Community Health Profile

National Aggregate of Urban Indian Health Program Service Areas

October 2016

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 for the excellent work they do daily on behalf of their communities.

Urban Indian Health Institute

A Division of the Seattle Indian Health Board

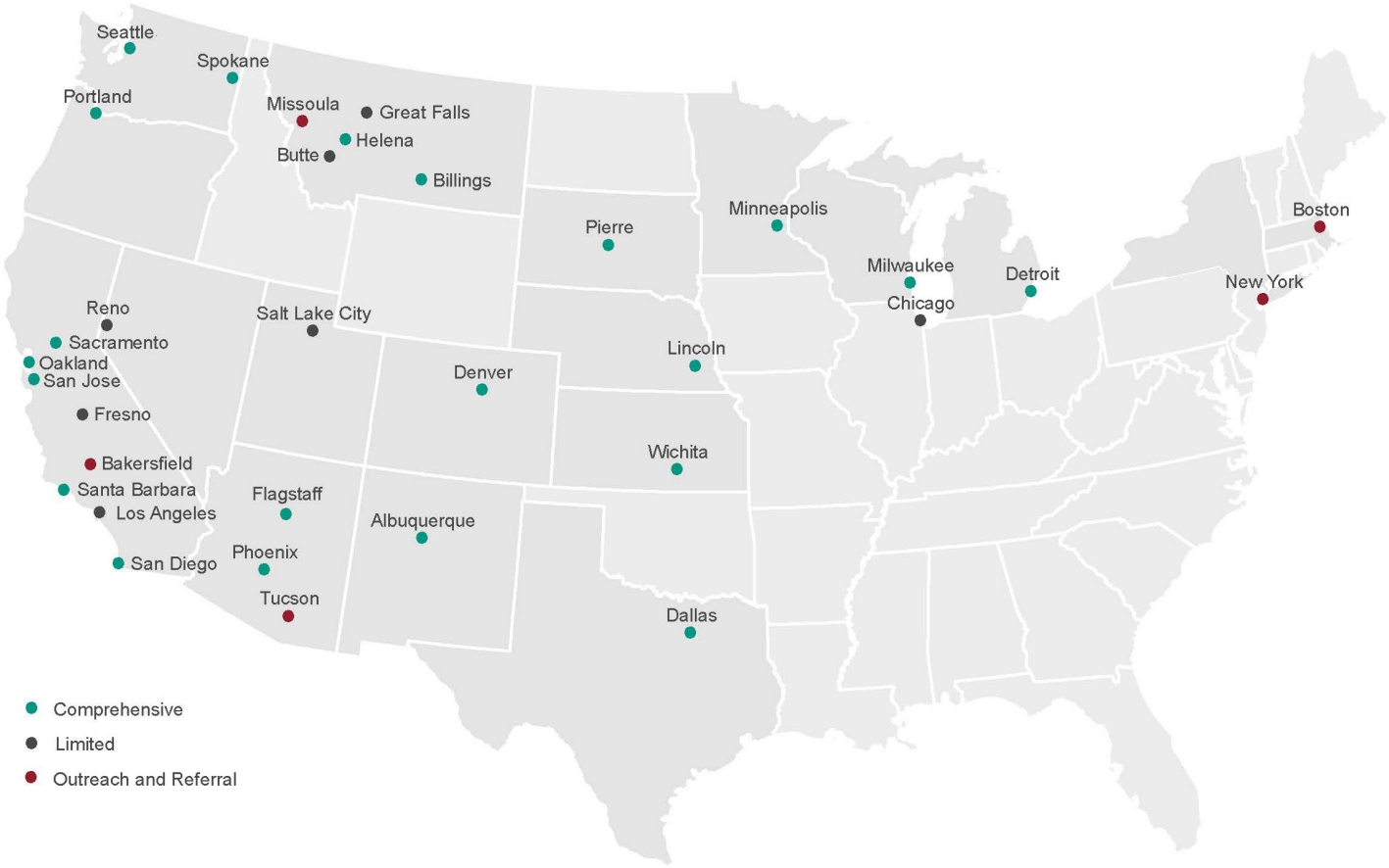

WESTIN

URBAN INDIAN HEALTH PROGRAM LOCATIONS

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 33 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 19 states and serve individuals in approximately 100 U.S. counties where over 1.2 million AI/ANs reside.[1]

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.



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 network of Subchapter IV UIHPs across the country. This document presents data specific to demographics, social determinants of health, mortality, sexually transmitted diseases, maternal and child health, substance use, and mental health. 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 behaviors that adversely affect them. Data for this profile comes from the U.S. Census, the American Community Survey, the U.S. Center for Health Statistics, the National Notifiable Disease Surveillance System, and the National Survey of Drug Use and Health. This report is the fourth community health profile published by the Urban Indian Health Institute (UIHI) and will be updated on a regular basis.

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 UIHP service areas. Data presented in this report may be most useful when combined with individual UIHP 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 to support the work of UIHPs.

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

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.

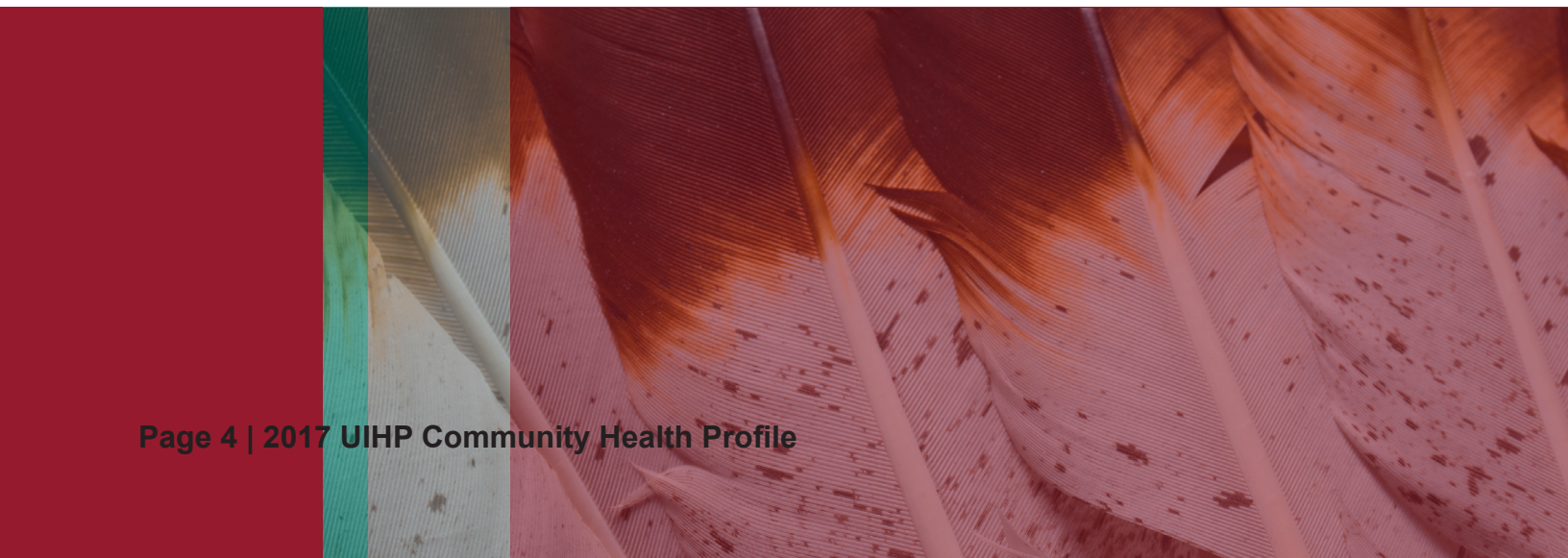
The AI/AN population was defined as AI/AN only (not in combination with other races) unless otherwise indicated. The NHW population was defined as White only and excluded the Hispanic population unless otherwise indicated. Results were calculated using aggregate data from a two- to six-year time period 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).



In addition, significance testing between or within groups for some indicators was determined by using a chi-square or logistic regression test with a probability level (p-value) of 0.05 used as the criterion to establish a statistically significant difference in the results.

Furthermore, odds ratios (OR) were calculated for other indicators. An OR is defined as the ratio of the odds of a condition or event occurring in one group (study group) to the odds of it occurring in another group (comparison group) and explains the likelihood or probability of this condition or event occurring. An OR of 1 indicates that the condition or event under study is equally likely to occur in both groups. An OR greater than 1 indicates that the condition or event is more likely to occur in the study group than the comparison group. An OR less than 1 indicates that the condition or event is less likely to occur in the study group than the comparison group.

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

Indicator Selection

A list of indicators for the community health profile were developed. Indicators were then 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.

This profile uses national surveillance data, which may or may not include patients served directly at UIHPs. There may be information not captured by these systems that better represent the unique strengths and challenges in communities served by UIHPs. Local sources of data may provide a more region-specific and comprehensive understanding of the community's health.

DATA SOURCES

Data Limitations

Although data analysis and assessment of results were conducted for 68 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 behavior 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. 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%.[4] The bias created by misclassification varies by age, proximity to a reservation, and cause-of-death.[5] 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.

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.

The National Notifiable Disease Surveillance System

Sexually transmitted diseases (STDs) are a component of the National Notifiable Disease Surveillance System (NNDSS) and incident cases are submitted to the Centers for Disease Control and Prevention (CDC) from state health departments and other local reporting jurisdictions. Case definition for STDs are outlined in Case Definitions for Infectious Conditions under Public Health Surveillance. The majority of cases are reported in non-STD clinic settings, such as private physician offices. It is mandatory that reportable disease cases be reported to state health departments when identified by a health provider, hospital, or laboratory; however, it is voluntary that notifiable disease cases be reported to CDC by the state for national surveillance. Data for this report include analysis on chlamydia, gonorrhea, and syphilis from aggregated data from 2010-2014. Estimates of rates are based on the counties for the UIHP service areas.

For more information about NNDSS, visit: https://www.cdc.gov/nndss/

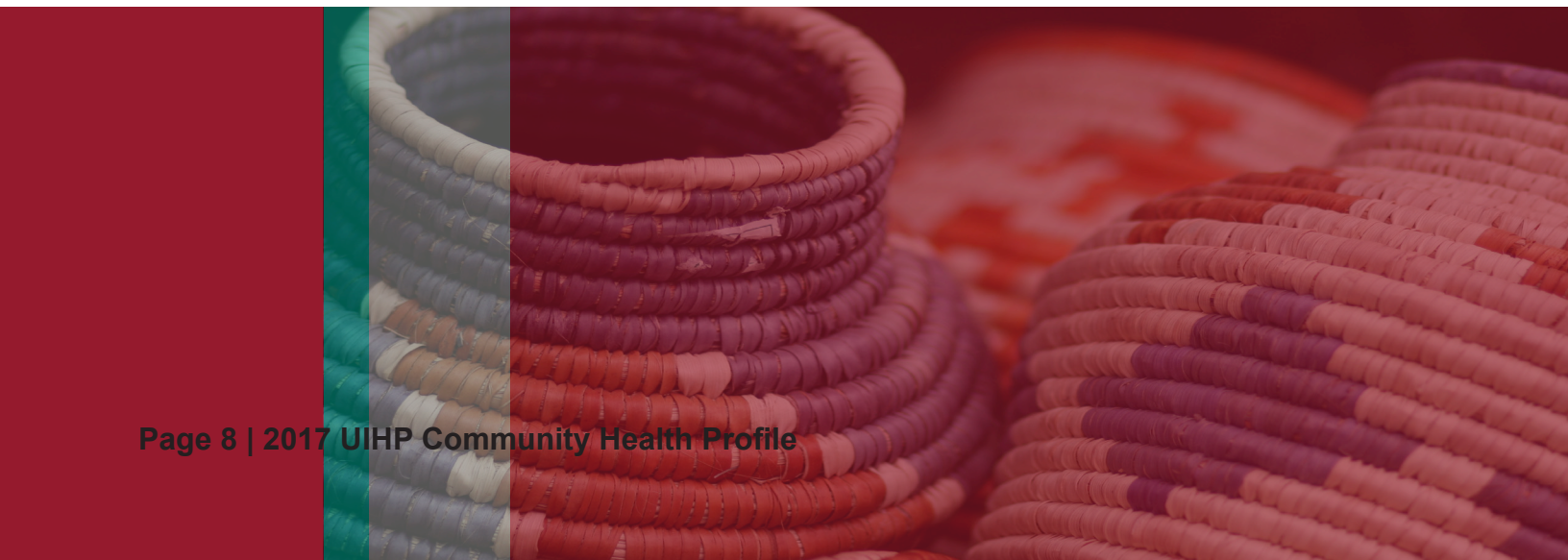
National Vital Statistics System

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, information on the infant, 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.



National Survey of Drug Use and Health

The National Survey of Drug Use and Health (NSDUH) is a nationwide survey that collects information on substance use and mental health every year in the United States. With funding from the Substance Abuse and Mental Health Services Administration (SAMHSA), RTI International conducts the survey and collects data on a variety of substances that include tobacco products, alcohol, marijuana, illicit drugs, and prescription drugs used non-medically. A number of health-related topics are also included in the survey.

The most recent six years of NSDUH data (2009-2014) are included in this profile. Youth are defined as individuals aged 12 to 17 years. Adults are defined as individuals aged 18 and older. NSDUH estimates in this profile are not adjusted for age; observed differences in estimates may be due to a true difference in proportions or may be due to differences in age distribution in the population. Additionally, since county information was not available, the definition of urban is not based on the UIHP service areas. Instead, urban is defined as individuals who live in a large or small metro area. Furthermore, individuals were asked to choose which racial group describes them and could report more than one race. NSDUH estimates of AI/ANs in this profile include individuals who selected only AI/AN or in combination with another race.

Within the substance use section, there are also several indicators to clarify. The illicit drug indicator included hallucinogens, inhalants, tranquilizers, cocaine, heroin, nonmedical use of pain relievers, stimulants, and sedatives. Substance abuse was defined as having a positive response to one or more of the following four criteria below and was considered to not be dependent upon the substance of interest:

1. Having serious problems due to substance use at home, work or school;
2. Using substance regularly and then doing something where substance use might have put them in physical danger;
3. Substance use leading to repeated trouble with the law; and/or
4. Having problems caused by substance use with family or friends and continuing use of substance even though it was causing problems with family and friends.

Substance dependence was defined as a positive response to three or more of the following six dependence criteria:

1. Spending a great deal of time over a period of a month getting, using, or getting over the effects of the substance;
2. Unable to keep set limits on substance use or used more often than intended;
3. Needing to use substance more than before to get desired effects or noticing that using the same amount had less effect than before;
4. Unable to cut down or stop using the substance every time he or she tried or wanted to;
5. Continuing to use substance even though it was causing problems with emotions, nerves, mental health, or physical problems; and/or
6. Reducing or giving up participation in important activities due to substance use.

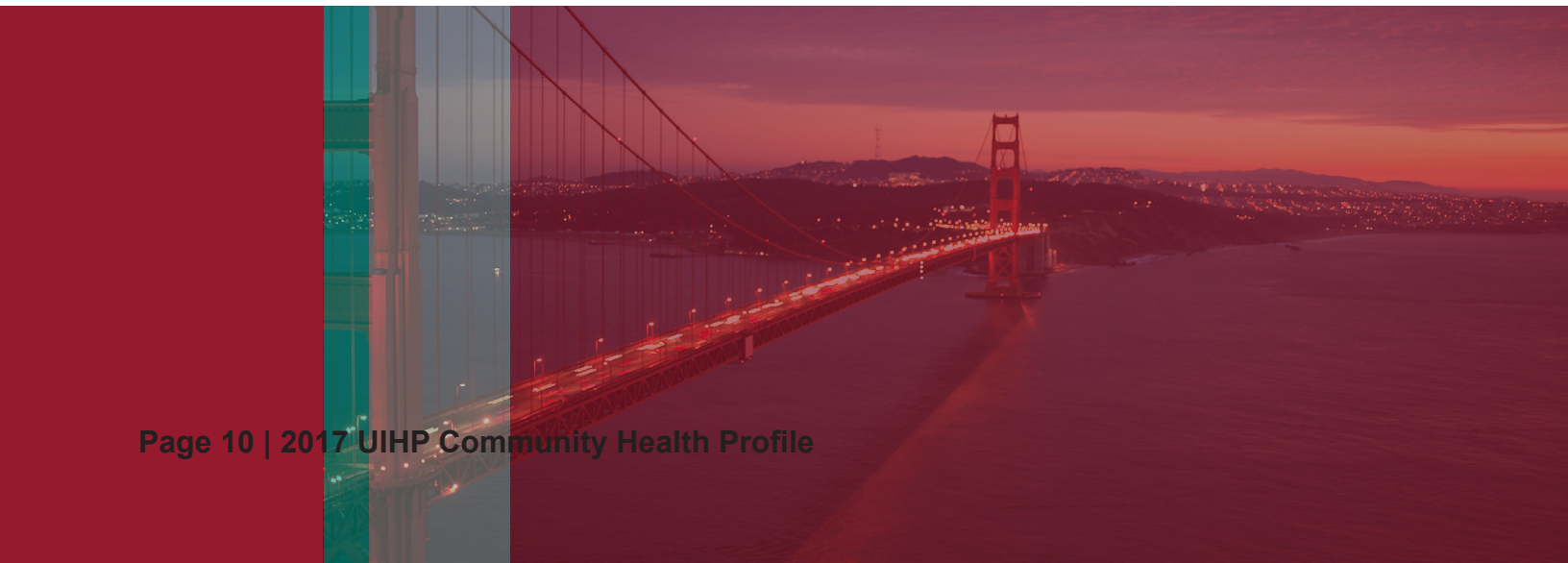
Within the mental health sections, there are several additional indicators that should be explained. Estimates of having a severe mental illness and having any mental illness were based on a prediction model using data from the Mental Health Surveillance Study (MHSS). More detailed information about this predictive model can be found in the NSDUH codebooks.

An individual was classified as having a major depressive episode (MDE) if five out of the nine criteria were met and where at least one of the criteria was a depressed mood or loss of interest or pleasure in daily activities:

1. Depressed mood most of the day
2. Noticeable loss of interest or pleasure in all or almost all activities most of the day
3. Change in weight
4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feeling worthless
8. Decreased capability for thinking or focusing or indecisiveness
9. Recurring thoughts of death or suicide ideation

For more information about NSDUH, visit:

https://nsduhweb.rti.org/respweb/homepage.cfm



SOCIODEMOGRAPHICS

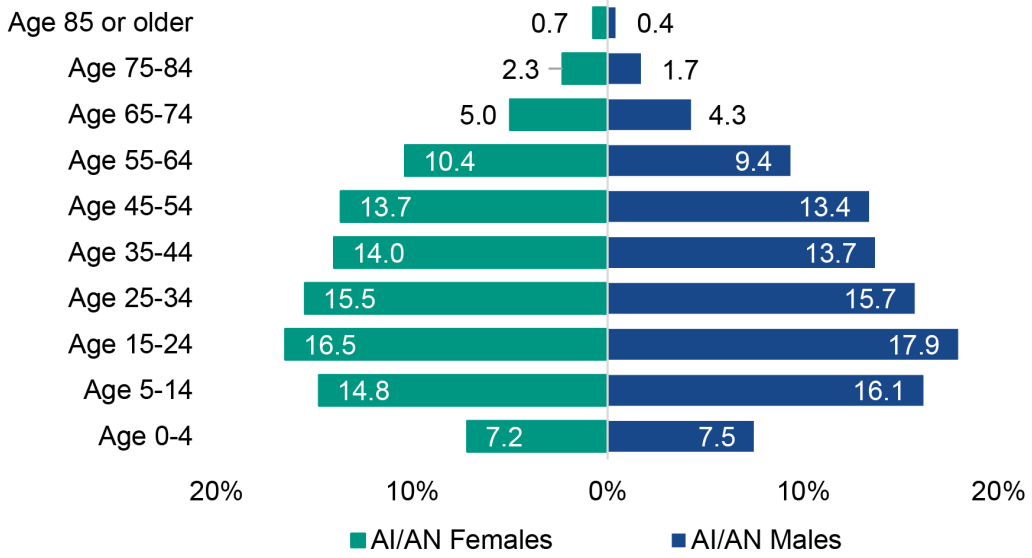
Introduction

The health of individuals and populations is greatly influenced by social determinants – the conditions in which people live, learn, work, and play.[7,8] 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.[9] These determinants, including race, lack of access to education or employment, poverty, and housing, among other things, produce extensive inequities within and between populations.[7,8] 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

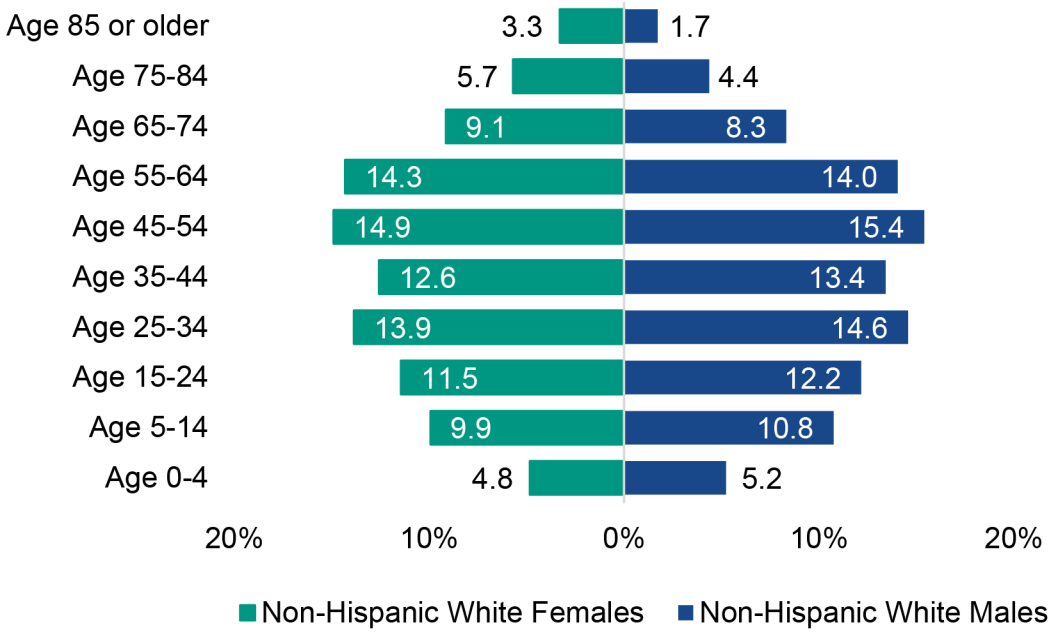
Relative to the NHW population, the AI/AN population in UIHP service areas was younger (Figure 1 and Figure 2). In all UIHP service areas combined, 40.0% of AI/ANs were under the age of 25 years, compared with 27.2% of NHWs. In contrast, 7.2% of AI/ANs were over the age of 65 years, compared with 16.3% of NHWs. Between the ages of 35 and 45 years, a shift in AI/AN women making up a greater proportion of the total AI/AN population occurred; however, this event did not occur among NHWs until the ages of 55 to 64, a complete decade later.

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



Source: American Community Survey, 2010-2014

Figure 2. NHW Population by Age and Gender, UIHP Service Areas, 2010-2014

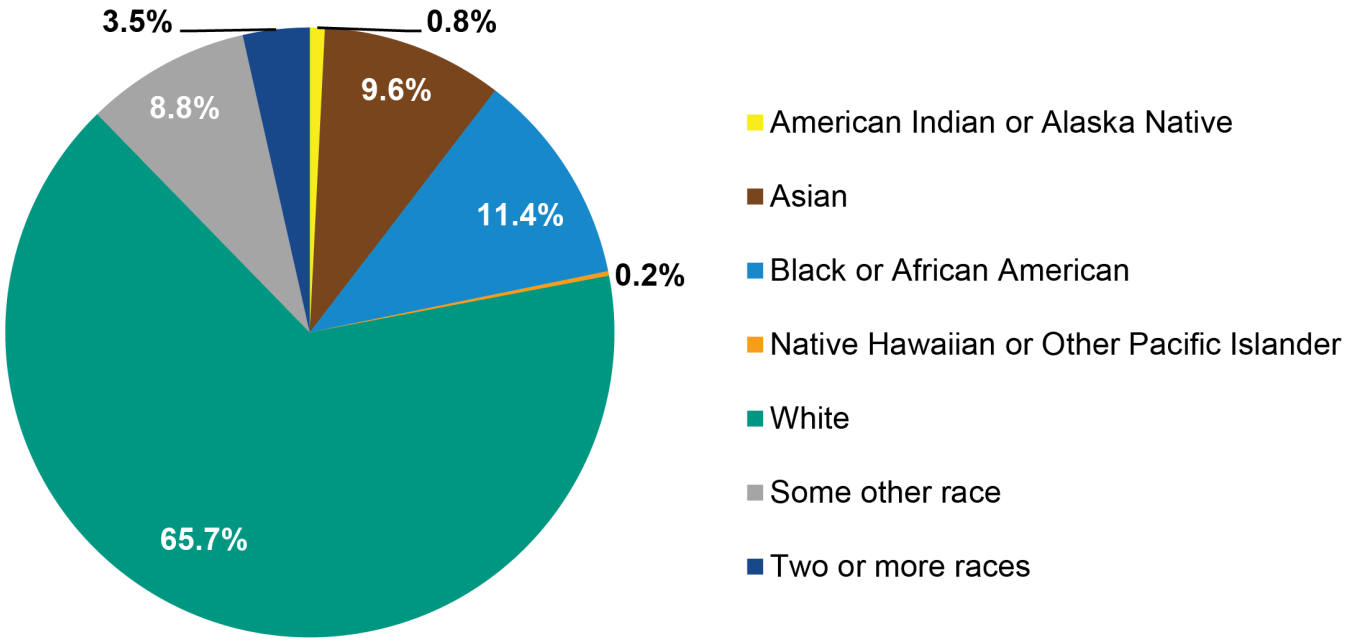


Source: American Community Survey, 2010-2014

Race

As shown in Figure 3, an estimated 603,712 (0.8%) individuals identified as AI/AN alone in all UIHP service areas combined, and an estimated 1,267,467 (1.7%) individuals identified as AI/AN alone or in combination with one or more other races (data not shown). Those who identified as White alone comprised the largest proportion (two-thirds) of the total population (75,986,216) in UIHP service areas. In addition, Black or African Americans alone were the second largest population identified in UIHP service areas, consisting of 8,633,120 individuals or 11.4% of the total population.

Figure 3. Population by Race, UIHP Service Areas, 2010-2014



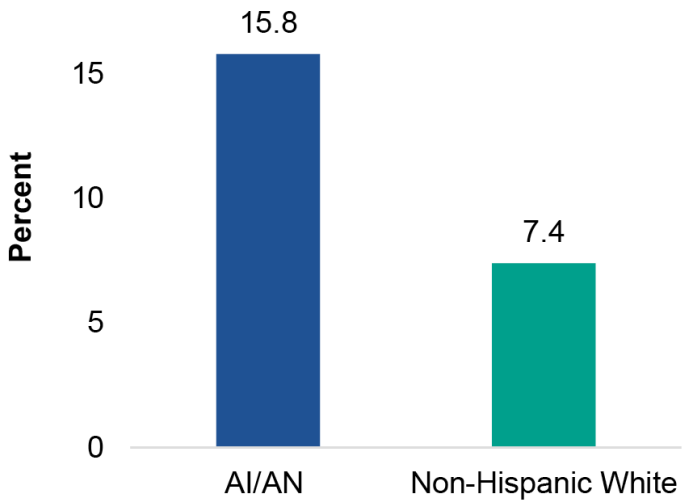
Source: American Community Survey, 2010-2014

Employment

Extensive evidence has shown that unemployment has a negative effect on health.[10] Unemployed individuals may experience financial insecurity and reduction in social status, social relations, and self-esteem.[11] In addition, unemployed individuals are also more likely to lack health insurance coverage.[12]

In all UIHP service areas combined, AI/ANs aged 16 and older experienced rates of unemployment that were over two times higher than NHWs (15.8% vs. 7.4%; 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, UIHP Service Areas, 2010-2014



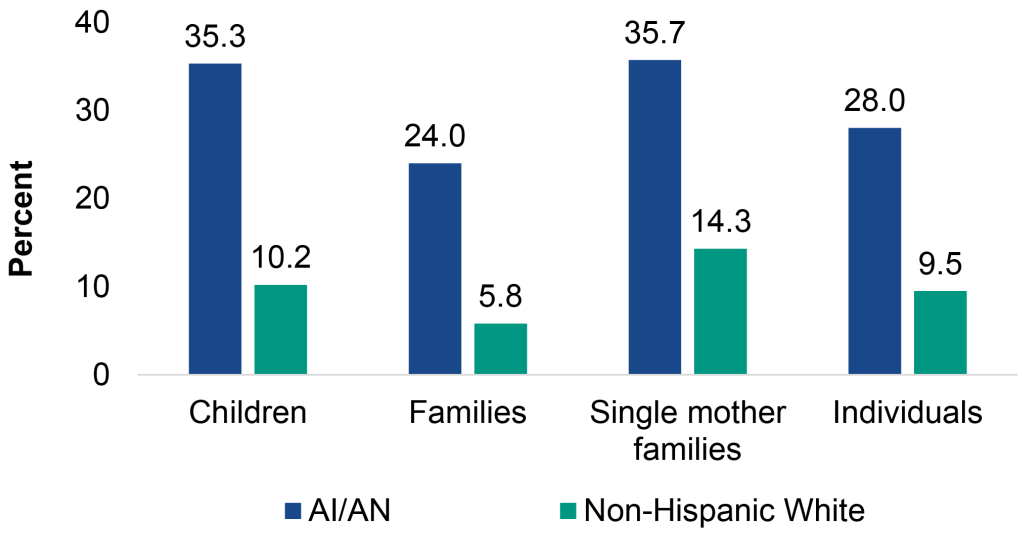
Source: American Community Survey, 2010-2014

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]

Figure 5. Income Below the Federal Poverty Level in Past Year, UIHP Service Areas, 2010-2014



Source: American Community Survey, 2010-2014

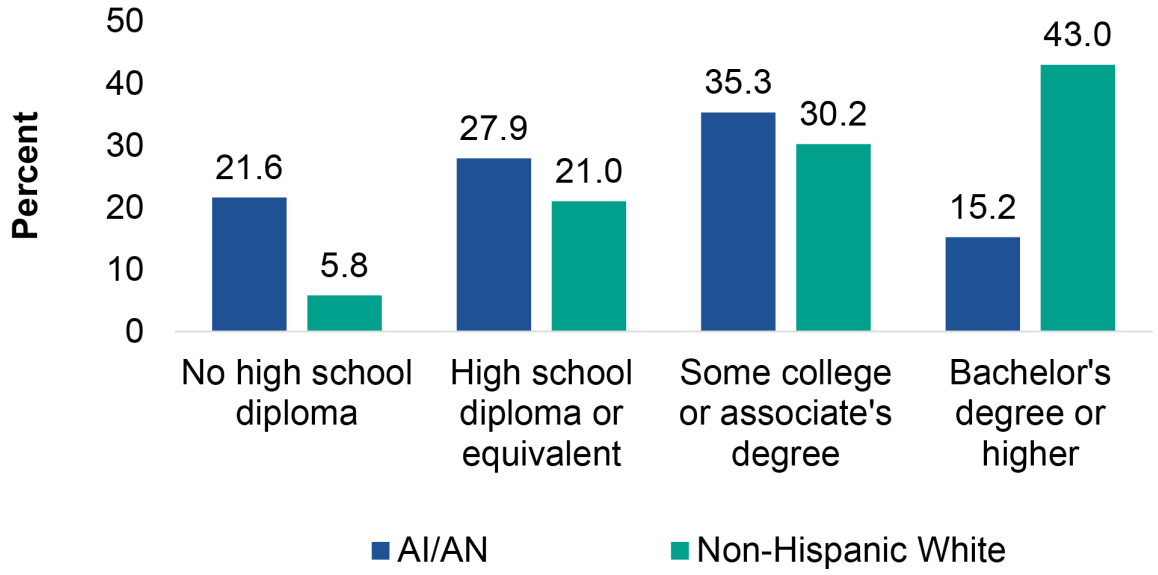
In all UIHP service areas combined, more than a quarter of AI/AN individuals lived in poverty (28.0%; Figure 5), compared to just one tenth for NHWs (9.5%). AI/AN children are significantly more likely to live in poverty. Approximately one in three AI/AN children aged 17 and under (35.3%) in all UIHP service areas combined lived in households with an income below the federal poverty level. This rate is more than triple than that of the NHW population (10.2%). In addition, nearly one in four AI/AN families in all UIHP service areas combined (24.0%) lived in households with an income below the federal poverty level. This is four times the rate 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 rate among NHWs (14.3%).

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.

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 UIHP service areas combined, a significantly higher percentage of AI/ANs aged 25 and older had not completed high school or passed the General Educational Development (GED) exam (21.6%; Figure 6) compared with the NHW population (5.8%). A significantly lower percentage of AI/ANs (15.2%) reported an undergraduate or graduate degree as their highest level of education compared with the NHW population (43.0%).

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

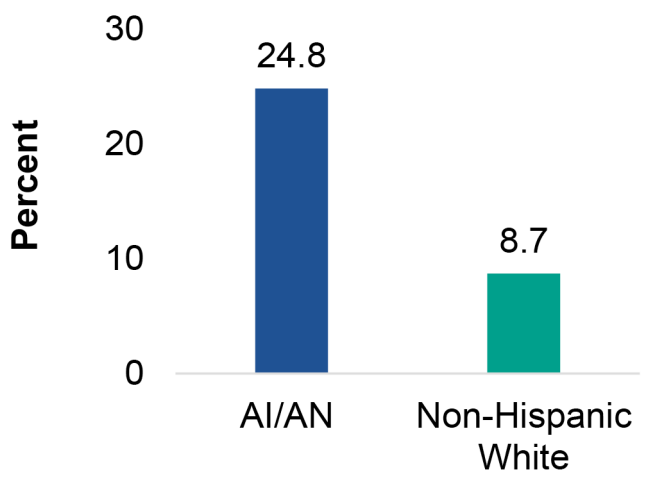


Source: American Community Survey, 2010-2014

Health Insurance Coverage

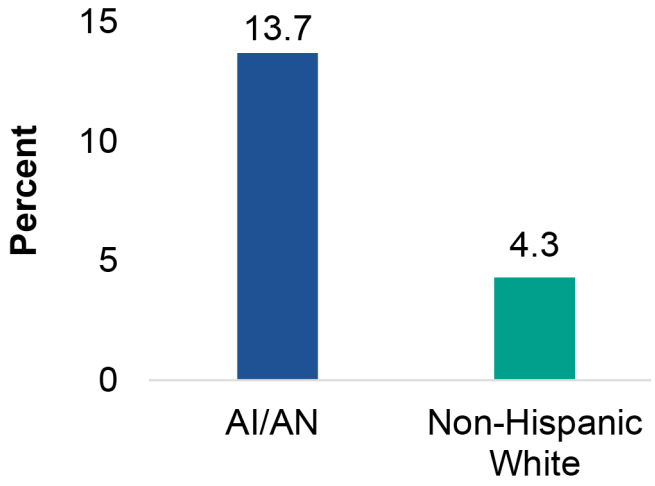
Compared to those with health insurance coverage, those without health insurance coverage have higher mortality rates.[18] Individuals without health insurance are also less likely to receive care and take longer to return to health after an unintentional injury or the onset of a chronic disease compared to those with health insurance.[19] In all UIHP service areas combined, one in four AI/ANs under age 65 (24.8%) reported having no health insurance, a rate nearly three times higher than that of NHWs (8.7%; Figure 7). The rate of uninsured AI/AN children under the age of 18 in all UIHP service areas is over three times higher than the rate of NHW children (13.7% vs. 4.3%, Figure 8).

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



Source: American Community Survey, 2010-2014

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



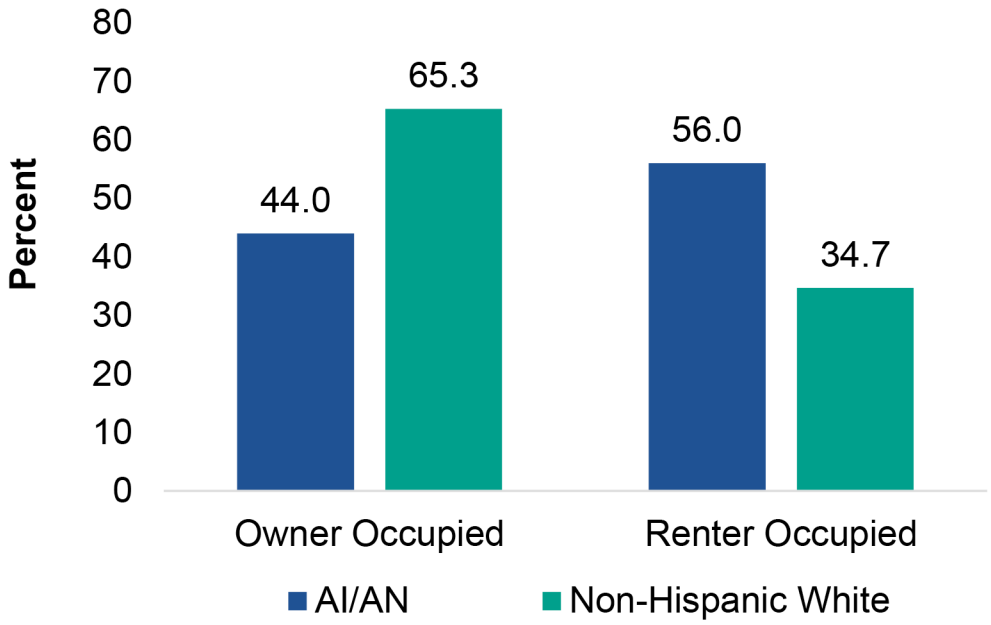
Source: American Community Survey, 2010-2014

Housing

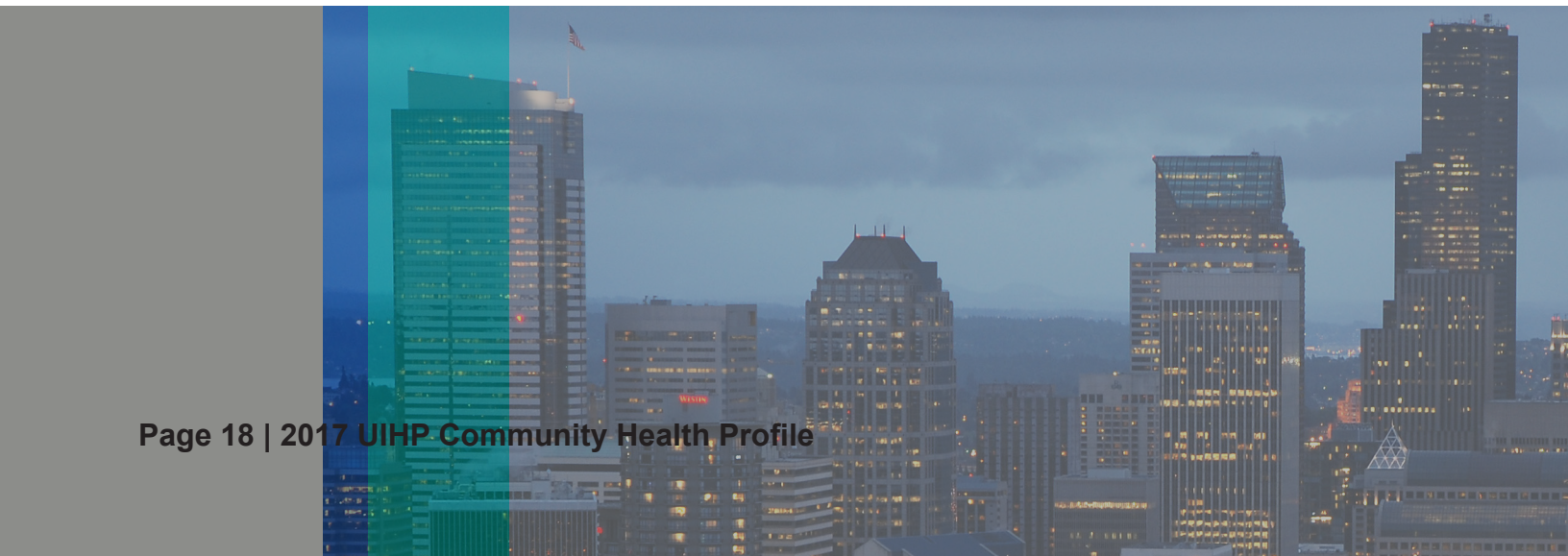
Housing and health are also closely linked. Several studies have found that home ownership is associated with many health benefits, including greater psychosocial wellbeing and lower mortality risk. These benefits may be explained by the fact that homeowners likely experience higher socioeconomic status, 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 risky health behaviors, such as smoking.[20]

In all UIHP service areas combined, the rate of renter occupation among AI/ANs was 1.6 times higher than NHWs (56.0% vs. 34.7%, Figure 9). Over half of all homes of AI/ANs were renter occupied, compared with approximately one-third of homes for NHWs. In contrast, the rate of home ownership among NHWs in all UIHP service areas combined was approximately 1.5 times higher than among AI/ANs (65.3% vs. 44.0%). 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, UIHP Service Areas, 2010-2014



Source: American Community Survey, 2010-2014

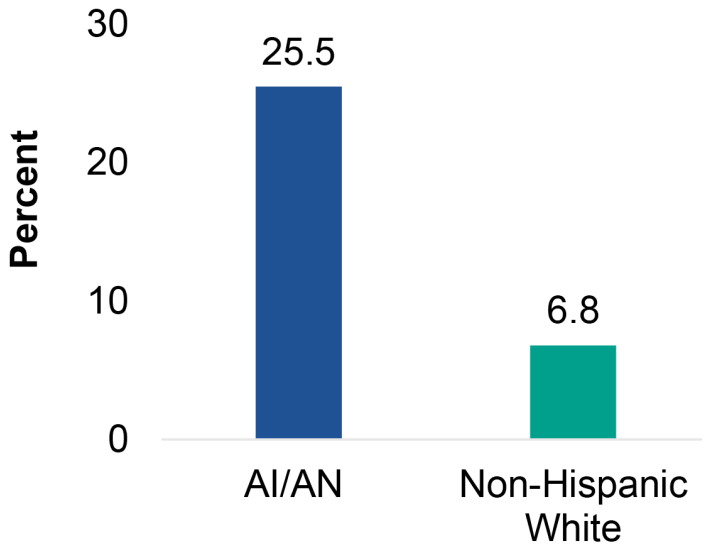


Food Stamps

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. In fact, one study found the prevalence of very low food security among SNAP households to be 11% higher than non-participating households in the same income range.[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 UIHP service areas combined, one quarter of AI/AN households received SNAP benefits in the past year (Figure 10). The rate of SNAP participation among AI/ANs in these areas was nearly four times higher than the rate among NHW.

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



Source: American Community Survey, 2010-2014

MORTALITY

Introduction

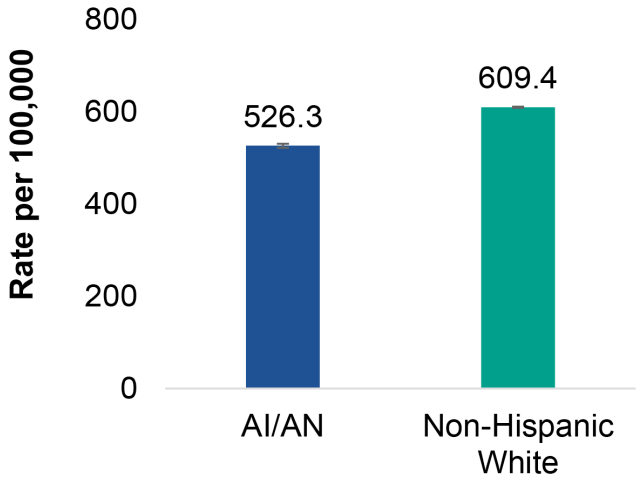
Mortality data provides an indication of a community's or population's health and socioeconomic development status. Mortality data are also a key component in understanding population size, future growth, and change. Examining mortality data is one way to measure the burden of disease in a community 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 behaviors, 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 UIHP service areas 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, approximately 14% lower (Figure 11).

Figure 11. All-Cause Mortality Rate, UIHP Service Areas, 2010-2014

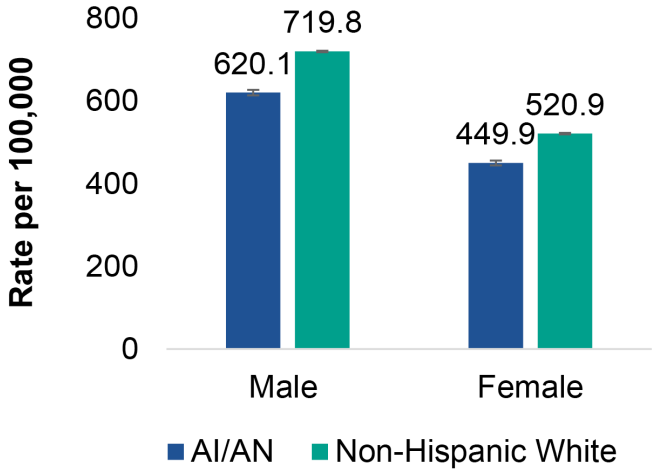


Source: US Center for Health Statistics, Death Certificates, 2010-2014

Mortality Rate by Gender

The mortality rates for both males and females were 14% lower among AI/ANs compared to their NHW counterparts (Figure 12). In addition, the mortality rate for AI/AN women was 27% lower than AI/AN men.

Figure 12. Mortality Rate by Gender, UIHP Service Areas, 2010-2014



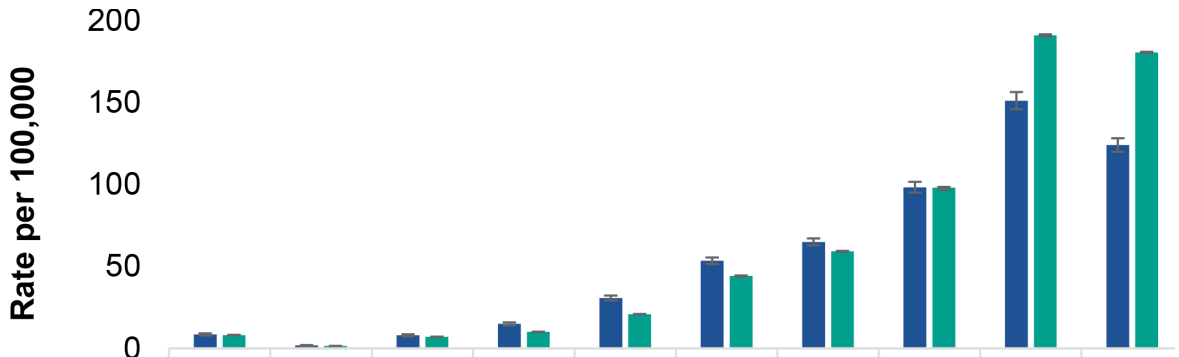
Source: US Center for Health Statistics, Death Certificates, 2010-2014

Mortality Rate by Age Group

Figure 13 compares mortality rates among AI/ANs and NHWs across age categories. AI/AN mortality rates were significantly higher among adolescents, young adults, and adults under 65. In contrast, mortality rates were significantly higher for NHW seniors. The mortality rates for AI/ANs between 25-34 years and 35-44 years were approximately 50% higher compared to NHWs. In addition, the mortality rate for AI/ANs between 45-54 years was approximately 21% higher than NHWs. The mortality rate for NHWs between 75-84 years was 26% higher than AI/ANs and approximately 46% higher for seniors 85 years or older.

Data shows that AI/ANs are dying at a much younger age than NHWs and have significantly higher mortality rates specifically due to motor vehicle accidents, intentional self-harm, homicides, assaults, chronic liver disease, and diabetes.

Figure 13. Mortality Rate by Age Group, UIHP Service Areas, 2010-2014



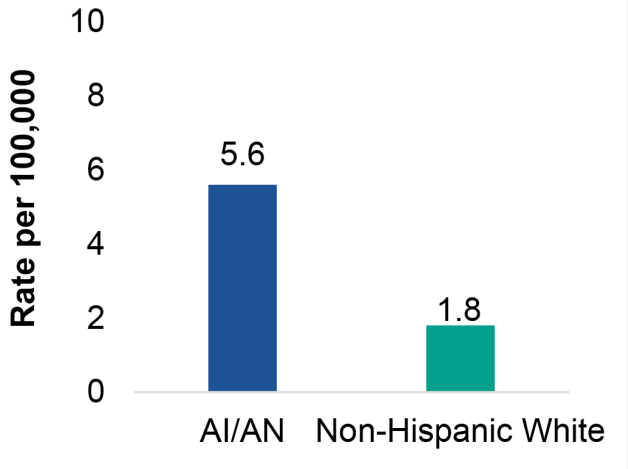
	0-4 Years	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85 Years Plus
AI/AN	8.5	1.8	8.0	15.0	30.7	53.4	64.9	98.2	151.0	123.9
Non-Hispanic White	8.1	1.5	7.1	10.1	20.8	44.2	59.2	97.9	190.8	180.4

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

Homicide

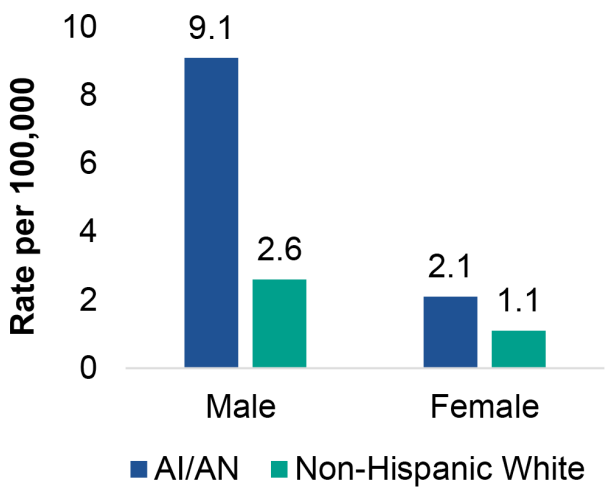
Homicides rates were 3.1 times higher for the AI/AN population compared to the NHW population (Figure 14). True disparities in homicide rates become apparent when looking at homicide by gender. Homicides for AI/AN males were 9.1 per 100,000 (Figure 15). This rate is 3.5 times higher than NHW males, 4.3 times higher than AI/AN females, and more than 8.0 times higher than NHW females. Homicides for each age group, with the exception of 5-14 and 85 years and older, were significantly higher for AI/ANs compared to NHWs (Figure 16).

Figure 14. Overall Homicide Rate, UIHP Service Areas, 2010-2014



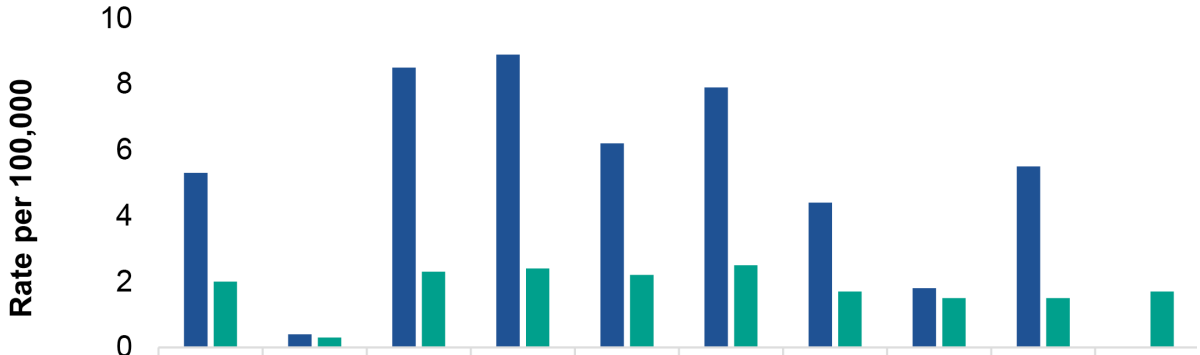
Source: US Center for Health Statistics, Death Certificates, 2010-2014

Figure 15. Homicide Rate by Gender, UIHP Service Areas, 2010-2014



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

Figure 16. Homicide Rate by Age Group, UIHP Service Areas, 2010-2014



	0-4 Years	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85 Years Plus
AI/AN	5.3	0.4	8.5	8.9	6.2	7.9	4.4	1.8	5.5	0.0
Non-Hispanic White	2.0	0.3	2.3	2.4	2.2	2.5	1.7	1.5	1.5	1.7

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

Top Causes of Mortality

Table 1. Top Causes of Mortality, UIHP Service Areas, 2010-2014

AI/AN			NHW		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	64.7	1	Vascular disease	254.3
2	Cancer	48.2	2	Cancer	189.6
3	Chronic liver disease and cirrhosis	25	3	Chronic lower respiratory disease	45.1
4	Diabetes	18.8	4	Alzheimer's disease	35.3
5	Motor vehicle accidents	11.2	5	Diabetes	19.31

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

Table 1 summarizes the top causes of mortality for both AI/AN and NHW people in UIHP Service Areas, 2010-2014.

Table 2. Male Top Causes of Mortality, UIHP Service Areas, 2010-2014

AI/AN Males			NHW Males		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	71.1	1	Vascular disease	252.1
2	Cancer	51.7	2	Cancer	197.6
3	Chronic liver disease and cirrhosis	26.3	3	Chronic lower respiratory disease	41.2
4	Diabetes	19.4	4	Alzheimer's disease	22.3
5	Motor vehicle accidents	15.3	5	Intentional self harm	21.6

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

Table 2 summarizes top causes of mortality among males in UIHP Service Areas, 2010-2014.

Table 3. Female Top Causes of Mortality, UIHP Service Areas, 2010-2014

AI/AN Females			NHW Females		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Vascular disease	58.3	1	Vascular disease	256.6
2	Cancer	44.7	2	Cancer	181.8
3	Chronic liver disease and cirrhosis	23.7	3	Chronic lower respiratory disease	48.9
4	Diabetes	18..2	4	Alzheimer's disease	47.9
5	Chronic lower respiratory disease	9.5	5	Flu and pneumonia	19.6

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

Table 3 summarizes the top causes of mortality for both AI/AN and NHW females in UIHP Service Areas, 2010-2014.

Table 4. Cancer Mortality, UIHP Service Areas, 2010-2014

AI/AN			NHW		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Tracheal/ Bronchus/Lung cancer	9.2	1	Tracheal/ Bronchus/ Lung cancer	45.8
2	Colon cancer	4.6	2	Colon cancer	16.2
3	Breast cancer	2.8	3	Pancreatic cancer	13.2
4	Pancreatic cancer	2.5	4	Bladder cancer	10.2
5	Bladder cancer	2.5	5	Leukemia	8.9

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

Table 4 summarizes the top types of cancer mortality for both AI/AN and NHW people in UIHP Serivce Areas, 2010-2014.

Table 5. Male Top Causes of Cancer Mortality, UIHP Service Areas, 2010-2014

AI/AN Males			NHW Males		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Tracheal/ Bronchus/Lung cancer	10.6	1	Tracheal/ Bronchus/ Lung cancer	47.6
2	Colon cancer	5.0	2	Prostate cancer	19.3
3	Prostate cancer	4.5	3	Colon cancer	16.7
4	Bladder cancer	3.2	4	Bladder cancer	14.3
5	Pancreatic cancer	2.7	5	Pancreatic cancer	13.7

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

Table 5 summarizes the top type of cancer mortality for both AI/AN and NHW males in UIHP Service Areas, 2010-2014.

Table 6. Female Top Causes of Cancer Mortality, UIHP Service Areas, 2010-2014

AI/AN Females			NHW Females		
Rank	**Cause**	**Rate (per 100,00)**	**Rank**	**Cause**	**Rate (per 100,000)**
1	Tracheal/ Bronchus/Lung cancer	7.9	1	Tracheal/ Bronchus/ Lung cancer	44.1
2	Breast cancer	5.5	2	Breast cancer	27.5
3	Cervical cancer	5.3	3	Cervical cancer	18.4
4	Colon cancer	4.3	4	Colon cancer	15.8
5	Pancreatic cancer	2.3	5	Pancreatic cancer	12.7

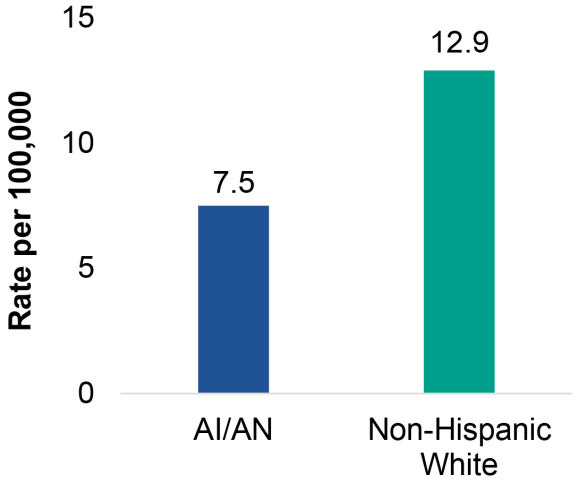
Source: US Center for Health Statistics, Death Certificates, 2010-2014

Table 6 summarizes the top types of cancer mortality for both AI/AN and NHW females in UIHP Service Areas, 2010-2014.

Suicide

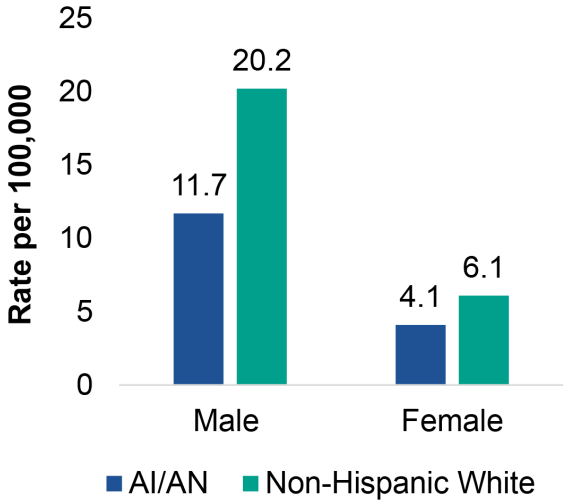
The suicide rate was significantly higher; 1.7 times higher among NHWs compared to AI/ANs (Figure 17). In addition, the suicide rate by gender was significantly higher for both NHW men and women compared to AI/AN men and women at 1.7 and 1.5 times higher respectfully (Figure 18). When comparing gender among AI/ANs, the suicide rate for AI/AN males was 3.3 times higher compared to AI/AN females. Furthermore, there is a significant difference in the trend of suicide mortality along the lifespan between AI/AN and NHW (Figure 19). Suicide rates for AI/AN peak in adolescence and young adulthood (ages 15-34) while NHW suicide peak later in middle and late adulthood (ages 45+).

Figure 17. Overall Suicide Rate, UIHP Service Areas, 2010-2014



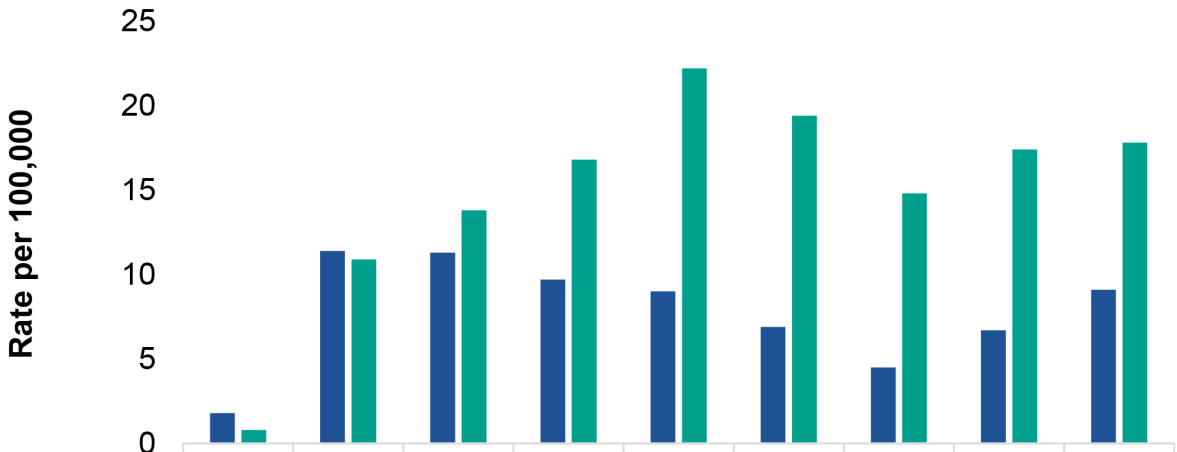
Source: US Center for Health Statistics, Death Certificates, 2010-2014

Figure 18. Suicide Rate by Gender, UIHP Service Areas, 2010-2014



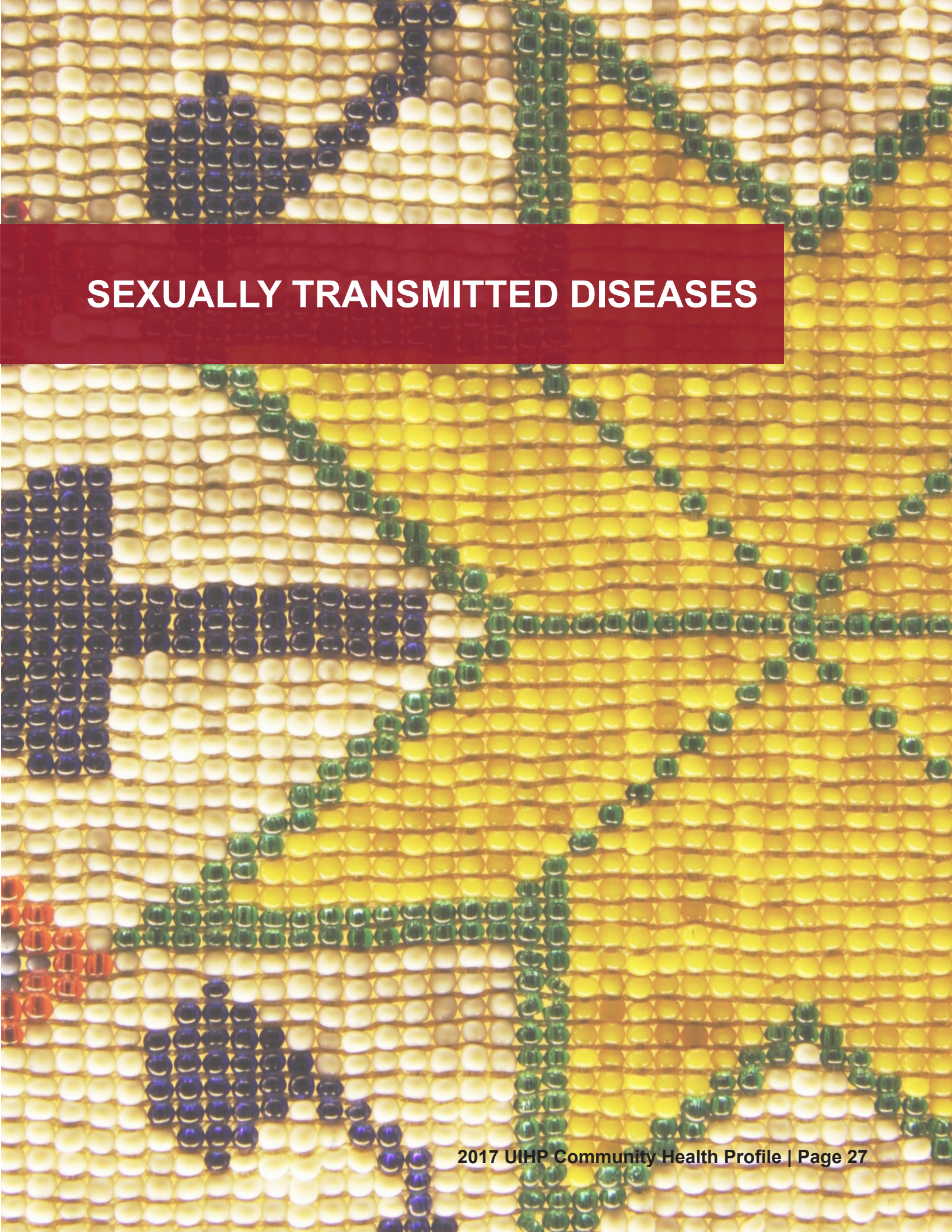
Source: US Center for Health Statistics, Death Certificates, 2010-2014

Figure 19. Suicide Rate by Age Group, UIHP Service Areas, 2010-2014



	5-14 Years	15-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85 Years Plus
AI/AN	1.8	11.4	11.3	9.7	9.0	6.9	4.5	6.7	9.1
Non-Hispanic White	0.8	10.9	13.8	16.8	22.2	19.4	14.8	17.4	17.8

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



SEXUALLY TRANSMITTED DISEASES

Introduction

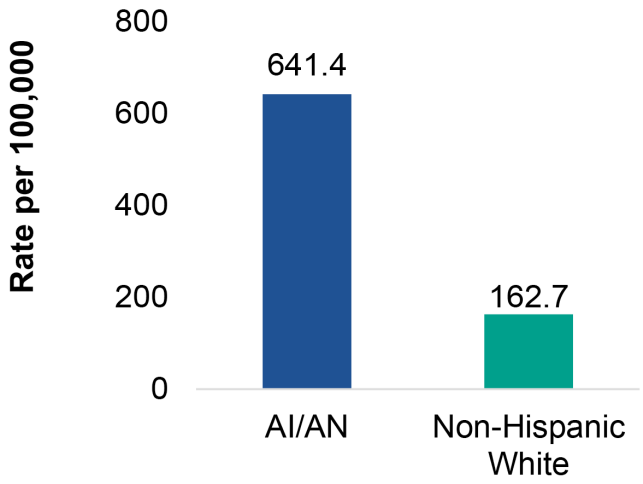
Sexually transmitted diseases (STDs) are an essential component of reproductive health and well-being, yet they remain largely unrecognized by the public, policymakers, and health care professionals due to social stigma around sex and sexuality. Despite the fact that they are largely preventable and oftentimes easily treatable, STDs impose a significant burden on the U.S. healthcare system (estimated to cost as much as $16 billion annually). In addition, STDs do not affect the population equally; gender, age, and racial disparities are well-documented. The CDC estimates that more than 20,000 women in the U.S. become infertile each year due to undiagnosed and untreated STDs.[24]

Chlamydia

Chlamydia is the most common STD in the U.S. and is largely asymptomatic. The disease disproportionately affects females, and if untreated, can result in serious complications, including permanent damage to a woman's reproductive system. This damage may make it difficult to get pregnant or even lead to infertility. Furthermore, chlamydia infection in pregnant women may pose a risk to the fetus or newborn, inducing miscarriage, premature birth, or low birth weight. Neonatal infections most commonly include pneumonia but may also cause conjunctivitis, pharyngitis, rhinitis, or otitis media.[25]

The rate of chlamydia among AI/ANs in UIHP service areas was nearly four times higher than the rate among NHWs (641.4 cases vs 162.7 cases per 100,000; Figure 20).

Figure 20. Chlamydia Infection Rate, UIHP Service Areas, 2010-2014

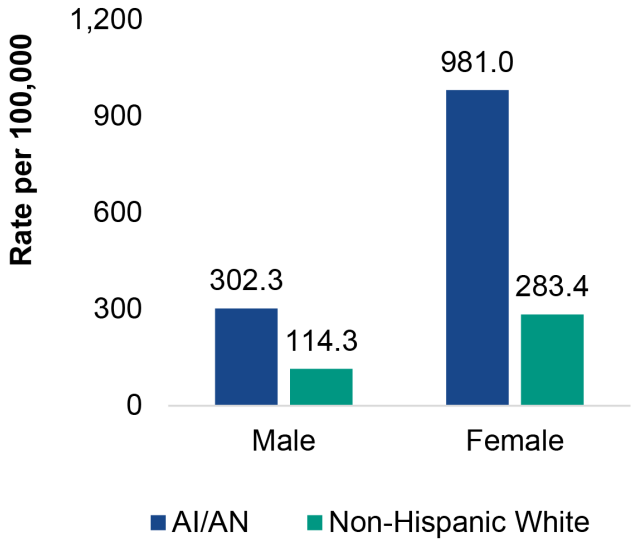


Source: National Notifiable Disease Surveillance System, 2010-2014

Chlamydia by Gender

The chlamydia infection rate for AI/AN females was the highest rate among sex/race categories and was 3.2 times higher than for AI/AN males (981.0 cases vs. 302.3 cases per 100,000, Figure 21). This difference was less pronounced among the NHW population, with female rates 2.5 times higher than males (283.4 cases vs 114.3 cases per 100,000 population). This difference is attributable, in part, to a greater number of females getting screened for the infection. However, this does not explain the largest disparity seen in chlamydia rates between AI/AN females and NHW females. A more likely explanation for this disparity is provider bias of perceived differences in chlamydia risk, whereas AI/AN females may be purposefully selected for screening on the basis of a perceived higher risk of chlamydia infection for minority women.[26]

Figure 21. Chlamydia Infection Rate by Gender, UIHP Service Areas, 2010-2014

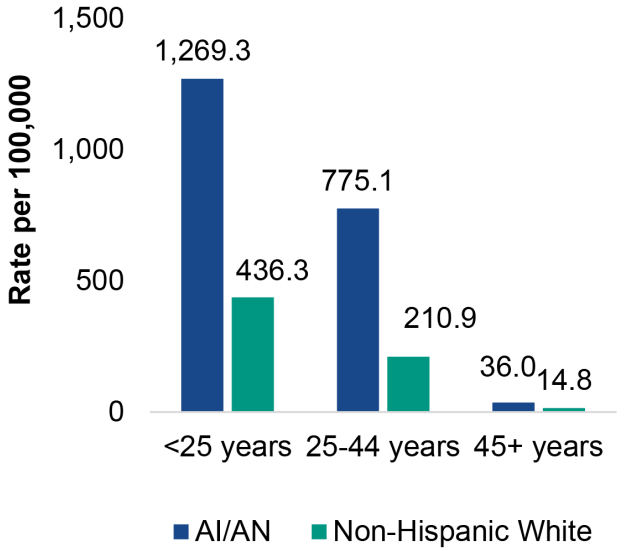


Source: National Notifiable Disease Surveillance System, 2010-2014

Chlamydia by Age Group

The U.S. Preventive Services Task Force recommends screening all sexually active women <25 years of age for chlamydia, as this group carries the largest burden of disease.[26] Chlamydia rates were highest in young adults (<25 years) for both AI/ANs and their NHW counterparts; however, the rates for AI/ANs were three times higher than for NHWs (Figure 22). The chlamydia rates among 25-44 year olds were approximately half those of the <25 age category. Among AI/ANs, the rate fell from 1,269.3 cases to 775.0 cases per 100,000. Infection rates among those ages 45+ are even lower, just 36.0 cases per 100,000 among AI/ANs.

Figure 22. Chlamydia Infection Rate by Age Group, UIHP Service Areas, 2010-2014



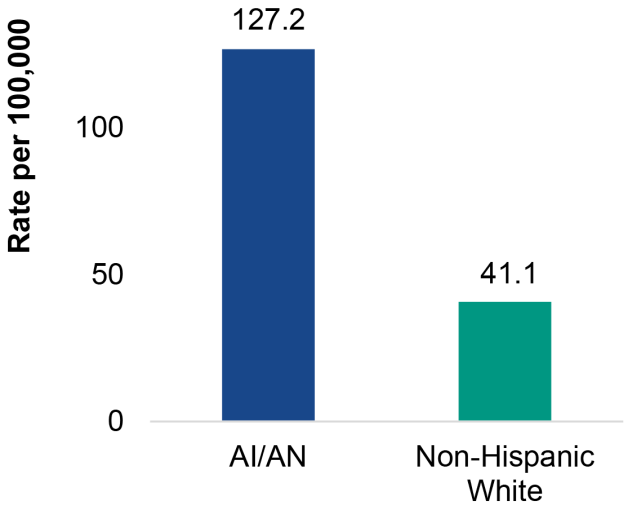
Source: National Notifiable Disease Surveillance System, 2010-2014

Gonorrhea

Gonorrhea is the second most common sexually transmitted disease reported in the U.S. and shares many of the same epidemiologic patterns as chlamydia; the disease disproportionately affects minorities and infection may cause permanent reproductive damage in women. Gonorrhea rates in the U.S. have declined significantly since an aggressive public health campaign began in the mid-1970s.[27] While gonorrhea is curable with antibiotics, antimicrobial resistance is a growing concern and successful treatment of gonorrhea is becoming more difficult.[27]

The rate of gonorrhea among AI/ANs in UIHP service areas was three times higher than the rate among NHWs (127.2 cases vs 41.1 cases per 100,000, Figure 23).

Figure 23. Gonorrhea Infection Rate, UIHP Service Areas, 2010-2014



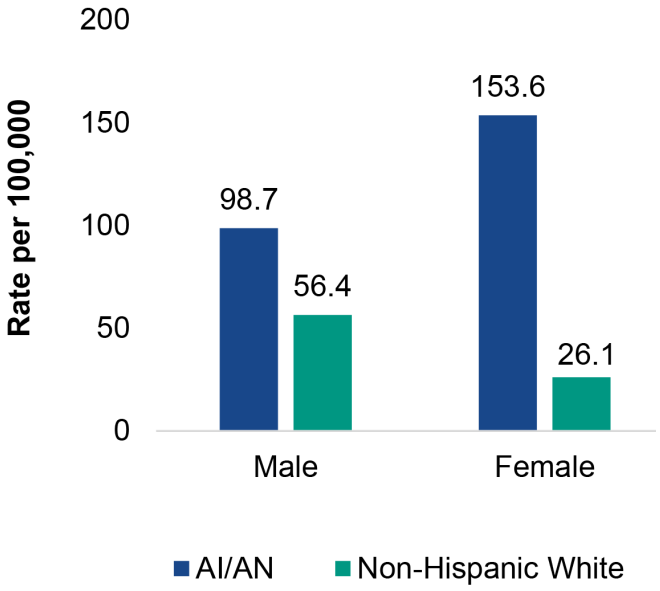
Source: National Notifiable Disease Surveillance System, 2010-2014

Gonorrhea by Gender

The rate for AI/AN females was 1.6 times higher than AI/AN males (153.6 cases vs 98.7 cases per 100,000, Figure 24). However, among NHWs, infection rates for males were over two times higher than their female counterparts (56.4 cases vs 26.1 cases per 100,000).

The national rate of gonorrhea reached an historic low in 2009 but has slowly increased again since then. Most of this increase is attributed to men and may be explained by either increased transmission or increased case ascertainment among gay, bisexual, and other men who have sex with men.[27]

Figure 24. Gonorrhea Infection Rate by Gender, UIHP Service Areas, 2010-2014



Source: National Notifiable Disease Surveillance System, 2010-2014

Gonorrhea by Age Group

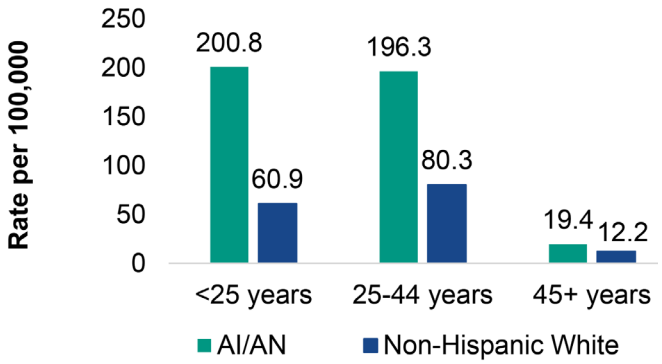
AI/AN rates for gonorrhea were highest among the <25 age category (200.8 cases per 100,000) and only slightly lower for the 25-44 age category (196.3 cases per 100,000, Figure 25). This trend was reversed among NHWs with the highest burden of disease in the 25-44 age category (80.3 cases per 100,000).

Syphilis

Compared to other sexually transmitted diseases, syphilis infection is extremely rare. In 2000, the rate of infection hit an all-time low in the U.S. at 2.1 cases per 100,000.[28] Despite these low rates, syphilis infection can cause serious and long-term complications. If untreated, syphilis may cause stroke, heart disease, and even death. For females, infection acquired up to the four years proceeding pregnancy can lead to infection of the fetus and congenital deformities in up to 80% of cases. Other harmful effects during pregnancy and delivery to newborn may include low birth weight, eye infection, sepsis, blindness, deafness, and neurological damage. Syphilis infection among pregnant women may also results in perinatal death.[28]

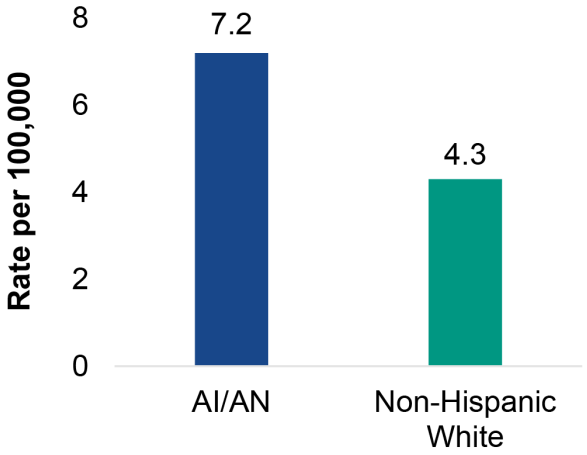
Since reaching an all-time low in 2000, syphilis cases have increased slightly nationwide. Due to low cases among AI/ANs, reported syphilis rates are aggregated as primary and secondary stage (P&S) syphilis and latent and late stage syphilis for this report. Among AI/ANs in UIHP service areas, the rate of syphilis infection from 2010-2014 was 7.2 cases per 100,000 (Figure 26). This rate was almost two times higher than the rate for NHWs.

Figure 25. Gonorrhea Infection Rate by Age Group, UIHP Service Areas, 2010-2014



Source: National Notifiable Disease Surveillance System, 2010-2014

Figure 26. Syphilis Infection Rate, UIHP Service Areas, 2010-2014



Source: National Notifiable Disease Surveillance System, 2010-2014

Syphilis Infection Rate by Gender

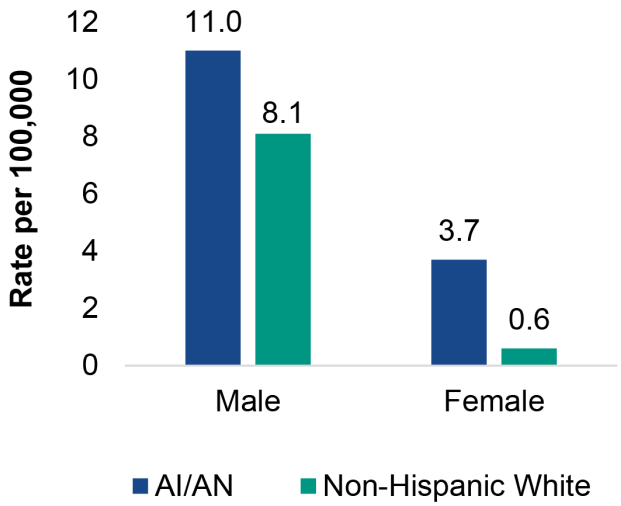
For both AI/ANs and NHWs, rates of syphilis are much higher among men than women (Figure 27). Among AI/ANs, the rate is three times higher for men than women (11.0 cases vs 3.7 cases per 100,000); among NHWs, the disparity is even greater; 13.5 time higer.

According to national data, the 2014 increase in syphilis cases (P&S) was more dramatic among men than women. Of these reported cases, 61% were among men who have sex with men (MSM), 13% were among men who had sex with women only (MSW), 9% were among women, and 17% were among men without information about their sexual partner.[28]

Syphilis Infection Rate by Age Group

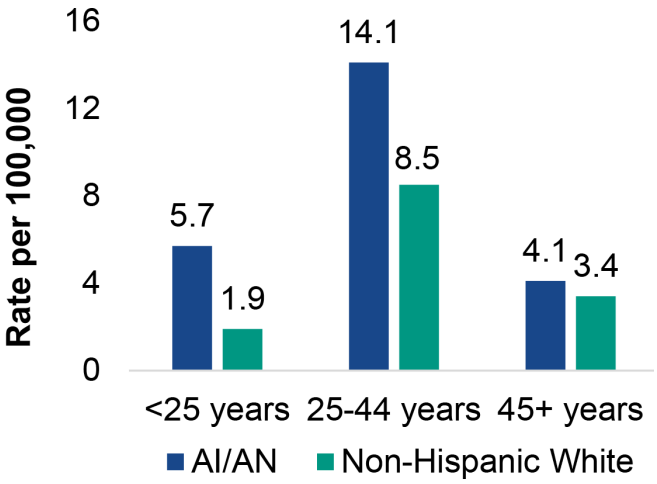
The highest syphilis rate among AI/ANs was for 25-44 year olds (14.1 cases per 100,000; Figure 28). This rate was 2.5 times higher than the rate among those ages <25 years (5.7 cases per 100,000) and 3.4 times higher than those ages 45+ years (4.1 cases per 100,000). The greatest disparity in syphilis rates compared to NHWs was among ages <25 years where the rate was three times higher (1.9 cases versus 5.7 cases per 100,000 population).

Figure 27. Syphilis Infection Rate by Gender, UIHP Service Areas 2010-2014



Source: National Notifiable Disease Surveillance System, 2010-2014

Figure 28. Syphilis Infection Rate by Age Group, UIHP Service Areas, 2010-2014



Source: National Notifiable Disease Surveillance System, 2010-2014

MATERNAL AND CHILD HEALTH

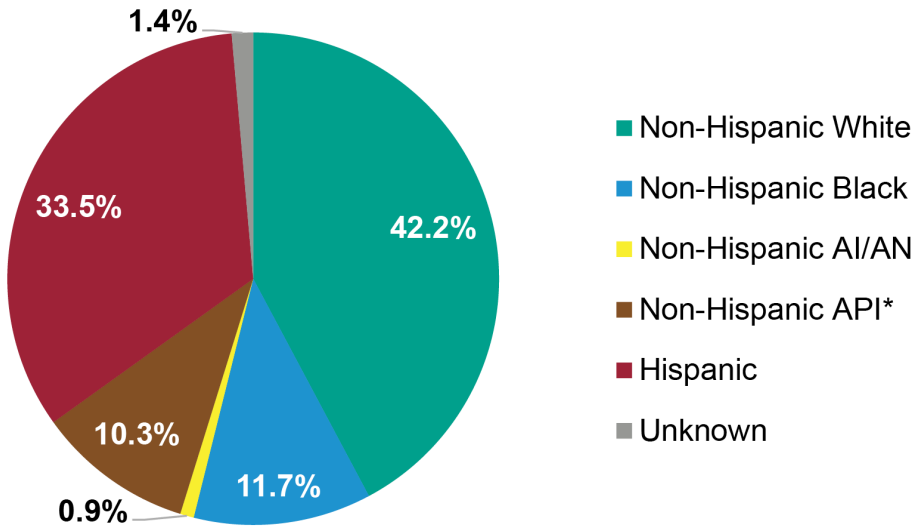
Introduction

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 UIHPs make decisions on areas of focus. 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 look into methods to eliminate these health disparities.

Total Births

From 2008 to 2012, there were a total of 5,516,885 million births in UIHP service areas. Among those births, 0.9% were identified as non-Hispanic AI/AN alone (Figure 29). The largest proportions of births among racial/ethnic group were from NHW (42.2%) and Hispanic (33.5%) women. Non-Hispanic Blacks were approximately 11.7% and non-Hispanic Asians and Pacific Islanders were approximately 10.3% of all births.

Figure 29. Births by Race/Ethnicity, UIHP Service Areas 2008-2012



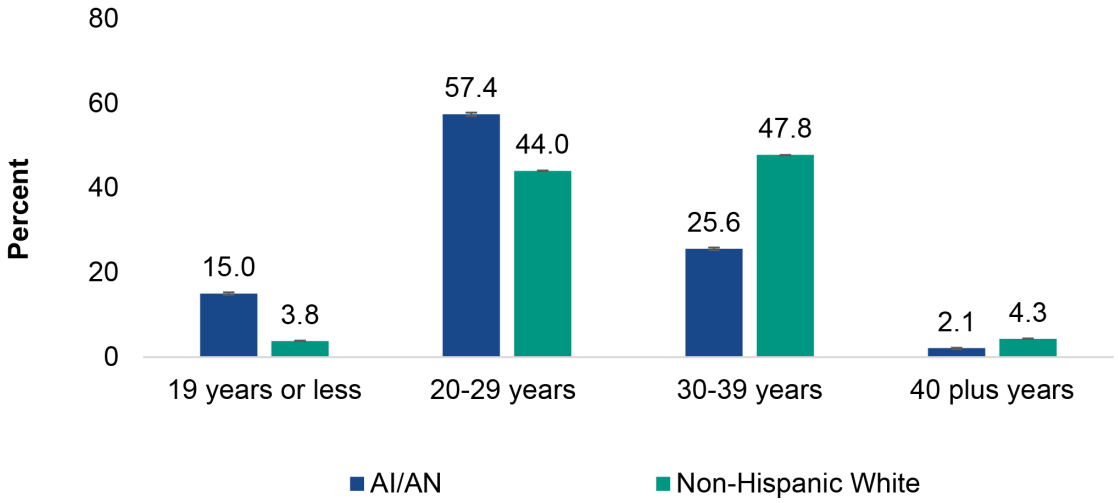
*API-Asian/Pacific Islander

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

Age

In general, AI/AN women tend to give birth at younger ages than their NHW counterparts (Figure 30). Fifteen percent of births among AI/AN women in UIHP service areas were to teenage women (less than 19 years of age) compared to 3.8% of NHW births. Births among AI/AN women were 4.4 times more likely to occur among AI/AN teenage women, compared with NHW teenage women. In addition, approximately 60% of all births among AI/AN women were to women in their 20s, compared to 44% among NHWs. Conversely, NHW women were more likely to experience childbirth in their 30s and 40s compared to AI/AN women. Approximately 50% 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 30. Births by Maternal Age Group, UIHP Service Areas, 2008-2012

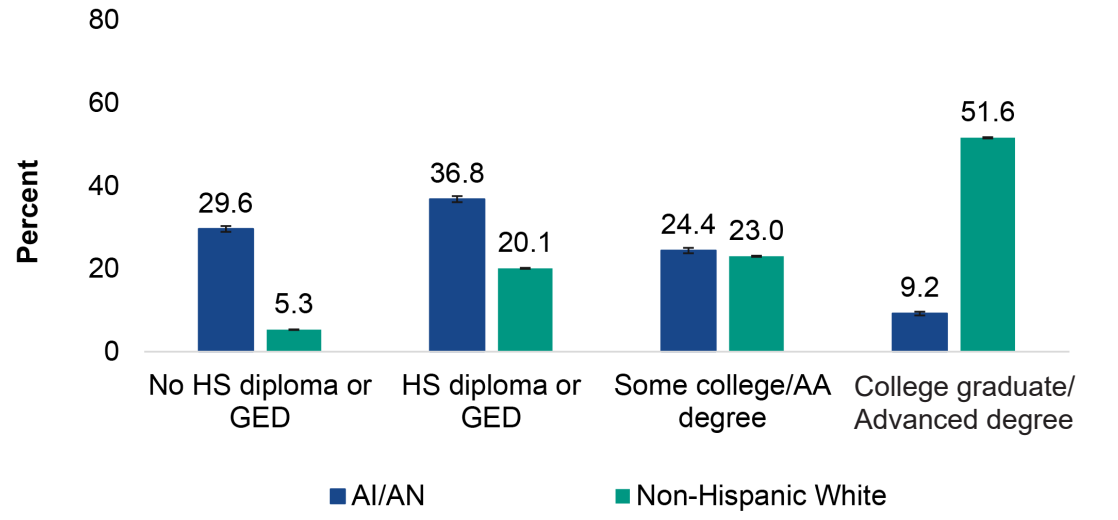


Source: National Vital Statistics, Birth Certificates, 2008-2012

Education

Approximately 30% of all births for AI/ANs in UIHP service areas were to women who did not complete high school and 37% were to women whose highest level of education was a high school diploma or GED (Figure 31). Conversely, among NHW women, only five percent of all births were from women who did not complete high school and 20% were from women whose highest level of education was a high school diploma or GED. The odds of an infant being born to a woman with a high school diploma or less was 5.8 times more likely to occur among AI/AN women than to NHW women. In addition, approximately half of all births among NHWs were to women with a college or advance degree compared to only 10% among their AI/AN counterparts. The odds of an infant being born to a woman with a college or advance degree was 8.6 times more likely to occur among NHW women than to AI/AN women.

Figure 31. Births by Maternal Education, UIHP Service Areas, 2008-2012

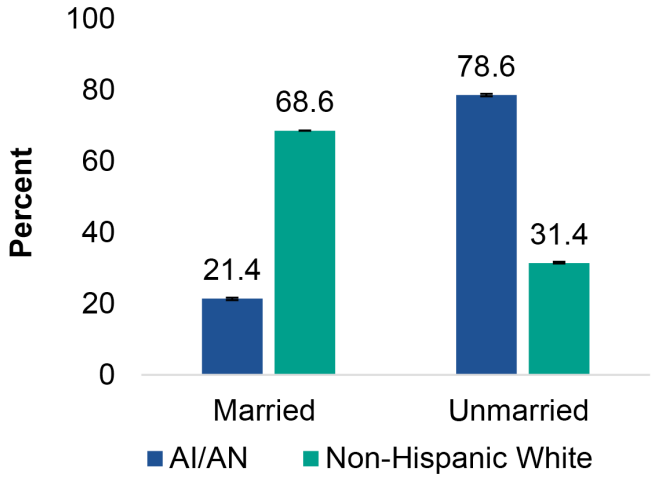


Source: National Vital Statistics, Birth Certificates, 2008-2012

Marital Status

Approximately 20% of all births to AI/ANs in UIHP service areas were to women who were married and approximately 80% were to women who were not married (Figure 32). This was significantly different compared to NHWs in which nearly 70% of births were to married mothers. AI/AN women were eight times more likely to be unmarried compared to NHW women when giving birth.

Figure 32. Births by Marital Status, UIHP Service Areas, 2008-2012

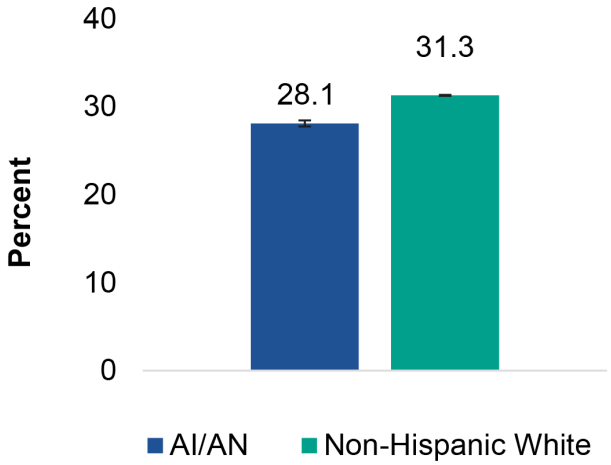


Source: National Vital Statistics, Birth Certificates, 2008-2012

Cesarean Section

In UIHP service areas, approximately one third of births were delivered by cesarean section among NHW females. This was significantly higher than the proportion of deliveries by cesarean section among AI/AN births (28%, Figure 33). AI/AN women were 14% less likely than NHW women to deliver by cesarean section.

Figure 33. Births by Cesarean Section, UIHP Service Areas, 2008-2012

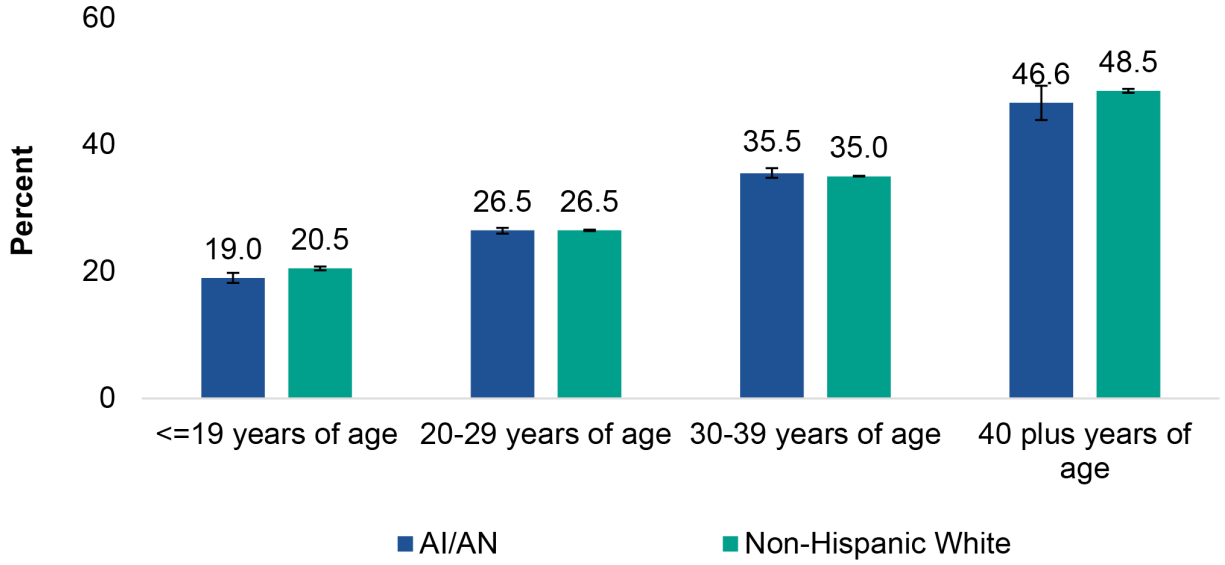


Source: National Vital Statistics, Birth Certificates, 2008-2012

Cesarean Section by Maternal Age

The proportion of cesarean deliveries increased significantly as maternal age increased for both AI/AN and NHW women (Figure 34) as well as the likelihood of a cesarean section.

Figure 34. Cesarean Sections by Maternal Age Group, UIHP Service Areas, 2008-2012



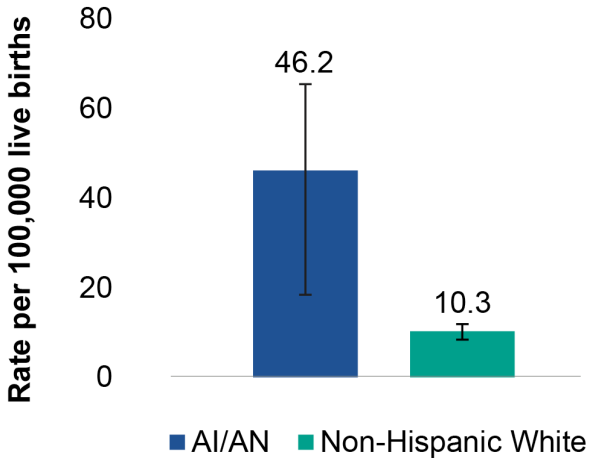
Source: National Vital Statistics, Birth Certificates, 2008-2012

Maternal Mortality

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy or its management, but not from accidental or incidental causes. Major causes of maternal death include bacterial infection; variants of gestational hypertension, including pre-eclampsia, obstetrical hemorrhage, ectopic pregnancy; and complications of abortions.[29]

In UIHP service areas, maternal mortality was 46.2 per 100,000 births for AI/AN women, which was significantly higher than NHW women (10.3/100,000 births, Figure 35). AI/AN women were 4.5 times more likely to experience maternal mortality than NHW women.

Figure 35. Maternal Mortality Rate, UIHP Service Areas, 2010-2012

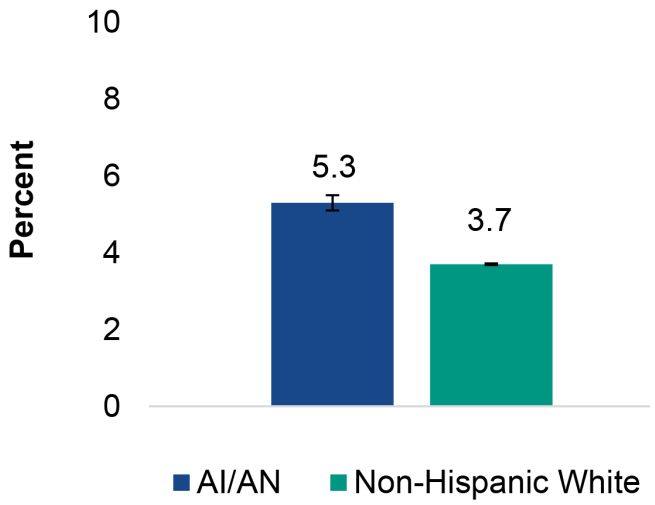


Source: National Vital Statistics, Birth Certificates, 2008-2012

Gestational Diabetes

Approximately 5.3% of AI/AN births in UIHP service areas were to women who were diagnosed with gestational diabetes during their pregnancy (Figure 36). This proportion was significantly higher than NHW women, where 3.7% percent of women giving birth were diagnosed with gestational diabetes. AI/AN pregnant women were 1.4 times more likely to be diagnosed with gestational diabetes than NHW pregnant women

Figure 36. Gestational Diabetes, UIHP Service Areas, 2008-2012

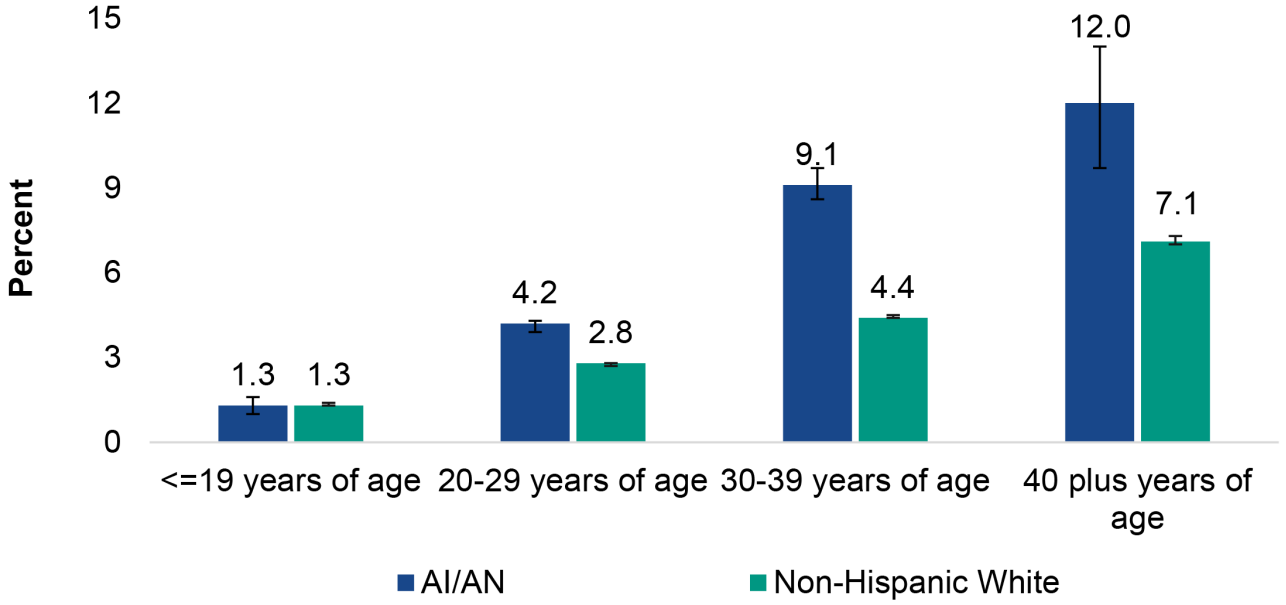


Source: National Vital Statistics, Birth Certificates, 2008-2012

Gestational Diabetes by Maternal Age

The risk of gestational diabetes during pregnancy significantly increased with maternal age for both AI/AN and NHW women (Figure 37). The likelihood of gestational diabetes increased by 119% as maternal age increased for AI/AN women, whereas the likelihood of gestational diabetes increased by 67% for NHW women. There was no difference in gestational diabetes between AI/AN and NHW teenage females; however, AI/AN pregnant women had a significantly higher proportion of gestational diabetes than NHW pregnant women for all other age categories.

Figure 37. Gestational Diabetes by Maternal Age Group, UIHP Service Areas, 2008-2012

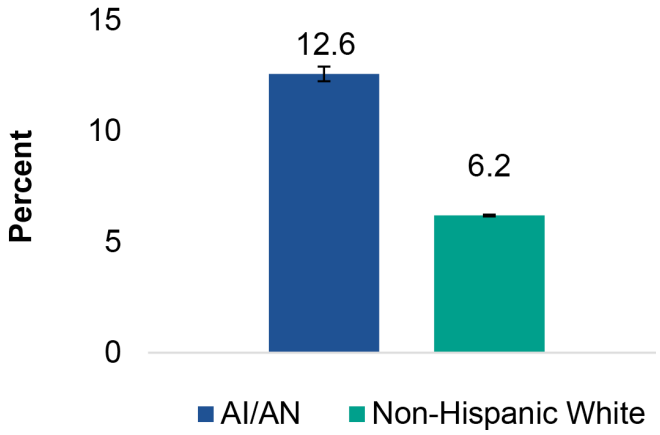


Source: National Vital Statistics, Birth Certificates, 2008-2012

Maternal Smoking

In UIHP service areas, 12.6% of AI/AN women smoked while pregnant, compared to 6.2% NHW women (Figure 38). AI/AN women were 2.2 times more likely to smoke while pregnant compared to NHW women.

Figure 38. Maternal Smoking, UIHP Service Areas, 2008-2012

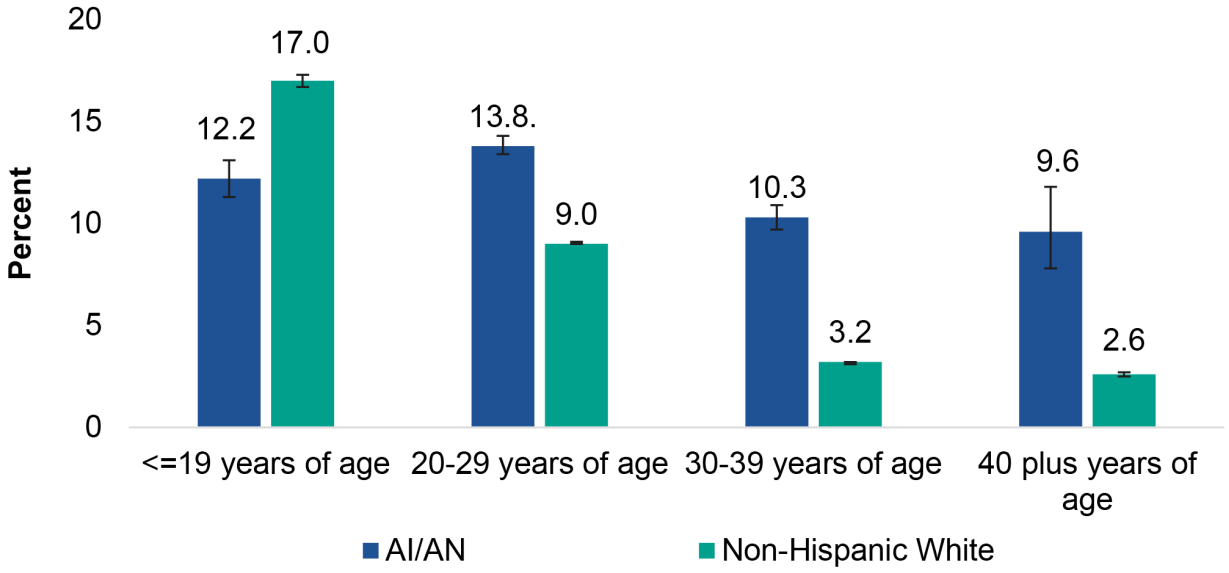


Source: National Vital Statistics, Birth Certificates, 2008-2012

Smoking by Maternal Age

Maternal smoking decreased as maternal age increased for both NHW and AI/AN women; however, the decrease for maternal smoking was not as dramatic for AI/AN women as it was for NHW women (Figure 39). Among AI/AN pregnant women, the likelihood of maternal smoking decreased by 13% as age increased, whereas the likelihood of maternal smoking decreased by 60% among NHW. Statistical analysis determined that age was a risk factor for maternal smoking for both AI/AN and NHW women. In addition, maternal smoking was significantly higher among AI/AN women in their 20s, 30s, and 40s compared to NHW women. Conversely, NHW teenage women had a significantly higher proportion of maternal smoking than AI/AN teenage women.

Figure 39. Maternal Smoking by Age Group, UIHP Service Areas, 2008-2012



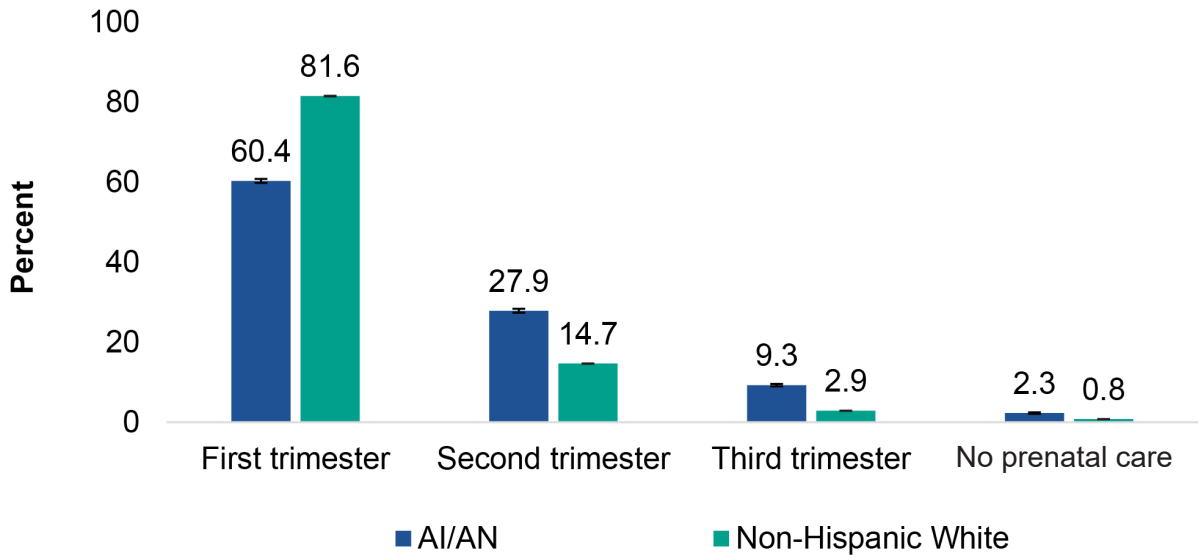
Source: National Vital Statistics, Birth Certificates, 2008-2012

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.[29]

Among pregnant women in the UIHP service areas, 60% of AI/AN women began prenatal care in the first trimester compared to 81.6% of NHW women, a significant difference (Figure 40). NHW women were approximately three times more likely to begin prenatal care in the first trimester compared to AI/AN women. In addition, approximately 12% of AI/AN pregnant women began prenatal care in the third trimester or did not receive any prenatal care during their pregnancy compared to approximately four percent of NHW pregnant women. AI/AN women were 3.4 times more likely to either begin prenatal care in the third trimester or not receive any prenatal care during their pregnancy compared to NHW women.

Figure 40. Prenatal Care by Trimester, UIHP Service Areas, 2008-2012



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

Infant Mortality

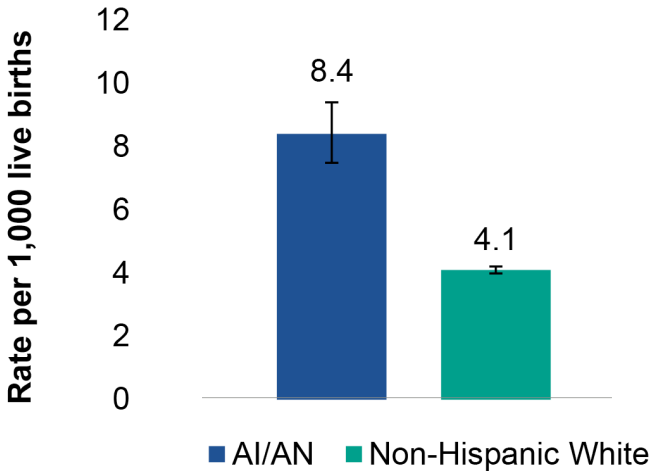
Infant mortality is a useful indicator for the level of health in a community. It is defined as the number of deaths of infants younger than one year of age per 1,000 live births for a given period of time. Infant mortality is related to the underlying health of the mother, public health practices, socioeconomic conditions, and the availability and use of appropriate health care for infants and pregnant women.[30] 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.[30]

The infant mortality for AI/ANs in UIHP service areas was 8.4 per 1,000 live births (Figure 41). This was significantly higher than the infant mortality rate for NHWs (4.1 per 1,000 live births), with AI/AN infants being 2.5 times more likely to die within their first year of life, compared to NHW infants.

Premature Births

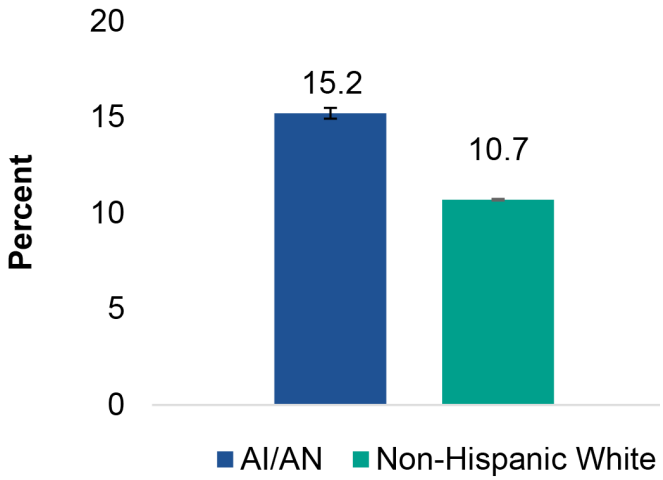
A premature birth is defined as childbirth occurring earlier than 37 completed weeks of pregnancy. In UIHP service areas, approximately 10% of all infants born to NHW women were born prematurely, which is significantly lower than all infants born prematurely to AI/AN women at 15.2% (Figure 42).

Figure 41. Infant Mortality Rate, UIHP Service Areas, 2008-2012



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

Figure 42. Premature Births (<37 weeks), UIHP Service Areas, 2008-2012

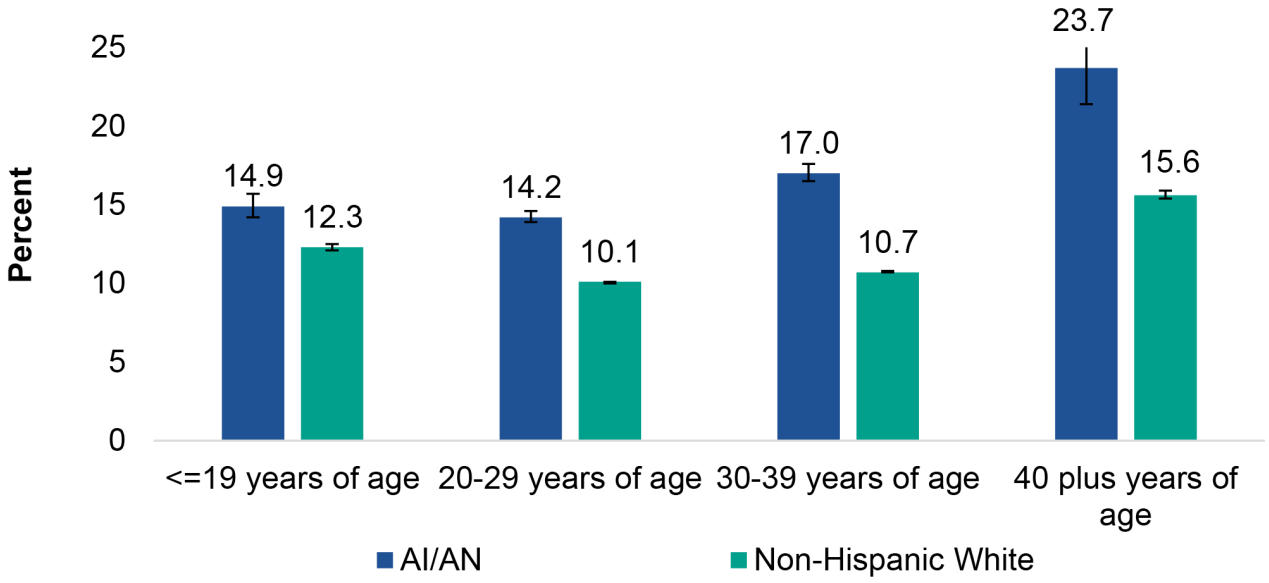


Source: National Vital Statistics, Birth Certificates, 2008-2012

Additionally, AI/AN pregnant women were 1.5 times more likely to have an infant born prematurely than a NHW women.

Patterns of premature births were similar for both NHW and AI/AN pregnant woman by age stratification (Figure 43). Although premature births increased as maternal age increased, women in their 20s had the lowest rate of premature births than any other age group for both NHW and AI/AN women.

Figure 43. Premature Births (<37 weeks) by Maternal Age Group, UIHP Service Areas, 2008-2012

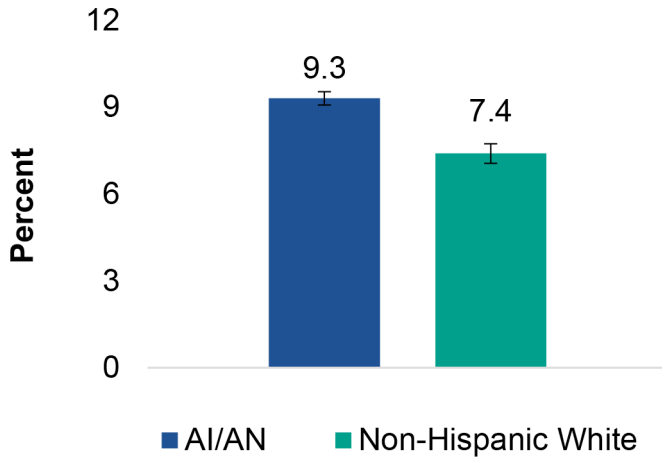


Source: National Vital Statistics, Birth Certificates 2008-2012

Low Birth Weight

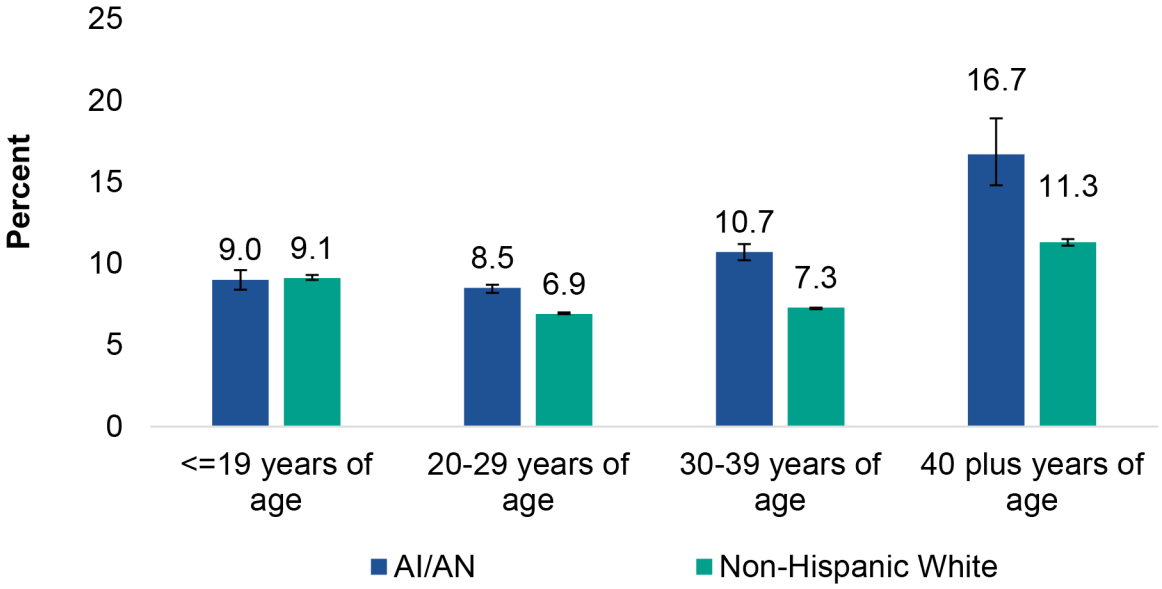
Low birth weight is defined as less than 2,500 grams (5.5 pounds). In UIHP service areas, approximately 10% of all births born to AI/AN women were low birth weight, which is significantly higher than all infants born to NHW women who were low birth weight at 7.4% (Figure 44). AI/AN women were 1.3 times more likely to give birth to a new born who was low birth weight compared to White NH women.Low birth weight patterns by age stratification were similar for both NHW and AI/AN pregnant woman (Figure 45). Although low birth weight increased as maternal age increased, 20-29 year-old females had the lowest rate of low birth weight babies than any other age group for both NHW and AI/AN women. Also, it was determined that age was a risk factor for low birth weight for both AI/AN and NHW women.

Figure 44. Low Birth Weight (<2,500 g), UIHP Service Areas, 2008-2012



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

Figure 45. Low Birth Weight (<2,500 g), by Maternal Age Group, UIHP Service Areas, 2008-2012



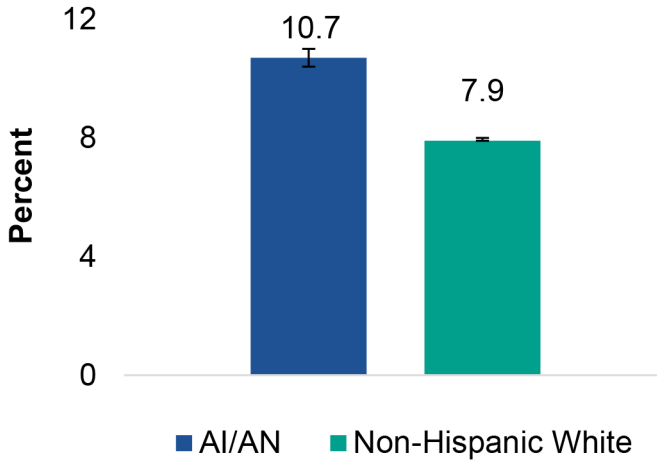
Source: National Vital Statistics, Birth Certificates 2008-2012

Neonatal Intensive Care Unit Admission

Most babies admitted to the neonatal intensive care unit (NICU) are premature, have low birth weight, or have a medical condition that requires special care. In the U.S., nearly half a million babies are born preterm, and many of these babies also have low birth weights. Babies with medical conditions such as heart problems, infections, or birth defects are also cared for in the NICU.[31]

Admission to the NICU for newborns in UIHP service areas was significantly higher among AI/AN newborns than NHW newborns (Figure 46). An estimated 10.7% of AI/AN newborns were admitted to the NICU compared to 7.9% NHW newborns. AI/AN newborns were 1.4 times more likely to be admitted to the NICU compared to NHW newborns.

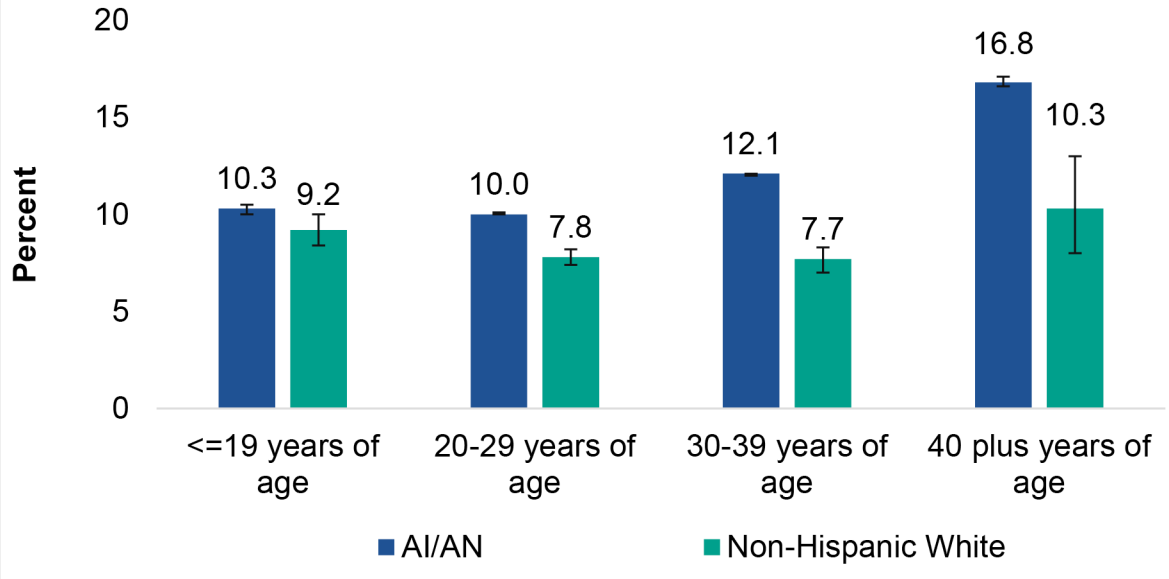
Figure 46. Newborns Admitted to the NICU, UIHP Service Areas, 2008-2012



Source: National Vital Statistics, Birth Certificates 2008-2012

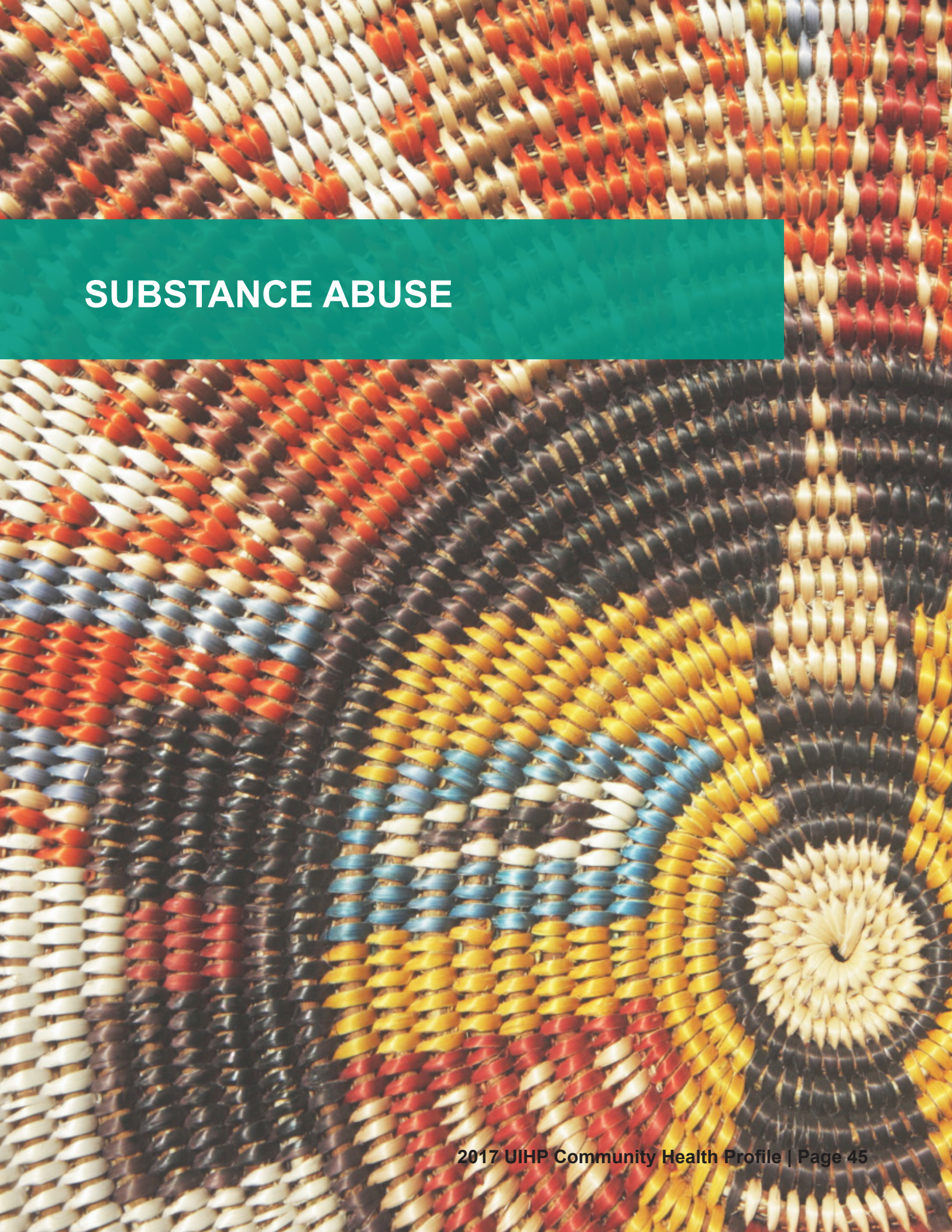
The number of newborns admitted to the NICU increased with maternal age for AI/ANs and NHWs; however, this increase was not as dramatic for NHW newborns (Figure 47). The likelihood of AI/AN newborns being admitted to the NICU increased by 17% as maternal age increased, whereas the likelihood of NHW infants being admitted to the NICU increased by only 2%. For several maternal age groups, the proportion of AI/AN newborns admitted to the NICU was significantly higher than the proportion of NHW newborns.

Figure 47. Newborns Admitted to the NICU by Maternal Age group, UIHP Service Areas, 2008-2012



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

SUBSTANCE ABUSE



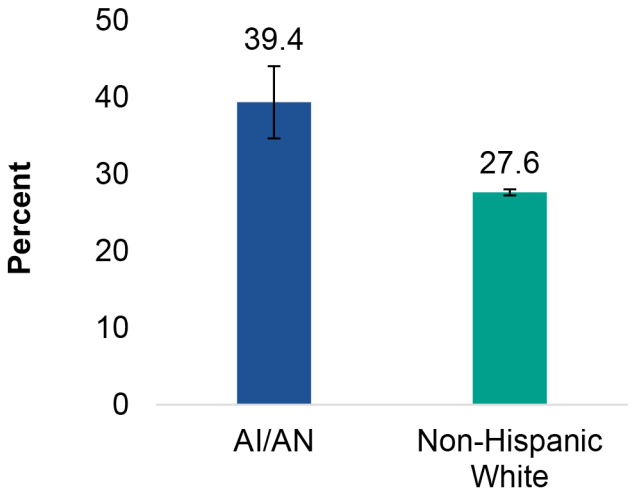
Introduction

Substance use has severe consequences on the health and well-being of individuals and society as a whole. Specifically, a number of medical conditions have been causally linked to tobacco and alcohol use while marijuana, prescription pain relievers, and illicit drugs have been strongly associated with a range of harmful health consequences.[32-36] This section describes NSDUH data available on the use of tobacco, alcohol, marijuana, prescription pain relievers, and illicit drugs.

Tobacco Use

Smoking has been causally linked to a number of harmful health consequences, including coronary heart disease, stroke, diabetes, and many types of cancers, such as lung and pancreatic.[36] Among AI/ANs living in urban areas, 39.4% reported using tobacco in the past month, compared to 27.6% of NHW (Figure 48). This statistically significant difference between the two groups illustrates a potentially greater risk of developing tobacco-related health problems among AI/ANs, compared to NHWs. However, it is important to note that the prevalence of tobacco use may also be higher among AI/ANs because of its use for ceremonial, religious, and medicinal purposes.[37]

Figure 48. Tobacco Use in the Past Month, Urban Areas, 2009-2014

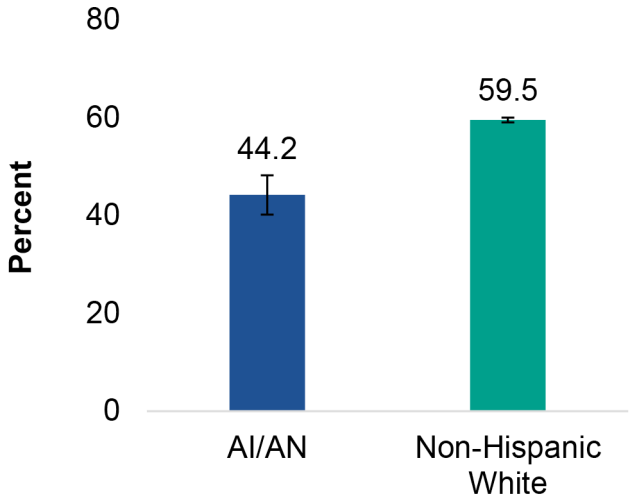


Source: National Survey of Drug Use and Health, 2009-2014

Alcohol Use

A causal link between alcohol and over 60 medical conditions has been found, with alcohol having a negative effect in most of those cases.[33] Among AI/ANs living in urban areas, 44.2% reported using alcohol in the past month, which is significantly lower than 59.5% of NHW (Figure 49). While the stereotype that AI/ANs consume more alcohol than Whites is widespread, national survey findings have actually shown that AI/ANs report greater abstinence from alcohol and lower numbers of light/moderate alcohol use.[38]

Figure 49. Alcohol Use in the Past Month, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Binge Drinking

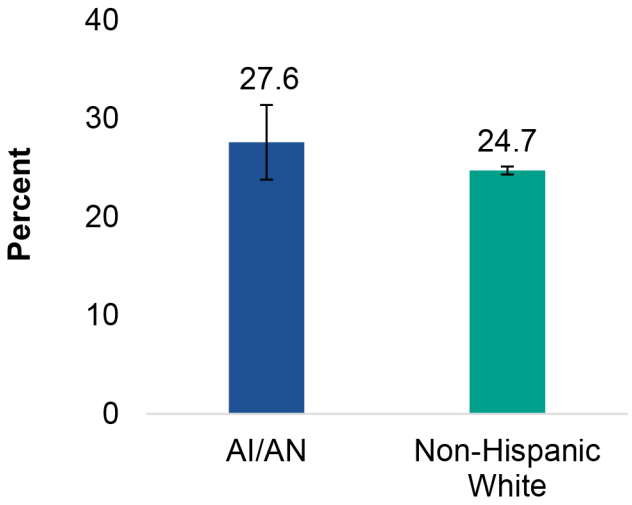
Binge drinking has been associated with a number of detrimental health outcomes including accidental injuries, suicide, sudden infant death syndrome, alcohol poisoning, heart attacks, gastritis, pancreatitis, sexually transmitted diseases, meningitis, hypertension, and uncontrolled diabetes.[39]

Other social and economic consequences related to binge drinking include interpersonal violence, fetal alcohol syndrome, unintended pregnancy, child neglect, and lost productivity.[39] Among individuals living in urban areas, 27.6% of AI/ANs reported binge drinking in the past month, compared to 24.7% of NHW; however, this was a non-significant difference (Figure 50). Other studies have found similar findings that implied no significant difference between AI/ANs and Whites.[38]

Alcohol Use or Dependence

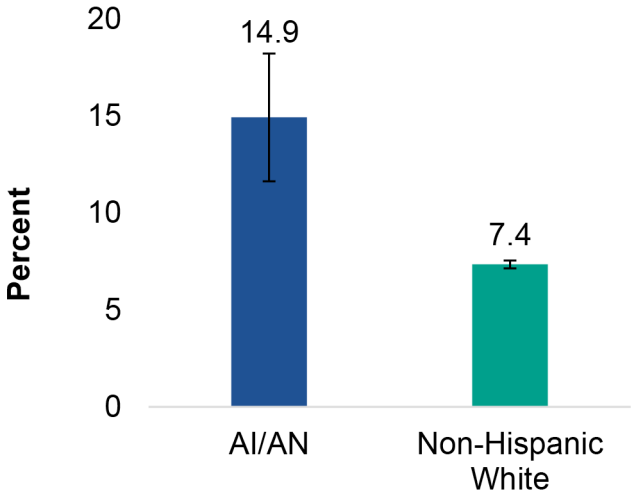
Among individuals living in urban areas, the proportion of AI/ANs who had alcohol abuse or dependence in the past year was significantly higher than NHWs, at 14.9% and 7.4% respectively (Figure 51). Previous research has also found a high prevalence of alcohol abuse and alcohol dependence among AI/ANs compared to other racial/ethnic groups.[40]

Figure 50. Binge Alcohol Use in the Past 30 Month, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Figure 51. Alcohol Abuse or Dependence in Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

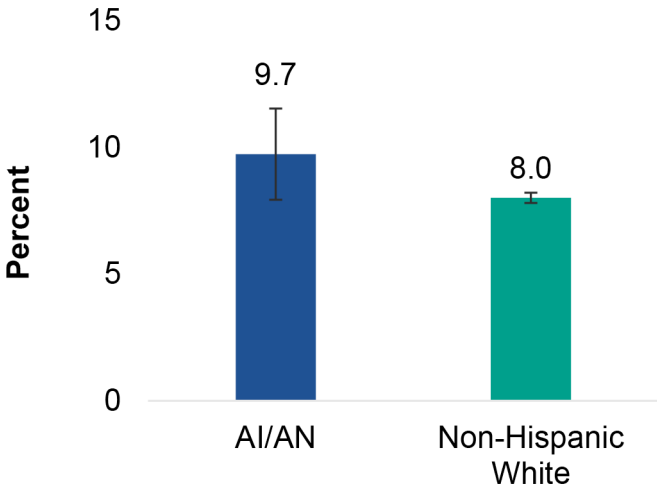
Marijuana Use

While marijuana has the potential to alleviate some symptoms of certain clinical conditions, it has also been associated with addiction, reduced cognitive function, lower educational outcomes, chronic bronchitis symptoms, and a higher risk of developing chronic psychosis disorders in people who have a genetic predisposition to such disorders.[32] Among individuals living in urban areas, the proportion of marijuana users in the past month was similar for both AI/ANs and NHWs, at 9.7% and 8.0% respectively (Figure 52). The similarity in usage may be due to marijuana being the most frequently used "illicit" drug and its legalization in several states in the US.[32]

Marijuana Abuse or Dependency

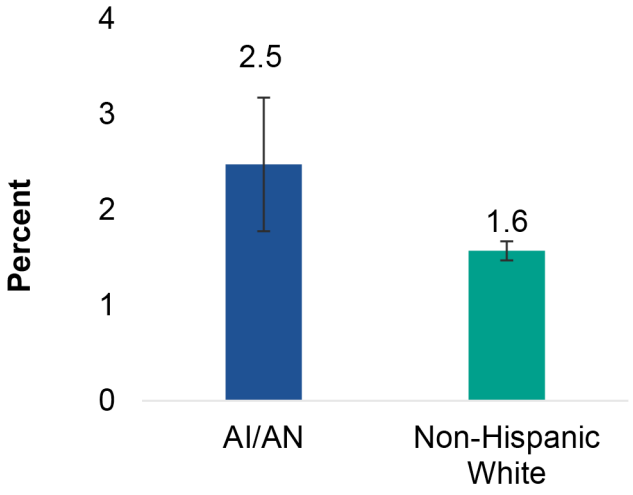
Among individuals living in urban areas, AI/ANs had a significantly higher proportion of marijuana abuse or dependence in the past year compared to NHW, at 2.5% and 1.6% respectively (Figure 53). This finding differs from previous research conducted in two AI/AN communities that did not find a significant difference in the drug abuse and dependence rates between that sample of AI/ANs and the national average; however, this difference may be due to this report's focus on urban AI/ANs nationwide while Mitchell's study focused specifically on one Southwestern tribe and one Northern Plains tribe.[41]

Figure 52. Marijuana Use in the Past Month, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Figure 53. Marijuana Abuse or Dependence in the Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

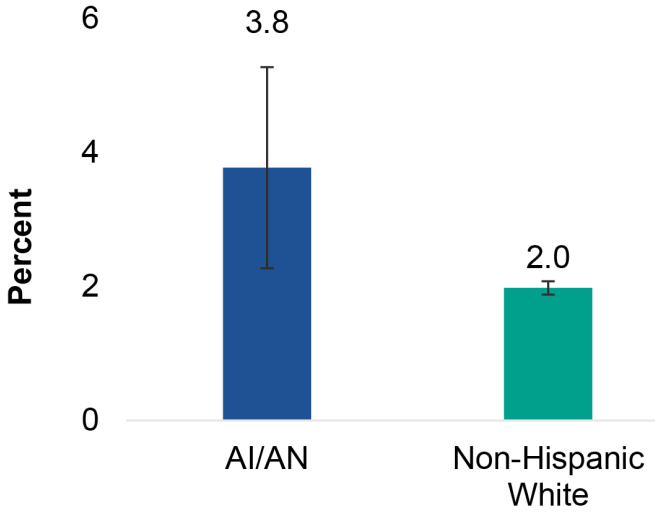
Pain Reliever Use

Nonmedical use of prescription pain relievers has been associated with progression to heroin use and associated with a higher number of emergency department visits, treatment admissions, and overdose deaths.[34,42,43] Among individuals living in urban areas, the proportion of AI/ANs who used pain relievers non-medically in the past month was almost twice as high as the proportion of NHWs, at 3.8% and 2.0% respectively (Figure 54). This significant difference between the two groups is similar to other findings in which the group with the highest reported nonmedical use of pain relievers was AI/ANs.[44,45]

Pain Reliever Abuse and Dependency

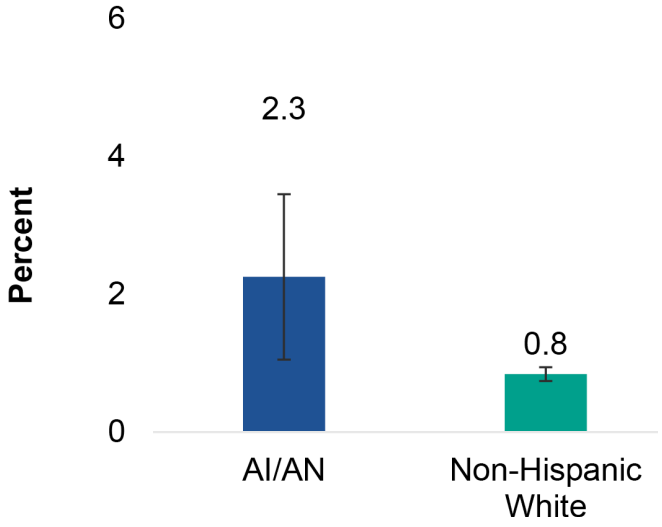
Among individuals living in urban areas, 2.3% of AI/ANs had pain reliever abuse or dependence in the past year, compared to 0.8% of NHW (Figure 55). While the proportions for both groups are relatively small, the proportion of AI/ANs was nearly three times as large as the proportion of NHW, which was also found to be a statistically significant difference. This finding differs from a previous study that focused on two specific tribes and found no significant difference in the drug abuse and dependence rates between those AI/ANs and the national average; however, this difference in the findings may be due to this report focusing on urban AI/ANs nationwide while the other study focused primarily on two AI/AN communities.[41]

Figure 54. Pain Reliever Use in the Past Month, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Figure 55. Pain Reliever Abuse or Dependence in the Past Year, Urban Areas, 2009-2014



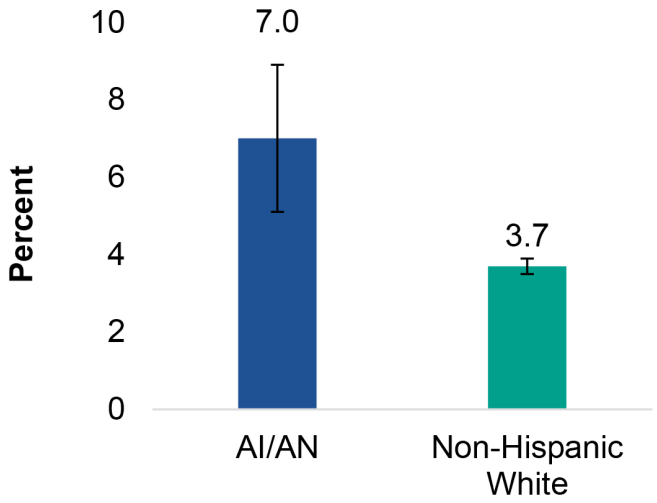
Source: National Survey of Drug Use and Health, 2009-2014

Illicit Drug Use

With illicit drug use, there are four categories of harmful health effects to consider: acute, poisonous outcomes, such as overdose; acute side-effects from intoxication, such as unintentional injuries; dependence; and the consequences of long-term, regular use, such as chronic disease, bloodborne bacterial and viral infections, and mental disorders.[35] NSDUH defined the following substances as illicit drugs: hallucinogens, inhalants, tranquilizers, cocaine, heroin, nonmedical use of pain relievers, stimulants, and sedatives.

Among individuals living in urban areas, the proportion of AI/ANs who used an illicit drug other than marijuana in the past month was almost twice as high as the proportion of NHWs, a significant difference of 3.3% (Figure 56). This finding is similar to others that have shown AI/ANs to have the highest proportions for illicit drug use, compared to other racial/ethnic groups.[46]

Figure 56. Illicit Drug Use Other than Marijuana in the Past Month, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

MENTAL HEALTH

Introduction

Mental health is a crucial component for individual well-being, relationships with others, and worker productivity. Mental disorders disrupt an individual's cognitive process, emotion or mood, and ability to integrate into society.[47] For AI/ANs, a number of historical and sociocultural factors, including the forced removal of AI/ANs from their lands and policies against AI/AN culture and spirituality, have been associated with detrimental mental health effects.[47] This section discusses some of the data available from NSDUH that are related to mental health and access to care for adolescents and adults.

Adult Mental Health

Adult Perceived Need

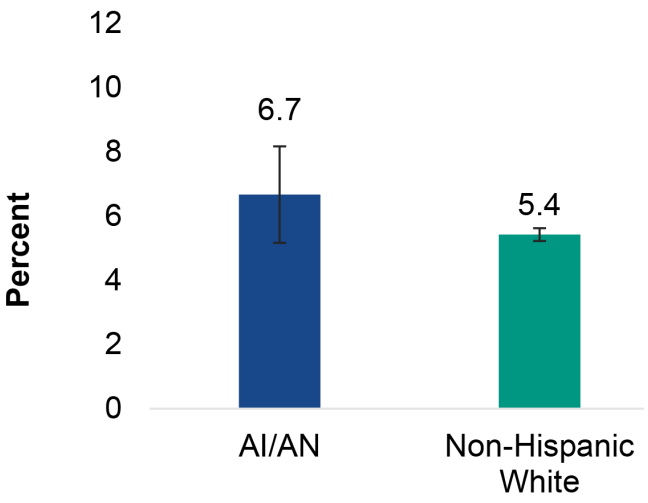
Among adults living in urban areas, 6.7% of AI/ANs experienced unmet needs for mental health services, compared to 5.4% of NHWs; however, this was not a significant difference (Figure 57). While past research has found unmet need for mental health services to be significantly higher for AI/ANs than for NHWs, that study focused only on those with one or more mental health symptoms and those with a serious mental health illness.[48]

Adult Depressive Episodes

Among adults living in urban areas, the proportion experiencing a Major Depressive Episode (MDE) in the past year was similar for both AI/ANs and NHWs (Figure 58). Similar to the previous indicator in this report, the importance of cultural sensitivity should be evaluated when thinking about how mental health screening tools are used with AI/ANs and how mental health issues may be expressed or viewed differently within a Native context.[49, 50, 51]

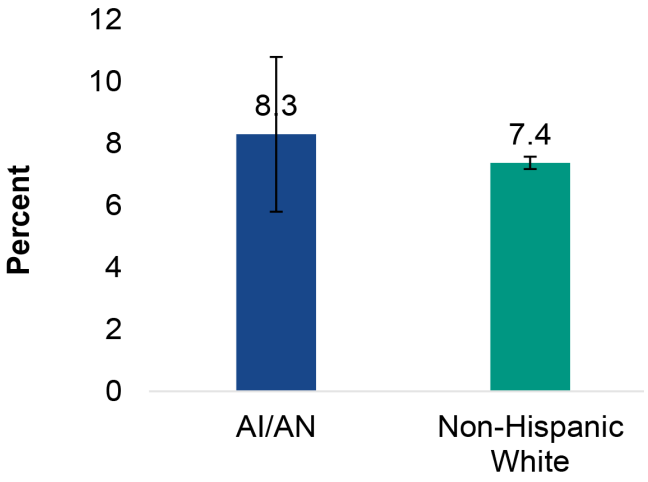
This does not mean AI/ANs cannot be identified with DSM-defined mental disorders, but it may mean that the classic symptoms for a clinical diagnosis may not be met with some AI/ANs, and other symptoms may need to be considered, such as those related to spirituality.[49, 51]

Figure 57. Adults with Unmet Needs for Mental Health Services in the Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Figure 58. Adults Experiencing a Major Depressive Episode (MDE) in the Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

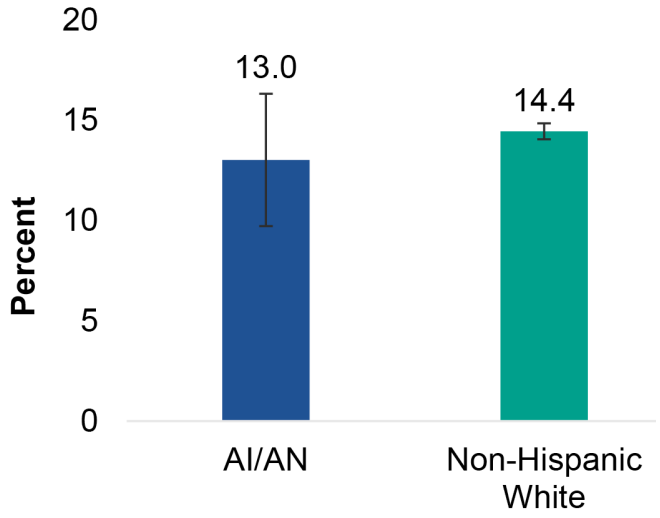
Youth Mental Health

Adolescent Specialty Mental Health Services

NSDUH defined specialty mental health services as staying overnight in a hospital, staying in a residential treatment facility, spending time in a day treatment facility, and receiving treatment from a mental health clinic, from a private therapist, or from an in-home therapist. These services were also used to address behavioral or emotional problems that were not caused by alcohol or drugs.

Among adolescents living in urban areas, the proportion of individuals who reported receiving specialty mental health services was slightly lower for AI/ANs, compared to NHWs, at 13.0% and 14.4% respectively; however, this was a non-significant difference (Figure 59). This finding is similar to past research that also found White youth to have slightly higher rates of professional mental health care service use, compared to AI/AN youth.[52]

Figure 59. Adolescents that Received Specialty Mental Health Services in the Past Year, Urban Areas, 2009-2014



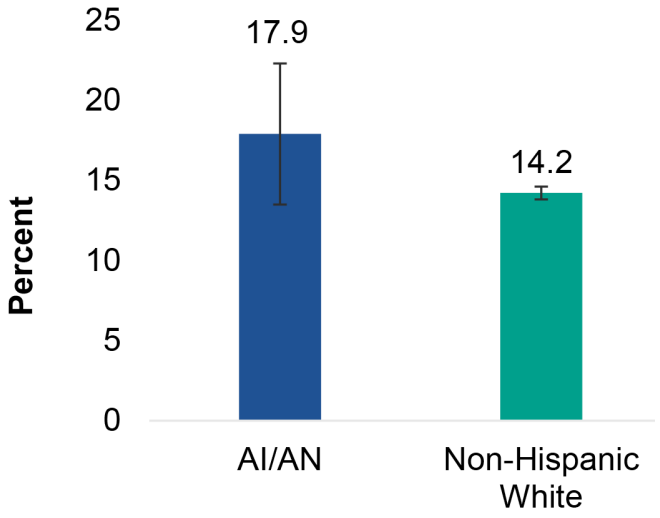
Source: National Survey of Drug Use and Health, 2009-2014

Non-Specialty Mental Health

NSDUH included the following treatments in the non-specialty mental health services category: school social worker, school psychologist, or school counselor; special school or program within a regular school for students with emotional or behavioral problems; pediatrician or other family doctor; juvenile detention center, prison, or jail; and foster care or therapeutic foster care. These services were also used to address behavioral or emotional problems that were not caused by alcohol or drugs.

Among adolescents living in urban areas, 17.9% of AI/ANs reported receiving non-specialty mental health services in the past year, compared to 14.2% of NHWs; however; this was a non-significant difference (Figure 60). Similar to this finding, previous research has also found rates of service use to be higher among AI/AN youth than White youth when those services are offered through the juvenile justice system or primary care; however, when offered through the school system, White youth were found to have a higher rate of service use.[52]

Figure 60. Adolescents that Received Non-Specialty Mental Health Services in the Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

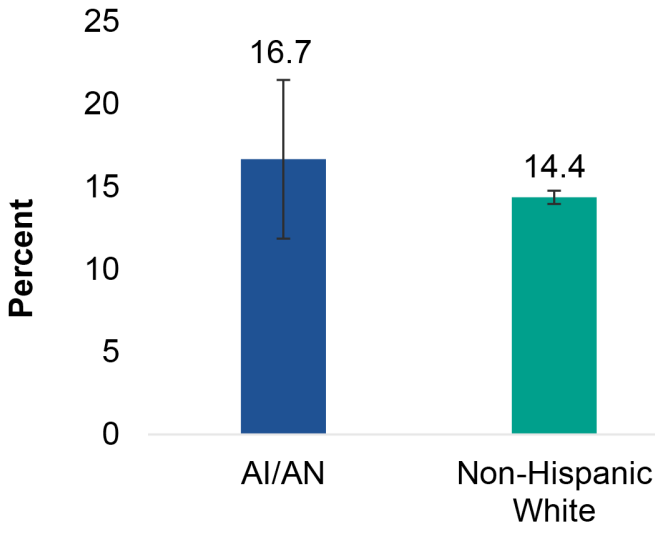
Lifetime Major Depressive Episodes

Although a lack of research exists on AI/AN adolescents and mental health problems, some evidence has been found that shows a higher prevalence of severe emotional distress among AI/ANs compared to their White counterparts.[53, 54] NSDUH defined an adolescent as having a major depressive episode (MDE) if at least five out of nine set criteria were met. More information regarding these criteria can be found on page 6 of this report. Among adolescents living in urban areas, 16.7% of AI/ANs were classified as having had a major depressive episode in their lifetime, compared to 14.4% of NHW; however, this was a non-significant difference (Figure 61).

Past Year Adolescent Depressive Episode

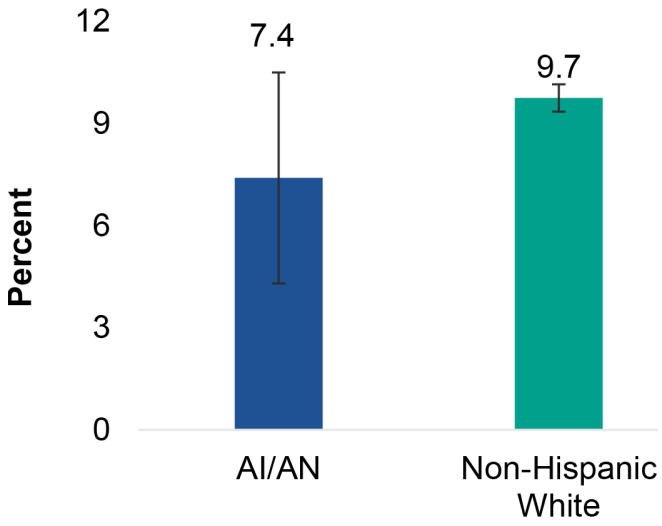
Among adolescents living in urban areas, a slightly lower proportion of AI/ANs had a MDE in the past year, compared to NHWs, at 7.4% and 9.7% respectively (Figure 62). Although this finding was a non-significant difference, it may suggest that AI/AN youth are experiencing MDEs earlier in their lifetime, compared to White youth. Future research is needed to investigate these findings.

Figure 61. Adolescents Having a Major Depressive Episode (MDE) in their Lifetime, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

Figure 62. Adolescents Experiencing a Major Depressive Episode (MDE) in the Past Year, Urban Areas, 2009-2014



Source: National Survey of Drug Use and Health, 2009-2014

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APPENDIX

UIHP SERVICE AREAS

First Nations Community Health Source
Albuquerque, New Mexico
Bernalillo County, New Mexico
Sandoval County, New Mexico

Bakersfield American Indian Health Project
Bakersfield, California
Kern County, California

Indian Health Board of Billings
Billings, Montana
Big Horn County, Montana
Yellowstone County, Montana

Native American Lifelines of Boston
Boston, Massachusetts
Essex County, Massachusetts
Middlesex County, Massachusetts
Norfolk County, Massachusetts
Plymouth County, Massachusetts
Suffolk County, Massachusetts

North American Indian Alliance
Butte, Montana
Silver Bow County, Montana

American Indian Health Services of Chicago
Chicago, Illinois
Cook County, Illinois

Urban Inter-Tribal Center of Texas
Dallas, Texas
Collin County, Texas
Dallas County, Texas
Denton County, Texas
Ellis County, Texas
Hood County, Texas
Johnson County, Texas
Kaufman County, Texas
Parker County, Texas
Rockwall County, Texas
Tarrant County, Texas
Wise County, Texas

Denver Indian Health and Family Services
Denver, Colorado
Adams County, Colorado
Arapahoe County, Colorado
Boulder County, Colorado
Broomfield County, Colorado
Denver County, Colorado
Douglas County, Colorado
Gilpin County, Colorado
Jefferson County, Colorado

American Indian Health and Family Services
Detroit, Michigan
Livingston County, Michigan
Macomb County, Michigan
Monroe County, Michigan
Oakland County, Michigan
St. Clair County, Michigan
Washtenaw County, Michigan
Wayne County, Michigan

Native Americans for Community Action
Flagstaff, Arizona
Coconino County, Arizona

Fresno American Indian Health Project
Fresno, California
Fresno County, California
Madera County, California
Tulare County, California

Indian Family Health Clinic
Great Falls, Montana
Cascade County, Montana

Helena Indian Alliance
Helena, Montana
Broadwater County, Montana
Jefferson County, Montana
Lewis and Clark County, Montana

Nebraska Urban Indian Health Coalition
Lincoln, Nebraska
Woodbury County, Iowa
Douglas County, Nebraska
Lancaster County, Nebraska
Sarpy County, Nebraska
Washington County, Nebraska

United American Indian Involvement, Inc.
Los Angeles, California
Los Angeles County, California

Gerald L. Ignace Indian Health Center, Inc.
Milwaukee, Wisconsin
Milwaukee County, Wisconsin
Waukesha County, Wisconsin

Indian Health Board of Minneapolis
Minneapolis, Minnesota
Hennepin County, Minnesota
Ramsey County, Minnesota

Missoula Urban Indian Health Center
Missoula, Montana
Missoula County, Montana

American Indian Community House
New York, New York
Bronx County, New York
Kings County, New York
New York County, New York
Queens County, New York
Richmond County, New York

Native American Health Center
Oakland, California
Alameda County, California
Contra Costa County, California
Marin County, California
San Francisco County, California
San Mateo County, California

NATIVE HEALTH
Phoenix, Arizona
Maricopa County, Arizona

South Dakota Urban Indian Health, Inc.
Pierre, South Dakota
Brown County, South Dakota
Hughes County, South Dakota
Minnehaha County, South Dakota
Stanley County, South Dakota

Native American Rehabilitation Association of the Northwest (NARA-NW)
Portland, Oregon
Clackamas County, Oregon
Multnomah County, Oregon
Washington County, Oregon
Clark County, Washington

Nevada Urban Indians, Inc.
Reno, Nevada
Churchill County, Nevada
Douglas County, Nevada
Storey County, Nevada
Washoe County, Nevada
Carson City, Nevada

Sacramento Native American Health Center
Sacramento, California
Sacramento County, California

Urban Indian Center of Salt Lake
Salt Lake City, Utah
Davis County, Utah
Salt Lake County, Utah
Tooele County, Utah
Utah County, Utah
Weber County, Utah

San Diego American Indian Health Center
San Diego, California
San Diego County, California

Indian Health Center of Santa Clara Valley
San Jose, California
Santa Clara County, California

American Indian Health & Services
Santa Barbara, California
San Luis Obispo County, California
Santa Barbara County, California
Ventura County, California

Seattle Indian Health Board
Seattle, Washington
King County, Washington

NATIVE Project
Spokane, Washington
Spokane County, Washington

Tucson Indian Center
Tucson, Arizona
Pima County, Arizona

The Hunter Health Clinic
Wichita, Kansas
Butler County, Kansas
Reno County, Kansas
Sedgwick County, Kansas
Sumner County, Kansas

NOTES

NOTES

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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A Division of the Seattle Indian Health Board

Urban Indian Health Institute

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