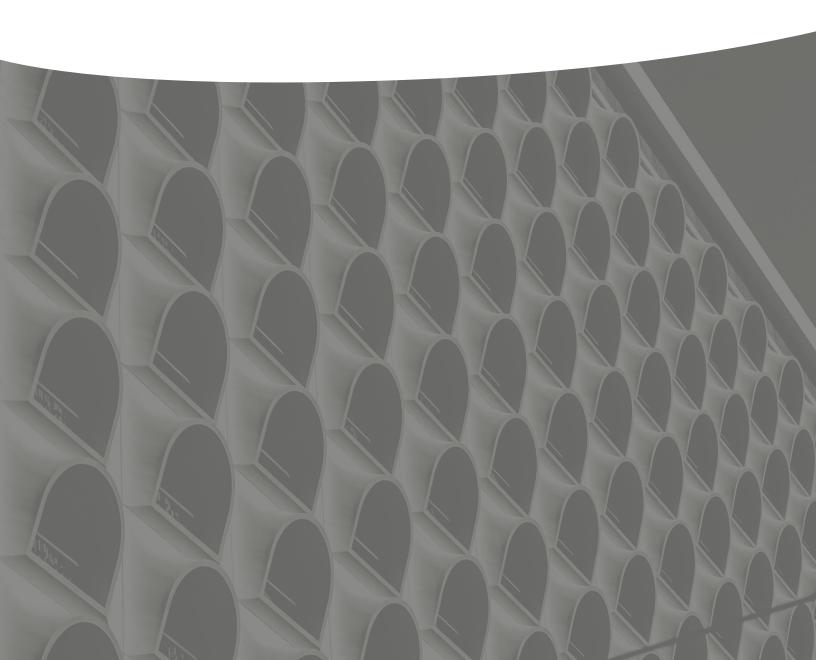
# **Community Health Profile**

Individual Site Report | Los Angeles UIHP Service Area August 2017





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







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

#### Recommended Citation:

Urban Indian Health Institute, Seattle Indian Health Board. (2017). *Community Health Profile: Individual Site Report, Los Angeles Urban Indian Health Program Service Area*. Seattle, WA: Urban Indian Health Institute.

# TABLE OF CONTENTS

- 2 Urban Indian Health Programs
- 3 Introduction and Purpose
- 4 Methodology
- 6 Data Sources
- 8 Sociodemographics
- 15 Mortality
- 21 Maternal and Child Health
- 30 References
- 32 Appendix

#### **Acknowledgements**

Funding for this report was provided by the Indian Health Service Division of Epidemiology and Disease Prevention. The report contents are solely the responsibility of the authors and do not necessarily represent the official views of the Indian Health Service. Additionally, UIHI would like to acknowledge the contributions of Francesca Murnan, MPA, Katherine Ly, BA and Alexa Fay for their help in the production and review of this report.

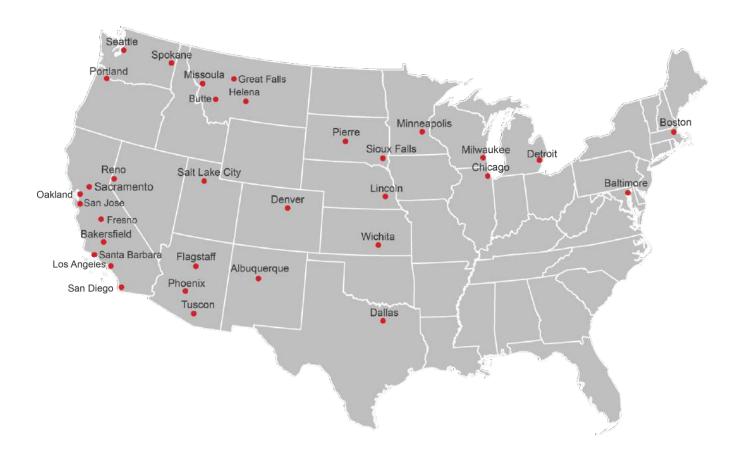
The Urban Indian Health Institute would like to thank the staff at the Urban Indian Health Programs, social service and faith based agencies for the excellent work they do daily on behalf of their communities.

### URBAN INDIAN HEALTH PROGRAMS

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

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

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



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

### 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 Urban American Indian Involvement (UAII), which is one of the 32 Subchapter IV UIHPs across the country. The counties analyzed in this report are defined as Los Angeles County by IHS. This report will refer to the service area both as Los Angeles County and the Los Angeles service area interchangeably. 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 data used is from national data sources and in no way, uses patient data from UAII. The profile examines and addresses the disparities that exist among the urban AI/AN population compared to the non-Hispanic White (NHW) population and demonstrates the disproportionality in outcomes and risk factors that adversely affect them. Data for this profile comes from the U.S. Census, the American Community Survey, and the U.S. Center for Health Statistics.

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

#### **Purpose**

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

#### **Program Planning**

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

#### **Grant Writing**

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

#### Identifying Gaps in Data

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

### **METHODOLOGY**

#### Methods

#### **Analysis**

The data for this report only includes information from Los Angeles County residents. For each indicator, prevalence or incidence was calculated for the Al/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 twoto five-year time period in order to have sufficient data to provide stable estimates and protect individual privacy. In some instances, confidence intervals were calculated and used to show differences in outcomes for specific indicators displayed in bar graphs. Confidence intervals are ranges of numbers used to assess the accuracy of a point estimate and measure the variability in the data. The point estimate may be a rate, such as a death rate or an infectious disease rate, or a frequency, such as the percent of individuals living in poverty or the percent of adults experiencing unemployment.

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

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

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

#### Indicator Selection

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

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

**Data Limitations** 

### **METHODOLOGY**

The contents of this report are specific to national surveillance data for Los Angeles County only.

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

Another factor affecting and limiting the analysis of data, are errors in racial misclassification, particularly for demographic and mortality data. Racial misclassification is defined as incorrect coding of an individual's race or ethnicity in public records.<sup>4</sup> This can greatly underestimate the true rate of disease, risk factor, or outcome. Al/ANs are especially likely to experience problems of incorrect classification on death certificates;

therefore, true mortality rates among Al/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 Al/ANs was underestimated by 9.7%.<sup>5</sup> The bias created by misclassification varies by age, proximity to a reservation, and cause-of-death.<sup>6</sup> Based on documented racial misclassification of Al/ANs in surveillance data, any of the health disparities presented in this community health profile are assumed to be larger than reported.

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

### **DATA SOURCES**

#### **Data Sources**

#### 2010 U.S. Census

The U.S. Census takes place every 10 years and provides official population counts for individuals living in the United States and provides information by age, race, Hispanic origin, and sex. In 2010, the U.S. Census allowed individuals to self-report belonging to more than one race group. When determining a population count, this report considers people to be of Al/AN race if they report Al/AN as their only race or if they report being Al/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 Al/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 Al/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: <a href="https://www.census.gov/acs">www.census.gov/acs</a>.

#### 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, Al/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, the mother's risk factors,

# **DATA SOURCES**

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.html.

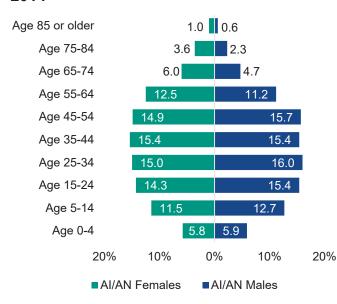
#### Introduction

The health of individuals and populations is greatly influenced by social determinants – the conditions in which people live, learn, work, and play.<sup>8,9</sup> Evidence from decades of research on the relationship between key social determinants and health outcomes overwhelmingly suggests that greater social disadvantage leads to poorer health.<sup>10</sup> These determinants, including race, lack of access to education or employment, poverty, and housing, among other things, produce extensive inequities within and between populations.<sup>8,9</sup> This section presents data on measures of demographics and social determinants of health to illustrate differences between urban Al/ANs and NHWs that may contribute to overall health inequities between these populations.

#### Age and Gender

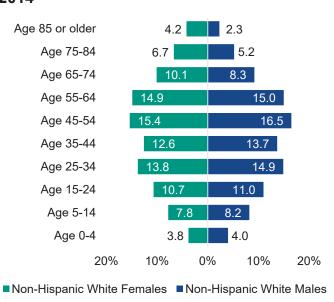
Relative to the NHW population, the Al/AN population in Los Angeles county was younger (Figure 1 and Figure 2). In Los Angeles county, 32.8% of Al/ANs were under the age of 25 years, compared with 22.8% of NHWs. In contrast, 9.1% of Al/ANs were over the age of 65 years, compared with 18.8% of NHWs.

Figure 1. Al/AN Population by Age and Gender, Los Angeles Service Area, 2010-2014



Source: American Community Survey, 2010-2014

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



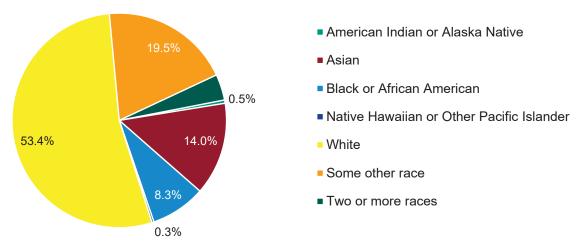
Source: American Community Survey, 2010-2014

Page 8 | 2017 UIHP Community Health Profile

#### Race

As shown in Figure 3, an estimated 54,409 (0.5%) individuals identified as AI/AN alone in Los Angeles county, and an estimated 152,571 (1.5%) individuals identified as AI/AN alone or in combination with one or more races (data not shown). Those who identified as White alone comprised the largest proportion (53.4%) of the total population (2,711,665) in Los Angeles county. Approximately 20% of individuals were identified as some other race. In addition, Asians alone were the second largest population identified in Los Angeles county, consisting of 1,396,388 individuals or 14.0% of the total population.

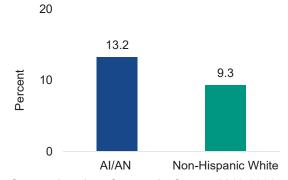
Figure 3. Population by Race, Los Angeles Service Area, 2010-2014



Source: American Community Survey, 2010-2014 Employment

Extensive evidence has shown that unemployment has a negative effect on health.<sup>11</sup> Unemployed individuals may experience financial insecurity and reduction in social status, social relations, and selfesteem.<sup>12</sup> In addition, unemployed individuals are also more likely to lack health insurance coverage.<sup>13</sup> In Los Angeles county, Al/ANs aged 16 and older experienced unemployment 1.4 times more often than NHWs (13.2% vs. 9.3%; Figure 4). These proportions do not include individuals in the military or individuals who are institutionalized.

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

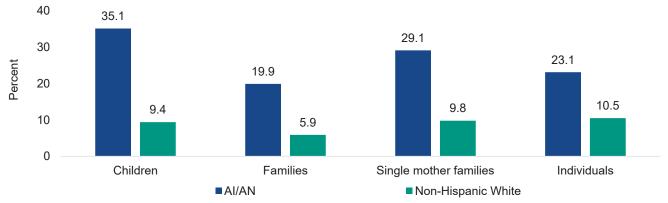


#### **Poverty**

Poverty and health are inextricably connected.<sup>14</sup> Poverty may lead to poor health outcomes by limiting access to healthy foods, quality housing, safe neighborhoods, and adequate health care, among other things. Poverty can also impact many aspects of a child's health and well-being. Children in poverty have lower academic achievement and higher rates of high school dropout, accidents, injuries, and food insecurity compared with their more affluent peers. Living in poverty as a child likely affects health throughout a person's lifespan.<sup>15</sup> 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).<sup>16</sup>

In Los Angeles county, nearly a quarter of Al/AN individuals lived in poverty (23.1%; Figure 5), compared to just one tenth for NHWs (10.5%). Approximately one in three Al/AN children aged 17 and under (35.1%) in Los Angeles county lived in households with an income below the federal poverty level. This proportion is 3.7 times that of children living in poverty among the NHW population (9.4%). In addition, nearly one in five Al/AN families in Los Angeles county (19.9%) lived in households with an income below the federal poverty level; 3.4 times the proportion relative to NHWs (5.9%). Finally, among those families in households headed by single mothers, one in three Al/ANs lived in poverty (29.1%), 3.0 times the proportion of NHWs (9.8%).

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



Source: American Community Survey, 2010-2014

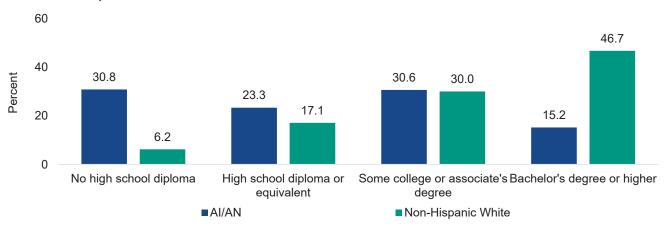
Data note: Federal poverty thresholds are used to determine poverty status. The thresholds are based on family size and the ages of family members. Federal poverty thresholds are not intended as a comprehensive description of families' needs, but rather as a statistical indicator that can be tracked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



#### **Educational Attainment**

The relationship between education and health, or the "health-education gradient," is well documented. The Significant disparities in life expectancy by level of education are found among all demographic groups and are arguably increasing over time. In Los Angeles County, a higher percentage of Al/ANs aged 25 and older had not completed high school or passed the General Educational Development (GED) exam (30.8%; Figure 6) compared with the NHW population (6.2%). A significantly lower percentage of Al/ANs (15.2%) reported an undergraduate or graduate degree as their highest level of education compared with the NHW population (46.7%).

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

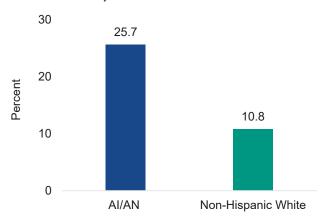




#### Health Insurance Coverage

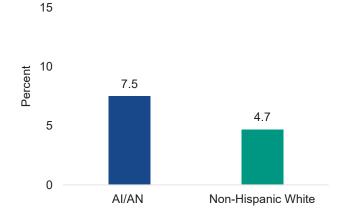
Compared to those with health insurance coverage, those without health insurance coverage have higher mortality rates. <sup>19</sup> Individuals without health insurance are also less likely to receive care and take longer to return to health after an unintentional injury or the onset of a chronic disease compared to those with health insurance. <sup>20</sup> In Los Angeles county, one in four Al/ANs under age 65 (25.7%) reported having no health insurance, 2.4 times the proportion of NHWs (10.8%; Figure 7). The proportion of uninsured Al/AN children under the age of 18 in Los Angeles county is 1.6 times higher than the that of NHW children (7.5% vs. 4.7%, Figure 8).

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



Source: American Community Survey, 2010-2014

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



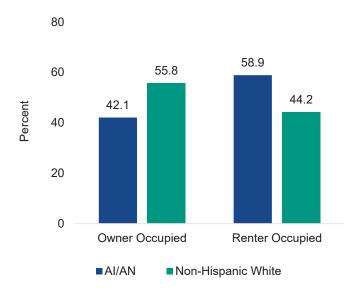


#### Housing

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, increased coronary heart disease, and more risk factors, such as smoking.<sup>21</sup>

In Los Angeles County, the proportion of renter occupation among Al/ANs was 33.3% higher than NHWs (58.9% vs. 44.2%, Figure 9). Over half of all homes of Al/ANs were renter occupied, compared with approximately 40% of homes for NHWs. In contrast, the proportion of home ownership among NHWs in Los Angeles County was approximately 1.3 times higher than among Al/ANs (55.8% vs. 42.1%). Less than half of all homes of Al/ANs were owner occupied, compared with over 50% of homes for NHWs.

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



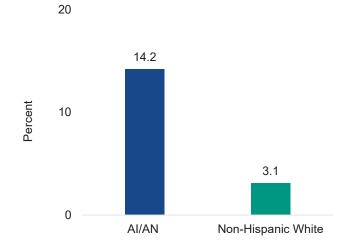


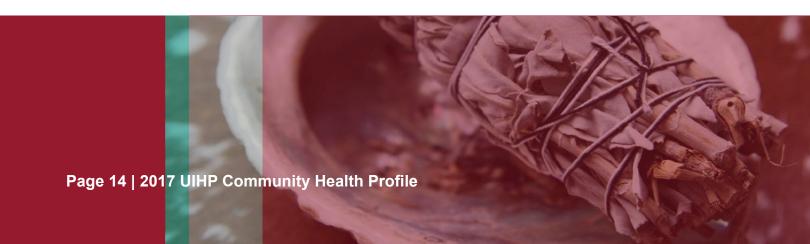
#### Food Stamps

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.<sup>22</sup> Households with an income below 130% of the federal poverty level are eligible to receive SNAP benefits. According to a study done by the U.S. Department of Agriculture, which administers the SNAP program, 55% of households receiving SNAP benefits remained food insecure after receiving SNAP.<sup>23</sup> Moreover, children in households that receive SNAP benefits are significantly more likely to suffer from an array of health problems than those in households that do not receive SNAP.22

In Los Angeles County, one seventh of AI/AN households received SNAP benefits in the past year (Figure 10). The proportion of SNAP participation among AI/ANs in these areas was 4.6 times higher than the proportion among NHW.

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





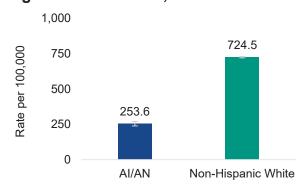
#### Introduction

Mortality data provides an indication of a community's or population's health and socioeconomic development status. Mortality data are also a key component in understanding population size, future growth, and change. Examining mortality data is one way to measure the burden of disease in a community or population. Tracking death rates may identify groups that are at an increased risk for premature death and may identify specific diagnoses resulting in death that are more prevalent in certain populations. In addition, high mortality rates may indicate an issue with environmental factors, communicable diseases, risk factors, and/or socioeconomic factors. This section examines ageadjusted 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 Al/AN populations. <sup>24</sup> True mortality rates among Al/ANs in Los Angeles county are assumed to be higher than the rates described for this section.

#### All-Cause Mortality Rate

The all-cause mortality rate was 65.0% lower for the Al/AN population than for the NHWs (Figure 11).

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

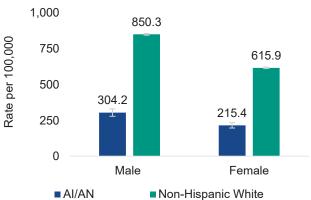


Source: US Center for Health Statistics, Death Certificates, 2010-2014

#### Mortality Rate by Gender

The mortality rates for both males and females were lower among Al/ANs compared to their NHW counterparts (Figure 12), 64.2% and 65.0% respectively. In addition, the mortality rate for Al/AN women was 29.2% lower than Al/AN men

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



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



#### Suicide

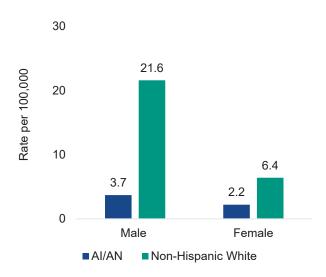
The suicide rate was higher by 4.6 times among NHWs compared to Al/ANs (Figure 13). In addition, the suicide rate by gender was significantly higher for both NHW men and women compared to Al/AN men and women at 5.8 and 2.9 times higher respectively (Figure 14). When comparing rates of suicide among Al/ANs, the rate was 1.7 times higher for males compared to females.

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

20 13.9 10 3.0 Al/AN Non-Hispanic White

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

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

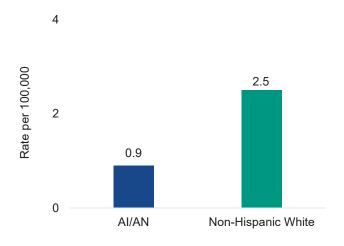


Source: US Center for Health Statistics, Death Certificates, 2010-2014

#### Homicide

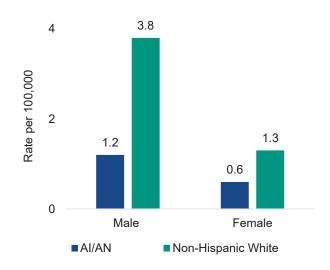
Homicides rates were 2.8 times higher for the NHW population compared to the Al/AN population (Figure 15). True disparities in homicide rates become apparent when looking at homicide by gender. Homicides for Al/AN males were 1.2 per 100,000 (Figure 16). The rate for homicides was 3.2 times higher for NHW males compared to Al/AN males, and 2.2 times higher for NHW females compared to Al/AN females. Among Al/ANs, the rate was 2 times higher among men compared to women.

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



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

Figure 16. Homicide Rate by Gender, Los Angeles Service Area, 2010-2014



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



#### **Top Causes of Mortality**

Table 1. Overall Top Causes of Mortality, Los Angeles Service Area, 2010-2014

AI/AN			NHW		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	362.0	1	Vascular disease	576.3
2	Cancer	112.1	2	Cancer	374.1
3	Chronic lower respiratory disease	33.2	3	Chronic lower respiratory disease	95.7
4	Diabetes	25.1	4	Alzheimer's disease	86.7
5	Flu and pneumonia	20.2	5	Flu and pneumonia	56.9

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

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

Table 2. Top Male Causes of Mortality, Los Angeles Service Area, 2010-2014

AI/AN Males			NHW Males		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	117.9	1	Vascular disease	310
2	Cancer	60.6	2	Cancer	207.5
3	Chronic lower respiratory disease	20.3	3	Chronic lower respiratory disease	47.6
4	Diabetes	16.8	4	Alzheimer's disease	29.2
5	Chronic liver disease and cirrhosis	12.6	5	Flu and pneumonia	27.5

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

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



Table 3. Top Female Causes of Mortality, Los Angeles Service Area, 2010-2014

AI/AN Female			NHW Females		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Vascular disease	81.0	1	Vascular disease	207.5
2	Cancer	42.5	2	Cancer	161.8
3	Diabetes	10.9	3	Chronic lower respiratory disease	42.8
4	Alzheimer's disease	10.5	4	Alzheimer's disease	35.9
5	Chronic lower respiratory disease	9.7	5	Flu and pneumonia	20.4

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

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

#### **Cancer Mortality**

Table 4. Overall Top Causes of Cancer Mortality, Los Angeles Service Area, 2010-2014

Al/AN			NHW		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	26.6	1	Tracheal/Bronchus/ Lung cancer	75.2
2	Colon cancer	8.0	2	Colon cancer	31.9
3	Breast cancer	7.6	3	Breast cancer	27.9
4	Pancreatic cancer	6.4	4	Pancreatic cancer	25.7
5	Bladder cancer	4.5	5	Cervical Cancer	18.5

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

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



Table 5. Top Male Causes of Cancer Mortality, Los Angeles Service Area, 2010-2014

AI/AN Males			NHW Males		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	16.5	1	Tracheal/Bronchus/ Lung cancer	46.5
2	Colon cancer	5.2	2	Prostate cancer	21.5
3	Prostate cancer	5.1	3	Colon cancer	18.1
4	Pancreatic cancer	5.0	4	Bladder cancer	15.0
5	Bladder cancer	3.2	5	Pancreatic cancer	14.6

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

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

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

Al/AN Females			NHW Females		
Rank	Cause	Rate (per 100,000)	Rank	Cause	Rate (per 100,000)
1	Tracheal/Bronchus/ Lung cancer	9.2	1	Tracheal/Bronchus/ Lung cancer	35.5
2	Breast cancer	6.1	2	Breast cancer	28.3
3	Cervical cancer	3.7	3	Cervical cancer	17.3
4	Colon cancer	3.6	4	Colon cancer	14.1
5	Pancreatic cancer	2.2	5	Pancreatic cancer	11.1

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

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

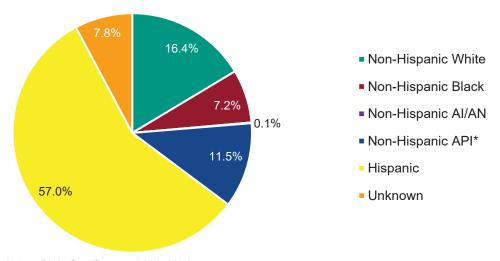
#### Introduction

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 UAII make decisions regarding programs that impact pregnant mothers, newborns and infants. This section of the community health profile focuses on key indicators for MCH. The data can be used to further examine why these disparities exist and look into programs to eliminate these health disparities.

#### **Total Births**

From 2008 to 2012, there were a total of 713,627 million births in Los Angeles County. Among those births, 0.1% were identified as non-Hispanic Al/AN alone (Figure 17). The largest proportions of births among racial/ethnic group were from Hispanic (57.0%) and NHW (16.4%) women. Non-Hispanic Asians and Pacific Islanders were approximately 11.5% and Non-Hispanic Blacks were approximately 7.2% of all births. The proportion of births that were unidentified by race, or unknown was 7.8%.

Figure 17. Births by Race/Ethnicity, Los Angeles Service Area, 2008-2012



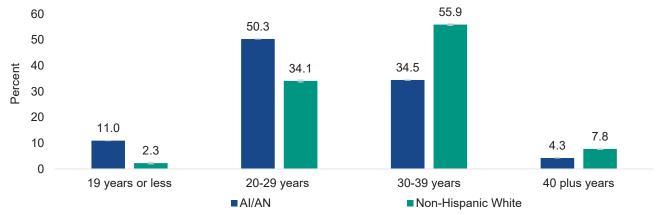
Source: National Vital Statistics, Birth Certificates, 2008-2012

<sup>\*</sup>API-Asian/Pacific Islander

#### Age

In general, Al/AN women tend to give birth at younger ages than their NHW counterparts (Figure 18). 11.0% of births among Al/AN women in Los Angeles county were to teenage women (less than 19 years of age) compared to 2.3% of NHW births. The proportion of Al/AN teenagers who gave birth was 4.8 times higher compared with teen age NHW. In addition, approximately 50.3% of all births among Al/AN women were to women in their 20s, compared to 34.1% among NHWs. Conversely, NHW women had higher rates of childbirth in their 30s and 40s compared to Al/AN women. Approximately 55.9% of all births among NHW women were to women in their 30s, whereas 34.5% births among Al/AN were to women in their 30s.

Figure 18. Births by Maternal Age Group, Los Angeles Service Area, 2008-2012

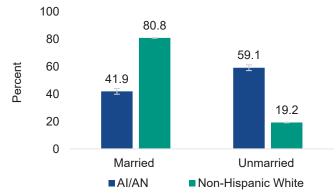


Source: National Vital Statistics, Birth Certificates, 2008-2012

#### **Marital Status**

Approximately 60% of all births to Al/ANs in Los Angeles county were to women who were unmarried and approximately 40% were to women who were married (Figure 19). This was significantly different compared to NHWs in which nearly 80% of births were to married mothers and approximately 20% were unmarried mothers. The proportion of Al/AN women who gave birth unmarried was 3.1 times higher than unmarried NHW mothers.

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

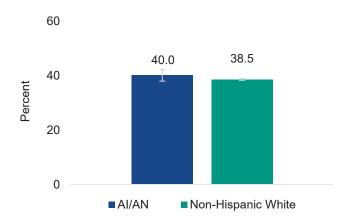


Source: National Vital Statistics, Birth Certificates, 2008-2012

#### Cesarean Section

In Los Angeles county, approximately two fifths of births were delivered by cesarean section among NHW females. This was similar to the proportion of deliveries by cesarean section among AI/AN births (40.0%, Figure 20).

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

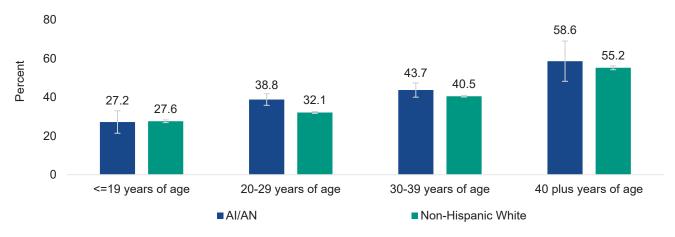


Source: National Vital Statistics, Birth Certificates 2008-2012

#### Cesarean Section by Maternal Age

The proportion of cesarean deliveries increased as maternal age increased for both AI/AN and NHW women (Figure 21). AI/AN women in their 40s had significantly higher proportions of births via cesarean section (58.6%) compared to other age groups.

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

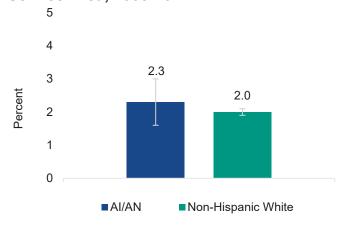


Source: National Vital Statistics. Birth Certificates. 2008-2012

#### **Maternal Smoking**

In Los Angeles County, 2.3% of Al/AN women smoked while pregnant, compared to 2.0% NHW women (Figure 22). The rate of maternal smoking was similar between NHWs and Al/AN women.

# Figure 22. Maternal Smoking, Los Angeles Service Area, 2008-2012

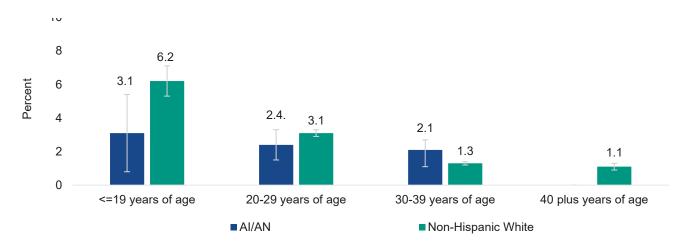


Source: National Vital Statistics, Birth Certificates, 2008-2012

#### Smoking by Maternal Age

Maternal smoking decreased as maternal age increased for NHW women; however, the proportion of maternal smoking remained consistent across maternal age for Al/AN women (Figure 23).

Figure 23. Maternal Smoking by Age Group, Los Angeles Service Area, 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.<sup>25</sup>

Among pregnant women in the Los Angeles county, 72.8% of Al/AN women began prenatal care in the first trimester compared to 84.6% of NHW women, a significant difference (Figure 24). The proportion of NHW women beginning prenatal care in the first trimester was 16.2% higher than Al/AN women. In addition, approximately 10.4% of Al/AN pregnant women began prenatal care in the third trimester or did not receive any prenatal care during their pregnancy compared to approximately 7.4% of NHW pregnant women. The proportion of Al/AN women beginning prenatal care in the third trimester or not receiving any prenatal care during their pregnancy was 1.4 times the proportion of NHW women enrolling in prenatal care.

100 84.6 72.8 80 60 40 16.8 20 8.0 6.7 6.0 3.7 1.4 0 Third trimester First trimester Second trimester No prenatal care AI/AN ■ Non-Hispanic White

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

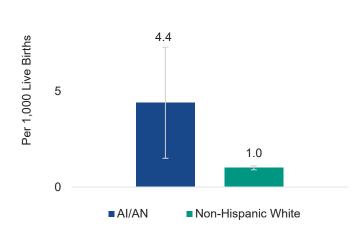
Source: National Vital Statistics, Birth Certificates, 2008-2012

#### **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.<sup>26</sup> Two thirds of infant deaths occur in the first month after birth and are primarily due to health problems of the infant or the pregnancy, such as preterm delivery or birth defects. Infant deaths occurring after the first month are influenced greatly by social or environmental factors, such as exposure to cigarette smoke or problems with access to health care.26

The infant mortality for Al/ANs in Los Angeles county was 43.8 per 1,000 live births (Figure 25). This was significantly higher than the infant mortality rate for NHWs (9.6 per 1,000 live births). Al/AN infants had 4.6 times higher rates of mortality within their first year of life, compared to NHW infants.

#### Figure 25. Infant Mortality Rate, Los Angeles Service Area, 2008-2012



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

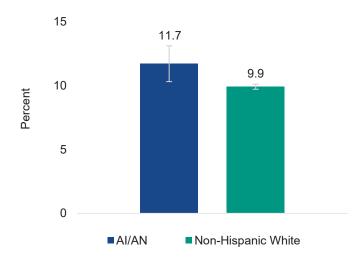


#### **Premature Births**

A premature birth is defined as childbirth occurring earlier than 37 completed weeks of pregnancy.<sup>27</sup> In Los Angeles County, approximately 10% of all infants born to NHW women were born prematurely, which is lower than all infants born prematurely to AI/AN women (11.7% Figure 26). AI/AN pregnant women had 18.2% higher proportions of premature birth when compared to NHW women.

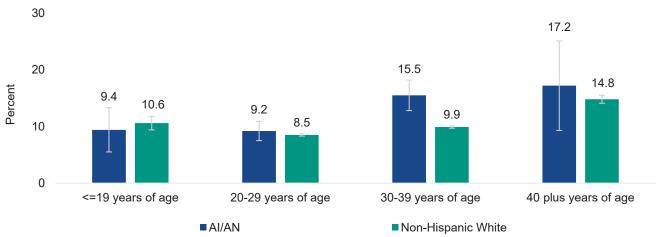
Patterns of premature births were similar for both NHW and Al/AN pregnant woman by age stratification (Figure 27). A significant difference was the proportion of Al/AN women in their 30s giving birth prematurely compared to NHW women in their 30s (15.5% vs. 9.9%).

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



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

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

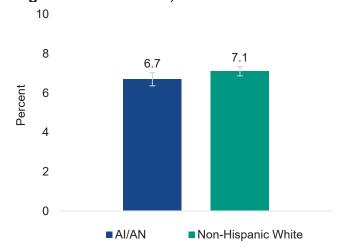


Source: National Vital Statistics, Birth Certificates 2008-2012

#### Low Birth Weight

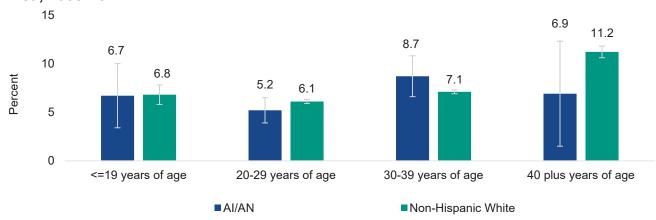
Low birth weight is defined as less than 2,500 grams (5.5 pounds).<sup>28</sup> In Los Angeles County, approximately 6.7% of all births born to Al/AN women were low birth weight, which is similar to all infants born to NHW women who were low birth weight (7.1% Figure 28). Among Al/AN it is notable that women in their 30s gave birth to the highest proportion of low birthweight infants; unlike NHW women who had the highest proportion of low birth weight births after 40 years of age (Figure 29).

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

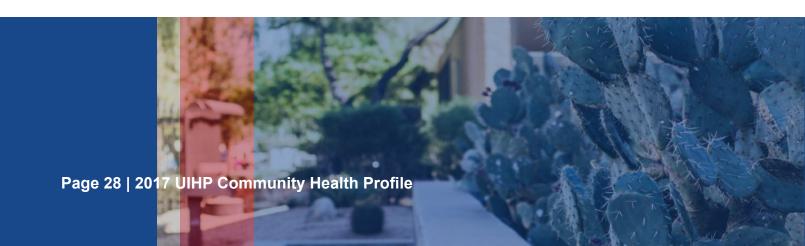


Source: National Vital Statistics, Birth Certificates, 2008-2012

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



Source: National Vital Statistics, Birth Certificates 2008-2012

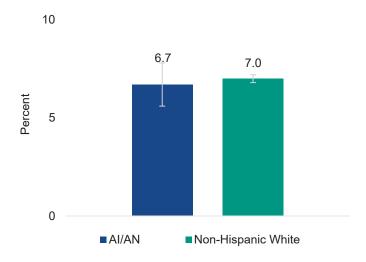


#### **Neonatal Intensive Care Unit Admission**

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.<sup>29</sup>

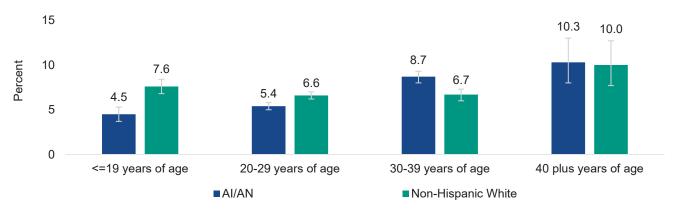
Admission to the NICU for newborns in Los Angeles county was similar among Al/AN newborns and NHW newborns (Figure 30). 6.7% of Al/AN newborns were admitted to the NICU compared to 7.0% of NHW newborns. The number of newborns admitted to the NICU increased with maternal age for Al/ANs and NHWs; however, this increase was more pronounced for Al/AN newborns (Figure 31).

Figure 30. Newborns Admitted to the NICU, Los Angeles Service Area, 2008-2012



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

Figure 31. Newborns Admitted to the NICU by Maternal Age group, Los Angeles Service Area, 2008-2012



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

### REFERENCES

- 1. U.S. Census Bureau. U.S. Census. https://www.census.gov/. Published 2012.
- 2. Centers for Disease Control and Prevention (CDC). Community Health Assessment for Population Health Improvement: Resource of Most Frequently Recommended Health Outcomes and Determinants. Atlanta, GA; 2013.
- 3. Hoopes MJ, Taualii M, Weiser TM, Brucker R, Becker TM. Including self-reported race to improve cancer surveillance data for American Indians and Alaska Natives in Washington state. *J Registry Manag*. 2010;37(2):43-48. http://www.ncbi.nlm.nih.gov/pubmed/21086821. Accessed July 24, 2017.
- 4. Campbell ME, Troyer L. The Implications of Racial Misclassification by Observers. *Am Sociol Rev.* 2007;72(5):750-765. doi:10.1177/000312240707200505.
- 5. U.S. Census Bureau. What is the census? https://www.census.gov/2010census/about/.
- 6. Arias E, Schauman WS, Eschbach K, Sorlie PD, Backlund E. The validity of race and Hispanic origin reporting on death certificates in the United States. *Vital Health Stat* 2. 2008;(148):1-23. http://www.ncbi.nlm.nih.gov/pubmed/19024798. Accessed July 24, 2017.
- 7. Chae DH, Walters KL. Racial discrimination and racial identity attitudes in relation to self-rated health and physical pain and impairment among two-spirit American Indians/Alaska Natives. *Am J Public Health*. 2009;99 Suppl 1(S1):S144-51. doi:10.2105/AJPH.2007.126003.
- 8. Health WHOC on the SD of. *The Social Determinants of Health: Developing an Evidence Base for Political Action.* Chile; 2007.
- 9. Thornton RLJ, Glover CM, Cené CW, Glik DC, Henderson JA, Williams DR. Evaluating Strategies For Reducing Health Disparities By Addressing The Social Determinants Of Health. *Health Aff (Millwood)*. 2016;35(8):1416-1423. doi:10.1377/hlthaff.2015.1357.
- 10. Braveman P, Egerter S, Williams DR. The Social Determinants of Health: Coming of Age. *Annu Rev Public Health*. 2011;32(1):381-398. doi:10.1146/annurev-publhealth-031210-101218.
- 11. Norström F, Virtanen P, Hammarström A, Gustafsson PE, Janlert U. How does unemployment affect self-assessed health? A systematic review focusing on subgroup effects. *BMC Public Health*. 2014;14:1310. doi:10.1186/1471-2458-14-1310.
- 12. Marmot M, Friel S, Bell R, Houweling TA, Taylor S, Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*. 2008;372(9650):1661-1669. doi:10.1016/S0140-6736(08)61690-6.
- 13. Cawley J, Moriya AS, Simon K. The Impact of the Macroeconomy on Health Insurance Coverage: Evidence from the Great Recession. *Health Econ*. 2015;24(2):206-223. doi:10.1002/hec.3011.
- 14. Murray S. Poverty and health. Can Med Assoc J. 2006;174(7):923-923. doi:10.1503/cmaj.060235.
- 15. Moore KA, Redd Z. Children in Poverty: Trends, Consequences, and Policy Options. *Child Trends*. 2002;54. https://childtrends-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2013/03/PovertyRB.pdf. Accessed July 24, 2017.
- 16. U.S. Census Bureau. Poverty Glossary. https://www.census.gov/topics/income-poverty/poverty/about/glossary.html. Published 2016. Accessed January 1, 2017.
- 17. Brunello G, Fort M, Schneeweis N, Winter-Ebmer R. The Causal Effect of Education on Health: What is the Role of Health Behaviors? *Health Econ.* 2016;25(3):314-336. doi:10.1002/hec.3141.
- 18. Cutler DM, Lleras-Muney A. Understanding differences in health behaviors by education. *J Health Econ.* 2010;29(1):1-28. doi:10.1016/j.jhealeco.2009.10.003.
- 19. Wilper AP, Woolhandler S, Boyd JW, et al. The health and health care of US prisoners: results of a nationwide survey. *Am J Public Health*. 2009;99(4):666-672. doi:10.2105/AJPH.2008.144279.
- 20. Hadley J. Insurance Coverage, Medical Care Use, and Short-term Health Changes Following an Unintentional Injury or the Onset of a Chronic Condition. *JAMA*. 2007;297(10):1073-1084. doi:10.1001/jama.297.10.1073.
- 21. Baker E, Bentley R, Mason K. The Mental Health Effects of Housing Tenure: Causal or Compositional? *Urban Stud.* 2013;50(2):426-442. doi:10.1177/0042098012446992.
- 22. Kreider B, Pepper J V., Gundersen C, Jolliffe D. Identifying the effects of SNAP (Food Stamps) on child health outcomes when participation is endogenous and misreported. *J Am Stat Assoc.* 2012;107(499):958-975. doi:10.1080/01621459.2012.682828.
- 23. Nord M, Coleman-Jensen A, Andrews M, Carlson S. Household Food Security in the United States, 2009. 2010. https://www.ers.usda.gov/webdocs/publications/44776/7024\_err108\_1\_.pdf?v=41056. Accessed July 24, 2017.
- 24. Urban Indian Health Institute. Community Health Profile: National Aggregate of Urban Indian Health

### REFERENCES

- *Organization Service Areas.* Seattle; 2011. http://www.uihi.org/download/Combined-UIHO-CHP\_Final.pdf. Accessed July 24, 2017.
- 25. Spokane Regional Health District. *A Healthy Start: Spokane's Future : Maternal and Infant Health*. Spokane, WA; 2008. https://books.google.com/books/about/A\_Healthy\_Start.html?id=9RqxXwAACAAJ. Accessed July 24, 2017.
- 26. Medical Definition of Mortality, infant. http://www.medicinenet.com/script/main/art.asp?articlekey=14274. Published 2016. Accessed July 24, 2017.
- 27. The Mayo Clinic. Premature Birth. http://www.mayoclinic.org/diseases-conditions/premature-birth/basics/definition/con-20020050. Published 2014.
- 28. ML FKWLKTSCHPJ. Effects of a prenatal care intervention for adolescent mothers on birth weight, repeat pregnancy, and educational outcomes at one year postpartum.
- 29. Stanford Children's Health. The Neonatal Intensive Care Unit (NICU). http://www.stanfordchildrens.org/en/topic/default?id=the-neonatal-intensive-care-unit-nicu-90-P02389. Published 2016. Accessed July 24, 2017.

# **APPENDIX**

#### **Glossary of Terms**

ACS - American Community Survey

AI/AN - American Indian / Alaska Native

IHS - Indian Health Service

MCH - Maternal and Child Health

NCHS - National Center for Health Statistics

NHW - Non-Hispanic White

NICU - Neonatal Intensive Care Unit

NVSS - National Vital Statistics System

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

TEC - Tribal Epidemiology Center

UAII – United American Indian Involvement

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

UIHP - Urban Indian Health Program

### **APPENDIX**

#### **About Us - Our Mission & History**

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

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

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

#### **Contact Information**

For general questions, please contact: info@uihi.org

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

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

Fax: (206) 812 – 3044

# **NOTES**



# **NOTES**



# **NOTES**





# **Contact Us**

Please contact the Urban Indian Health Institute with your comments by emailing <a href="mailto:info@uihi.org">info@uihi.org</a>, calling (206) 812-3030 or visiting us online at <a href="www.uihi.org">www.uihi.org</a>.





