 1.5 times higher proportion of beginning prenatal care in the first trimester compared to AI/AN women. In addition, 15.5% of pregnant AI/AN women began prenatal care in the third trimester or did not receive any prenatal care during their pregnancy compared to 5.7% of pregnant NHW women. The proportion of AI/AN women beginning prenatal care in the third trimester or not receive any prenatal care during pregnancy was 2.7 times higher compared to NHW women.

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



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

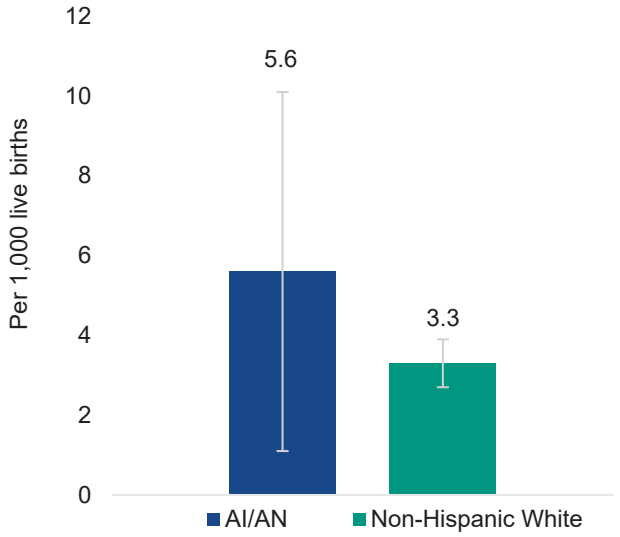


MATERNAL AND CHILD HEALTH

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.[25] 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.[25] The infant mortality for AI/ANs in Reno service areas was 5.6 per 1,000 live births (Figure 25); which was similar to NHWs (3.3 per 1,000 live births.)

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



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

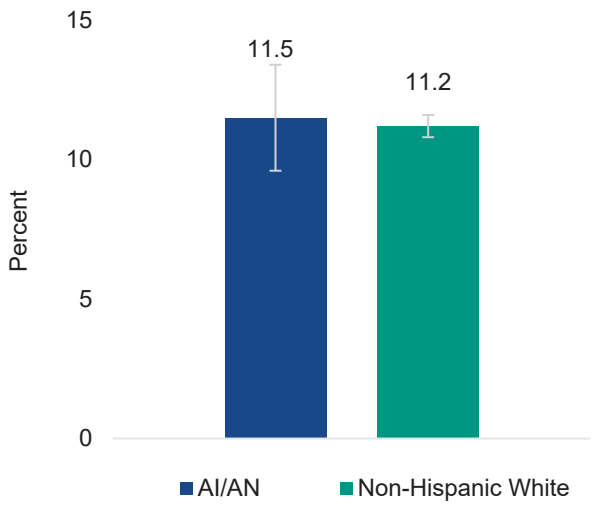
MATERNAL AND CHILD HEALTH

Premature Births

A premature birth is defined as childbirth occurring earlier than 37 completed weeks of pregnancy.[26] In Reno service areas, 11.2% of all infants born to NHW women were born prematurely. This was similar to all infants born prematurely to AI/AN women at 11.5% (Figure 26).

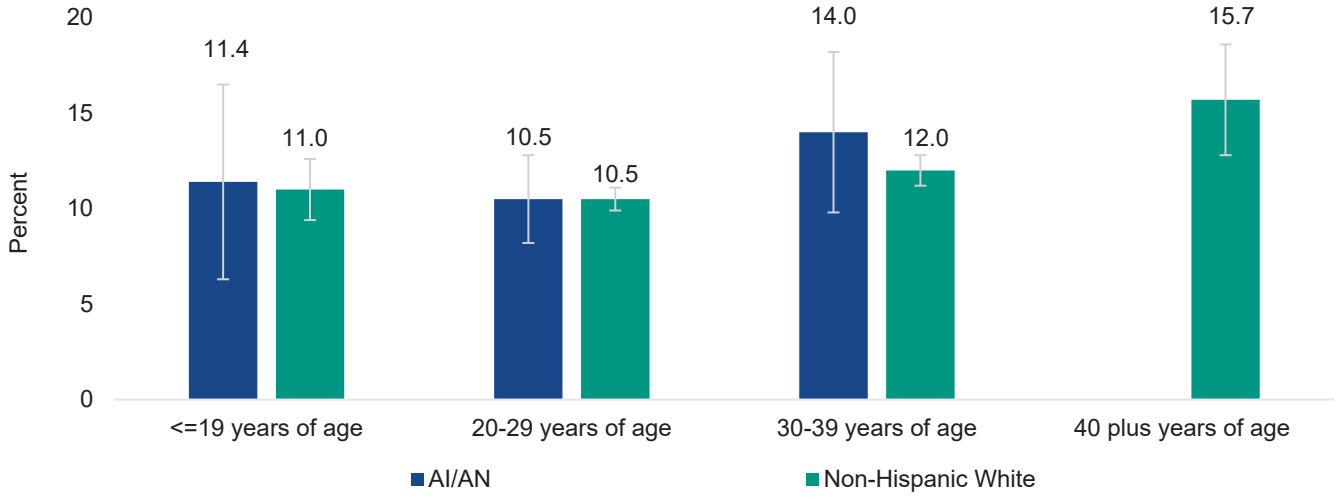
The proportion of premature births for AI/ANs remained consistent across all age groups, however, premature births increased as age increased for NHWs. The proportion of premature NHW births was highest in mothers above 40 years of age (Figure 27).

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

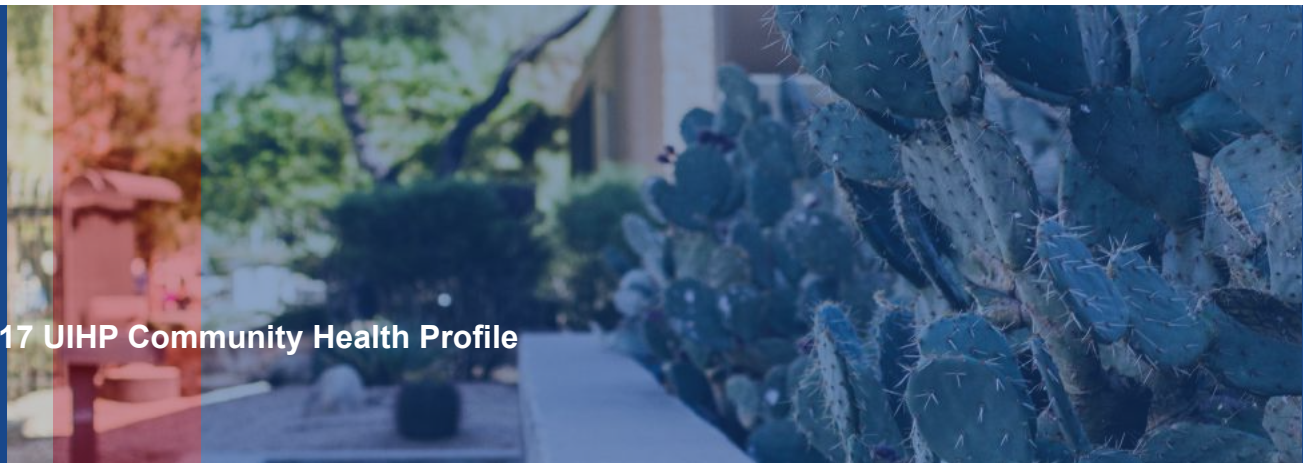


Source: National Vital Statistics, Birth Certificates, 2008-2012

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



Source: National Vital Statistics, Birth Certificates 2008-2012



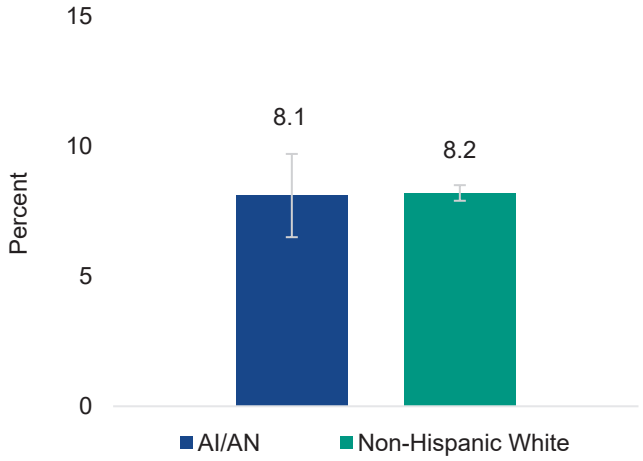
MATERNAL AND CHILD HEALTH

Low Birth Weight

Low birth weight is defined as less than 2,500 grams (5.5 pounds).[27] In Reno service areas, 8.1% of all infants born to AI/AN women were low birth weight. This was similar to the proportion (8.2%) of all low birthweight infants of NHW women (Figure 28).

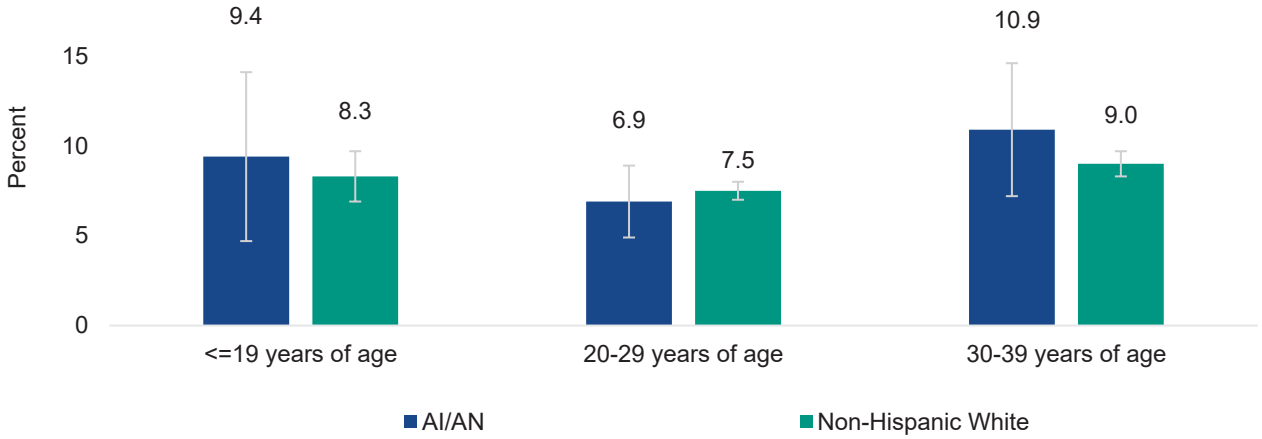
There was no difference in low birth weight between AI/AN and NHW women for each age group. In addition, the proportion of low birth weight was also similar across each age group for AI/AN and NHW women (Figure 29).

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



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

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



Source: National Vital Statistics, Birth Certificates 2008-2012

REFERENCES

1. U.S. Census Bureau. U.S. Census. https://www.census.gov/. Published 2012.
2. Centers for Disease Control and Prevention (CDC). *Community Health Assessment for Population Health Improvement: Resource of Most Frequently Recommended Health Outcomes and Determinants*. Atlanta, GA; 2013.
3. Hoopes MJ, Taualii M, Weiser TM, Brucker R, Becker TM. Including self-reported race to improve cancer surveillance data for American Indians and Alaska Natives in Washington state. *J Registry Manag*. 2010;37(2):43-48. http://www.ncbi.nlm.nih.gov/pubmed/21086821. Accessed July 24, 2017.
4. Campbell ME, Troyer L. The Implications of Racial Misclassification by Observers. *Am Sociol Rev*. 2007;72(5):750-765. doi:10.1177/000312240707200505.
5. U.S. Census Bureau. What is the census? https://www.census.gov/2010census/about/.
6. Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. *Vital Health Stat 2*. 2008;(148):1-23. http://www.ncbi.nlm.nih.gov/pubmed/19024798. Accessed July 24, 2017.
7. Chae DH, Walters KL. Racial discrimination and racial identity attitudes in relation to self-rated health and physical pain and impairment among two-spirit American Indians/Alaska Natives. *Am J Public Health*. 2009;99 Suppl 1(S1):S144-51. doi:10.2105/AJPH.2007.126003.
8. Health WHOC on the SD of. *The Social Determinants of Health: Developing an Evidence Base for Political Action.* Chile; 2007.
9. Thornton RLJ, Glover CM, Cené CW, Glik DC, Henderson JA, Williams DR. Evaluating Strategies For Reducing Health Disparities By Addressing The Social Determinants Of Health. *Health Aff (Millwood)*. 2016;35(8):1416-1423. doi:10.1377/hlthaff.2015.1357.
10. Braveman P, Egerter S, Williams DR. The Social Determinants of Health: Coming of Age. *Annu Rev Public Health*. 2011;32(1):381-398. doi:10.1146/annurev-publhealth-031210-101218.
11. Norström F, Virtanen P, Hammarström A, Gustafsson PE, Janlert U. How does unemployment affect self-assessed health? A systematic review focusing on subgroup effects. *BMC Public Health*. 2014;14:1310. doi:10.1186/1471-2458-14-1310.
12. Cawley J, Moriya AS, Simon K. The Impact of the Macroeconomy on Health Insurance Coverage: Evidence from the Great Recession. *Health Econ*. 2015;24(2):206-223. doi:10.1002/hec.3011.
13. Murray S. Poverty and health. *Can Med Assoc J*. 2006;174(7):923-923. doi:10.1503/cmaj.060235.
14. Moore KA, Redd Z. Children in Poverty: Trends, Consequences, and Policy Options. *Child Trends*. 2002;54. https://childtrends-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2013/03/PovertyRB.pdf. Accessed July 24, 2017.
15. U.S. Census Bureau. Poverty Glossary. https://www.census.gov/topics/income-poverty/poverty/about/glossary.html. Published 2016. Accessed January 1, 2017.
16. Brunello G, Fort M, Schneeweis N, Winter-Ebmer R. The Causal Effect of Education on Health: What is the Role of Health Behaviors? *Health Econ*. 2016;25(3):314-336. doi:10.1002/hec.3141.
17. Cutler DM, Lleras-Muney A. Understanding differences in health behaviors by education. *J Health Econ*. 2010;29(1):1-28. doi:10.1016/j.jhealeco.2009.10.003.
18. Wilper AP, Woolhandler S, Boyd JW, et al. The health and health care of US prisoners: results of a nationwide survey. *Am J Public Health*. 2009;99(4):666-672. doi:10.2105/AJPH.2008.144279.
19. Hadley J. Insurance Coverage, Medical Care Use, and Short-term Health Changes Following an Unintentional Injury or the Onset of a Chronic Condition. *JAMA*. 2007;297(10):1073-1084. doi:10.1001/jama.297.10.1073.
20. Baker E, Bentley R, Mason K. The Mental Health Effects of Housing Tenure: Causal or Compositional? *Urban Stud*. 2013;50(2):426-442. doi:10.1177/0042098012446992.
21. Kreider B, Pepper J V., Gundersen C, Jolliffe D. Identifying the effects of SNAP (Food Stamps) on child health outcomes when participation is endogenous and misreported. *J Am Stat Assoc*. 2012;107(499):958-975. doi:10.1080/01621459.2012.682828.
22. Nord M, Coleman-Jensen A, Andrews M, Carlson S. Household Food Security in the United States, 2009. 2010. https://www.ers.usda.gov/webdocs/publications/44776/7024_err108_1_.pdf?v=41056. Accessed July 24, 2017.
23. Urban Indian Health Institute. *Community Health Profile: National Aggregate of Urban Indian Health Organization Service Areas*. Seattle; 2011. http://www.uihi.org/download/Combined-UIHO-CHP_Final.pdf. Accessed July 24, 2017.
24. Spokane Regional Health District. *A Healthy Start: Spokane's Future : Maternal and Infant Health*.

REFERENCES

Spokane, WA; 2008. https://books.google.com/books/about/A_Healthy_Start.html?id=9RqxXwAACAAJ. Accessed July 24, 2017.
25. Medical Definition of Mortality, infant. http://www.medicinenet.com/script/main/art.asp?articlekey=14274. Published 2016. Accessed July 24, 2017.
26. The Mayo Clinic. Premature Birth. http://www.mayoclinic.org/diseases-conditions/premature-birth/basics/definition/con-20020050. Published 2014.
27. Ford K, Weglicki L, Kershaw T, Schram C, Hoyer PJ, Jacobson ML. Effects of a prenatal care intervention for adolescent mothers on birth weight, repeat pregnancy, and educational outcomes at one year postpartum. *J Perinat Educ*. 2002;11(1):35-38. doi:10.1624/105812402X88588.

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

NUI – Nevada Urban Indians

NVSS – National Vital Statistics System

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

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.

Urban Indian Health Institute
Seattle Indian Health Board
611 12th Avenue South
Seattle, WA 98144
Phone: (206) 812 – 3030
Fax: (206) 812 – 3044

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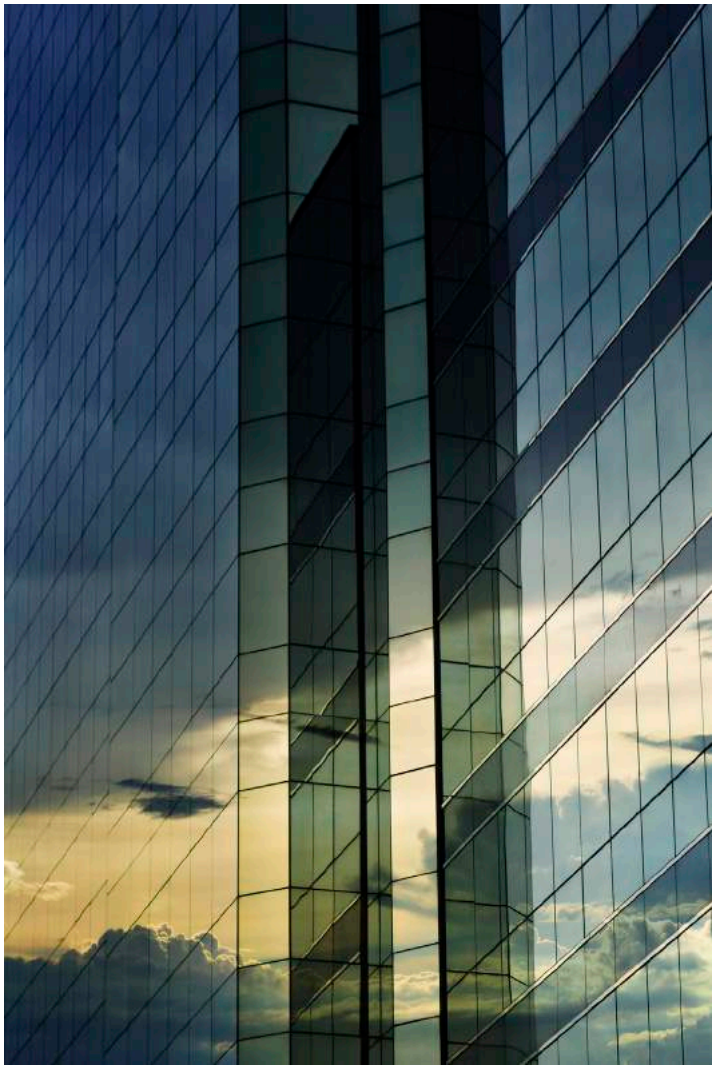

Contact Us

Please contact the Urban Indian Health Institute with your comments by emailing info@uihi.org, calling (206) 812-3030 or visiting us online at www.uihi.org.

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