Community Health Profile:
Denver Indian Health and Family Services
Denver, CO

December 2011

U I H I
Urban Indian Health Institute
A Division of the Seattle Indian Health Board

UIHI

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

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Please contact the Urban Indian Health Institute with your comments: info@uihi.org or 206-812-3030. You can also fill out the form on page 21 with comments or questions.

ACKNOWLEDGEMENTS

DENVER INDIAN HEALTH AND FAMILY SERVICES SERVICE AREA

Source: U.S. Census Bureau, 2010

Note: Counties served by Denver Indian Health and Family Services are highlighted in red. For a complete list of areas served by urban Indian health organizations, visit http://www.uihi.org/urban-indian-health-organization-profiles.

PURPOSE

This report is one of 27 community health profiles produced by the Urban Indian Health Institute (UIHI) to examine the health of American Indians/Alaska Natives (AI/AN) living in select urban counties. These counties are served by the network of Title V urban Indian health organizations (UIHO) across the country.

This health profile provides an overview of the health status of the AI/AN population living in the service area of the Denver Indian Health and Family Services (DIHFS).

The profile can be used to support your health organization in the following ways:

- Identify health priorities
- Allocate resources
- Guide the development of new programs
- Identify gaps in data and needs for new data collection
- Plan analyses to examine these indicators among clinic patients
- Provide statistics and figures to use in grant applications that require supporting data

METHODS

Comparisons

Each health indicator was calculated for the AI/AN population and compared with the all race population in this service area (referred to as the general population). In instances where local data were unavailable, data from all UIHO service areas combined are presented. Indicators were calculated for a five or six year time period in order to have sufficient data to make more stable estimates and protect individual privacy. For all indicators, 95% confidence intervals were calculated. A confidence interval is a range of values used to report the uncertainty around an estimate. With survey data, the confidence interval also accounts for the difference between a sample from the population and the population itself. In small populations estimated rates often have large confidence intervals, which make differences between the groups examined difficult to capture. A result is called statistically significant if it is unlikely to have occurred by chance. In this report a statistically significant difference was inferred if the confidence intervals of the comparison groups did not overlap. Statistically significant differences are noted with an asterisk in the titles of graphs and tables.

Indicator Selection

Indicators were selected for this health profile that could provide reliable and relevant information about death, mental health, access to care, social determinants of health, preventable causes of illness and other health concerns of urban AI/AN communities.

This profile uses national surveillance data, which may or may not include patients served directly at UIHOs. While this report covers a range of key health indicators, not every health concern affecting AI/ANs is examined. There may be information not captured by these systems that better represent the unique strengths and challenges in communities served by UIHOs. Local sources of data may provide a more region-specific and comprehensive understanding of the community's health and how it compares with national benchmarks.

Healthy People 2020 Objectives

Where possible, Healthy People 2020 objectives and targets were matched with each indicator. Healthy People 2020 targets are goals that represent improvements to current national rates.

DATA SOURCES

2010 U.S. Census
The U.S. Census provides official population counts for individuals living in the United States, and provides information by age, race, Hispanic origin and sex. The Census takes place every 10 years, and is used to determine the number of seats in the U.S. House of Representatives and to distribute funds to local communities. In 2010, 74% of households returned their Census forms by mail; the remaining households were counted by Census workers walking through neighborhoods.[1]

The 2010 U.S. Census allows 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 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 using mailed questionnaires, telephone interviews and in-person household visits. The ACS replaced the Census long-form survey in 2010 to collect indicators annually instead of once every 10 years. To provide reliable estimates for small counties, neighborhoods and population groups, the ACS provides 1-, 3- and 5-year aggregate estimates.

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 ACS, visit: http://www.census.gov/acs.

Behavioral Risk Factor Surveillance System
Behavioral Risk Factor Surveillance System (BRFSS) is an annual state-based system of surveys that collect information on health risk behaviors, preventive health practices and health care access primarily related to chronic disease and injury. Data is collected via telephone in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam. More than 350,000 adults age 18 or older are interviewed each year. The six most recent years for which BRFSS data are available (2005-2010) are included in this report.

Only households with landlines were included in this survey before 2009; households with cell phones were included starting in 2009. Many states have significant AI/AN populations that may not be reached through phone interviews because they do not have telephones. The BRFSS data presented in this profile include individuals who selected AI/AN as their only race or, if more than one race was selected, who selected AI/AN as, "the group that best represents your race."

BRFSS estimates may be unstable when a small sample is used to estimate rates in the population. Additionally, BRFSS estimates in this profile are not adjusted for age. In the sample of individuals surveyed by BRFSS in all UIHO service areas combined the percentage of AI/ANs under 45 years of age (59.7%) is significantly higher compared with the general population (52.4%).[2] Diseases such as heart disease and diabetes that are more common among older individuals are likely to be underestimated due to the difference in the age distribution of the AI/AN sample compared with the sample of the general population.

For more information about BRFSS, visit: http://www.cdc.gov/BRFSS.

National Vital Statistics System
Mortality data from the National Vital Statistics System (NVSS) is generated from death certificates collected through an intergovernmental collaboration between National Center for Health Statistics (NCHS) and the 50 states, two cities and five territories. 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 (2003-2007), natality (2003-2007) and infant mortality (2002-2006) data are available and are included in this report.

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.

NVSS is still transitioning to the 1997 Office of Management and Budget (OMB) standards for multiple race reporting. Since not all states allow individuals to identify as more than one race, NCHS releases bridged-race population estimates for calculation of rates. These estimates result from "bridging" the 31 race categories used in Census 2000, as specified in the 1997 OMB standards for the collection of data on race and ethnicity, to the four race categories specified under the 1977 standards (Asian or Pacific Islander, Black or African American, American Indian or Alaska Native, White). Estimates 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.

Air Quality System Data Mart – Air Quality Index
The Air Quality System (AQS) Data Mart contains ambient air pollution data for four selected pollutants collected by the U.S. Environmental Protection Agency (EPA), as well as state, local and tribal air pollution control agencies from thousands of monitoring stations across the country. Each day, monitors record concentrations of major pollutants. The raw measurements for the four selected pollutants are converted into the Air Quality Index (AQI), a value based on standard formulas developed by EPA. The AQI is an index used to report local air quality. AQI is not collected in all counties. In this report, these counties are listed and are noted with the phrase "no data available."

Racial Misclassification in Surveillance Data
Racial misclassification occurs when an individual's race is incorrectly coded on public records. 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. This can greatly underestimate the true rate of disease or cause of death. In a national sample, age-adjusted mortality for AI/ANs was underestimated by 9.7%.[3] The bias created by misclassification varies by age, proximity to a reservation and cause-of-death.[4] 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. Mortality data are of particularly poor quality for AI/ANs, as data quality checks of the racial/ethnic distribution of the deceased in this category are lower than the distribution represented in Census estimates; therefore, true mortality rates among AI/ANs are assumed to be higher than reported numbers suggest.

SOCIODEMOGRAPHICS

Social determinants of health such as education, employment and income have been shown to influence both mental and physical health outcomes.[5] Social determinants of health also interact with one another and with biological or genetic factors; affect individual behavior; and can transfer across generations.[5]

Population

Figure 1: Population, 2010, DIHFS service area

Race	Population
Total	2,789,669
AI/AN Alone or in Combination	53,496

Source: U.S. Census Bureau

Age
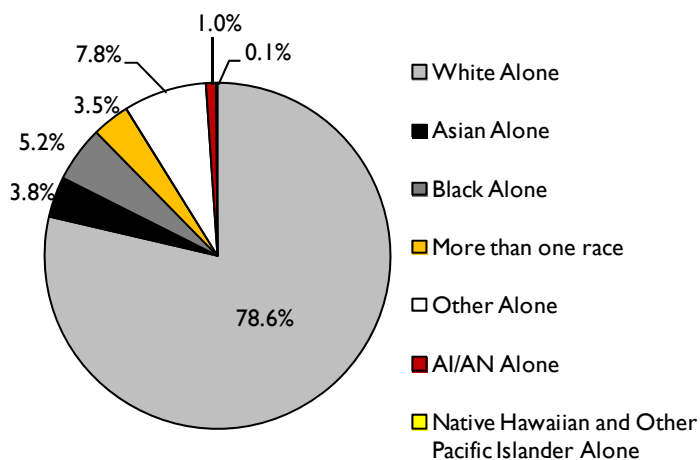
Figure 2: Age distribution, 2010, DIHFS service area

Age	AI/AN Alone	All Race
0-17 years	28.0%	24.6%
18-24 years	11.6%	9.3%
25-44 years	31.5%	30.0%
45-64 years	23.5%	26.1%
65+ years	5.4%	10.0%

Source: U.S. Census Bureau

In this service area, 40% of the AI/AN population is under the age of 25 compared with 34% of the general population.

Race/Ethnicity

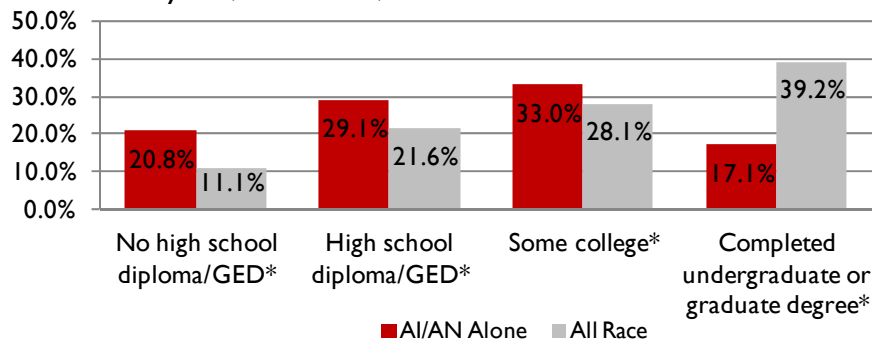Figure 3: Total population, 2010, DIHFS service area

Source: U.S. Census Bureau

In this service area, 1.0% of the population identify as AI/AN alone. According to the 2010 Census, 53,496 or 1.9% of residents in this service area report that they are of AI/AN heritage alone or in combination with other races.

Education

Figure 4: Highest level of educational attainment of the population ≥ 25 years, 2005-2009, DIHFS service area
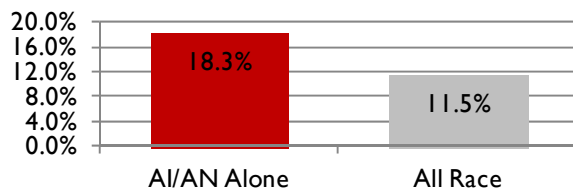

Source: U.S. Census Bureau, American Community Survey

A higher percentage of AI/ANs age 25 and older in this service area have not completed high school or obtained a GED (20.8%) compared with the general population (11.1%). A lower percentage of AI/ANs (17.1%) report an undergraduate or graduate degree as their highest level of education compared with the general population (39.2%). These differences are statistically significant.

Poverty Status

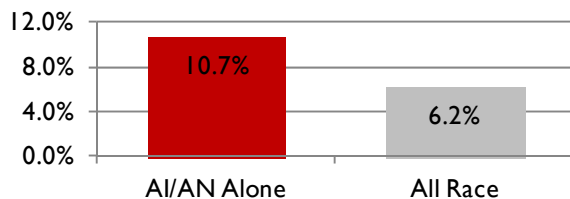Figure 5: Income below the federal poverty level, 2005-2009, DIHFS service area*

Source: U.S. Census Bureau, American Community Survey

A higher percentage of AI/ANs in this service area live below the federal poverty level (18.3%) compared with the general population (11.5%). This difference is statistically significant.

Data note: Federal poverty thresholds are used to determine poverty status. The thresholds are based on family size and the ages of the 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.

Unemployment

Figure 6: Labor force ≥ 16 years who are unemployed, 2005-2009, DIHFS service area

Source: U.S. Census Bureau, American Community Survey

In this service area, 10.7% of AI/ANs age 16 and older and 6.2% of the general population age 16 and older are unemployed. These rates do not include individuals in the military or individuals who are institutionalized.

Data note: The five-year unemployment rate presented in this report should be viewed as an average rate of unemployment over five years.

MORTALITY OVERVIEW

Examining the top causes of mortality is one way to measure the burden of disease in a community. This section describes the top five causes of death and top three causes of cancer deaths in this service area.

Racial misclassification leads to an underestimation of mortality rates in AI/AN populations.[3] True mortality rates among AI/AN in this service area are assumed to be higher than the rates described below.

Top Causes of Mortality

Figure 7: Top causes of mortality, 2003-2007, DIHFS service area

	AI/AN		All Race	
Rank	Cause	Rate (per 100,000)	Cause	Rate (per 100,000)
1	Heart disease	123.3	Cancer	158.9
2	Cancer	116.0	Heart disease	156.6
3	Unintentional Injury	40.9	Chronic lower respiratory disease	48.8
4	Diabetes	34.7	Unintentional Injury	42.6
5	Chronic lower respiratory disease	23.8	Stroke	39.3

Source: U.S. Center for Health Statistics

Heart disease and cancer are the two most common causes of death among AI/ANs and among the general population in this service area. Diabetes-associated deaths rank third out of all causes of mortality among AI/ANs (34.7 per 100,000). This is significantly higher than the diabetes- associated death rate of 16.4 per 100,000 among the general population.

Cancer Mortality

Figure 8: Top causes of cancer mortality, 2003-2007, DIHFS service area

	AI/AN		All Race	
Rank	Cause	Rate (per 100,000)	Cause	Rate (per 100,000)
1	Tracheal/bronchus/lung cancer	33.0	Tracheal/bronchus/lung cancer	38.2
2	Breast cancer (female)	14.3	Prostate cancer	24.5
3	Colon/rectal/anal cancer	10.2	Breast cancer (female)	21.2

Source: U.S. Center for Health Statistics

Tracheal, bronchus and lung cancers combined are the leading cause of cancer deaths among AI/ANs and the general population in this service area.

ACCESS TO CARE

Access to appropriate and timely care is critical to preventing illness and treating disease. There are many reasons why patients do not receive appropriate and timely care. Barriers to health care can be structural (e.g. lack of transportation, child care, language difficulties or availability of providers), economic (e.g. lack of health insurance or inability to pay for services) or personal (e.g. cultural appropriateness or distrust in health care providers).[6]

The network of Title V UIHOs serves a vital role in assuring access to primary medical care for the low-income urban AI/AN population. This section examines access to care in this service area using medical insurance coverage, affordable care and an established relationship with a primary care provider as indicators.

Medical Insurance Coverage

Compared with those with medical insurance, those without medical insurance have higher mortality rates.[7] Individuals without medical insurance also are less likely to receive care and take longer to return to health after an unintentional injury or the onset of a chronic disease compared with those who have medical insurance.[8]
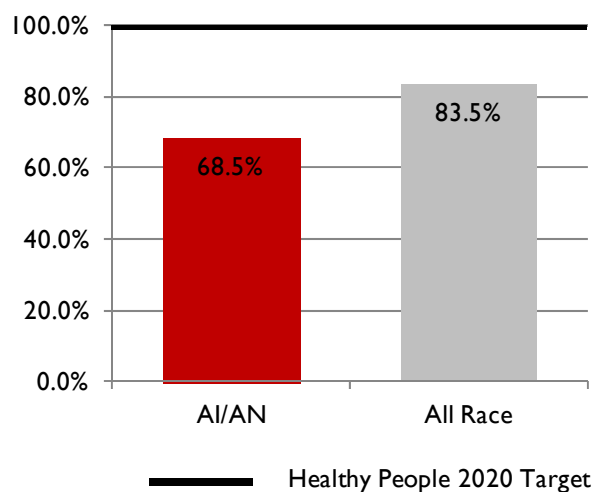
In this service area, a lower percentage of AI/ANs under age 65 (68.5%) report having medical insurance (including insurance through federal programs) than the general population (83.5%). This difference is statistically significant.

Figure 9: Self-reported health insurance coverage for individuals <65 years, 2005-2010, DIHFS service area*

Healthy People 2020 Target

Source: CDC, Behavioral Risk Factor Surveillance System

Healthy People 2020 Objective:

Increase the proportion of people with medical insurance

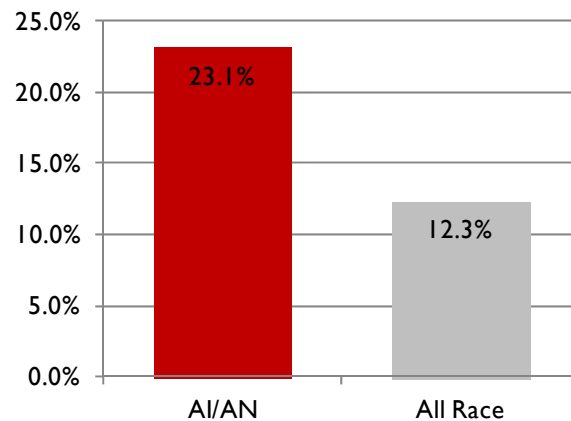**Target: 100%**

Affordable Care

Cost is just one of several reasons why people may be unable to obtain needed healthcare. In this service area, a higher percentage of AI/ANs (23.1%) report being unable to see a doctor because of cost than the general population (12.3%). This difference is statistically significant.
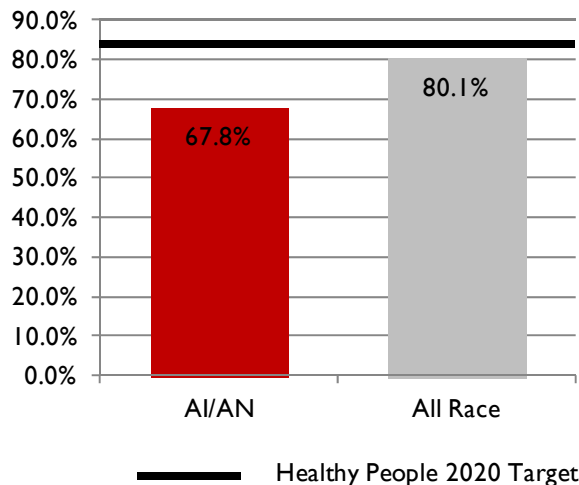
Figure 10: Could not see a doctor because of cost in the past year, 2005-2010, DIHFS service area*

Source: CDC, Behavioral Risk Factor Surveillance System

Healthy People 2020 Objective:

Reduce the percentage of people who delayed or did not obtain medical care

The Healthy People 2020 objective considers any reason that a person was not able to obtain medical care. This graph only shares information about cost as a barrier to obtaining medical care.

Usual Primary Care Provider

Figure 11: Has personal health care provider(s), 2005-2010, DIHFS service area*

Healthy People 2020 Target

Source: CDC, Behavioral Risk Factor Surveillance System

Individuals with a usual source of primary care are more likely to receive preventative services.[9] In this service area, a lower percentage of AI/ANs (67.8%) identified one or more providers from whom they usually receive care than the general population (80.1%). This difference is statistically significant.

Healthy People 2020 Objective:

Increase the proportion of persons with a usual primary care provider.

Target: >83.9%

ENVIRONMENTAL HEALTH

High levels of air pollutants can aggravate asthma and other pre-existing lung conditions.[10] Long-term exposure to pollutants in the air can cause permanent lung damage and an increased risk of cardiovascular disease.[10] In this section we describe the air quality in this service area. We also describe the proportion of the population with asthma, a subgroup that is vulnerable to illness due to poor air quality.

Air Quality

Figure 12: Number of days with poor air quality, 2010, DIHFS service area

	# of days		
County	Unhealthy for Sensitive Populations (AQI=101-150)	Unhealthy (AQI=151-200)	Very Unhealthy (AQI=201-300)
Adams*	0	0	0
Arapahoe	3	0	0
Boulder	2	0	0
Broomfield	no data available	no data available	no data available
Denver	0	0	0
Douglas	8	0	0
Gilpin	no data available	no data available	no data available
Jefferson	8	0	0

Source: Environmental Protection Agency   * In Adams County, 5% of daily AQI data is missing.

In 2010, there were eight days with an Air Quality Index (AQI) over 100 in Jefferson and Douglas Counties. When the AQI is higher than 100, sensitive groups such as children, older adults and those with heart or lung disease are at greater risk of being affected by unsafe levels of pollutants.[10]
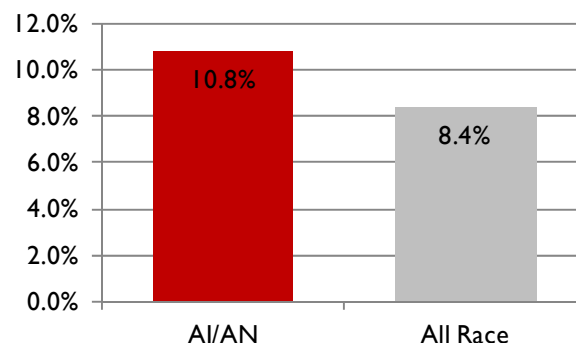
Healthy People 2020 Objective:

Reduce the number of days the Air Quality Index (AQI) exceeds 100

Target: ≤ 10 days with an AQI over 100 each year

Asthma

In this service area, 10.8% of AI/ANs currently have asthma compared with 8.4% of the general population. Providing preventive treatment to those with asthma can help meet the Healthy People 2020 goal of reducing missed days of school and work, hospitalizations and deaths due to asthma.

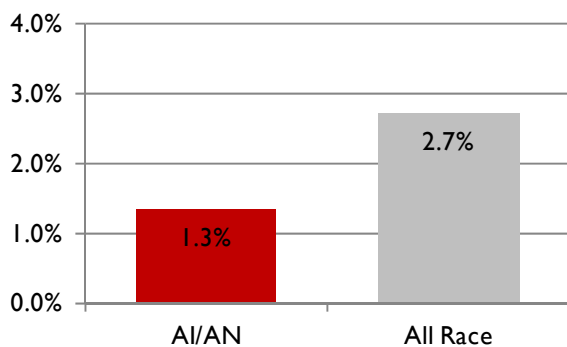Figure 13: Currently has asthma, 2005-2010, DIHFS service area

Source: CDC, Behavioral Risk Factor Surveillance System

HEART HEALTH

Diseases of the heart are the leading cause of death in the United States in both the general population and among AI/ANs.[11] Although some risk factors for cardiovascular disease (e.g. genetics and age) cannot be controlled, changes to diet, smoking and adherence to medication can reduce mortality and recurrent events.[12] This section examines the rates of coronary heart disease and available data measuring modifiable cardiovascular disease risk factors in this service area.

Heart Disease

Figure 14: Ever recieved a diagnosis of coronary heart disease, 2005-2010, DIHFS service area

Source: CDC, Behavioral Risk Factor Surveillance System

In this service area, 1.3% of AI/ANs and 2.7% of the general population have ever received a diagnosis of angina or coronary heart disease from a health professional.

The heart disease death rate in this service area among AI/ANs is 123.3 per 100,000 compared with 156.6 per 100,000 in the general population (data not shown).[13]

Data Note: Racial misclassification in death records leads to an underestimation of mortality rates in AI/AN populations.[3]
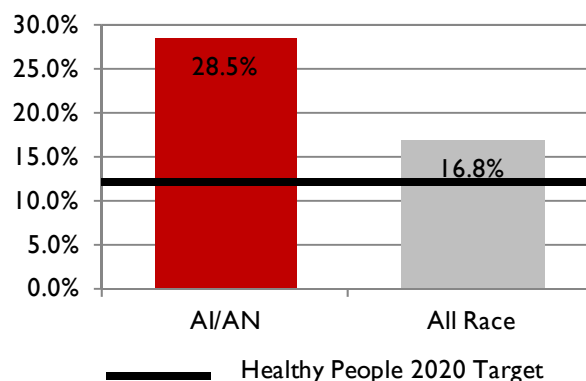
Smoking

In this service area, 28.5% of AI/ANs are current smokers compared with 16.8% of the general population. This difference is statistically significant.

Healthy People 2020 Objective:

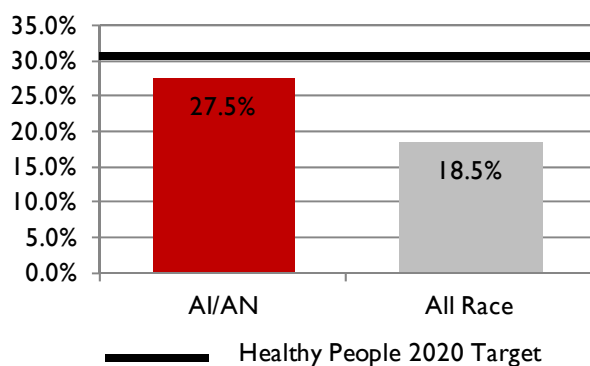Reduce tobacco use by adults

Target: <12.0%

Figure 15: Current smoker, 2005-2010, DIHFS service area*

Source: CDC, Behavioral Risk Factor Surveillance System

Obesity

Figure 16: Currently obese, 2005-2010, DIHFS service area*

Source: CDC, Behavioral Risk Factor Surveillance System

In this service area, the prevalence of obesity is higher among AI/ANs (27.5%) than the general population (18.5%). This difference is statistically significant. The rising obesity epidemic has been attributed to both individual and community level factors such as the availability and price of healthy food or safe places to exercise.

Healthy People 2020 Objective:

Reduce the proportion of adults who are obese
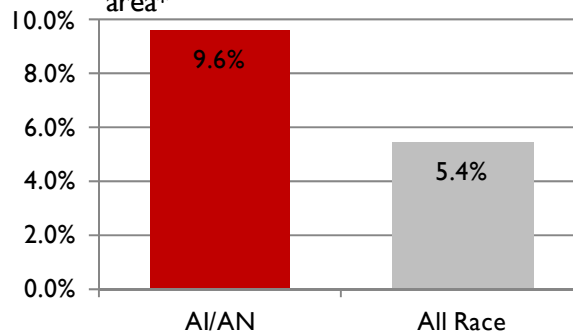
Target: < 30.6%

Diabetes

Heart disease is one of many health concerns for individuals with diabetes. Those with diabetes have a 2-4 times greater risk of dying of heart disease or ischemic heart disease than those without diabetes.[14]

Among AI/ANs in this service area, 9.6% report having been told by a doctor that they have diabetes compared with 5.4% of the general population. This difference is statistically significant.

AI/ANs in this service area have a diabetes mortality rate of 34.7 per 100,000 compared with 16.4 per 100,000 in the general population (data not shown).[13] This difference is statistically significant.

Data Note: Racial misclassification in death records leads to an underestimation of mortality rates in AI/AN populations.[3]

Figure 17: Ever recieved a diagnosis of diabetes, 2005-2010, DIHFS service area*

Source: CDC, Behavioral Risk Factor Surveillance System
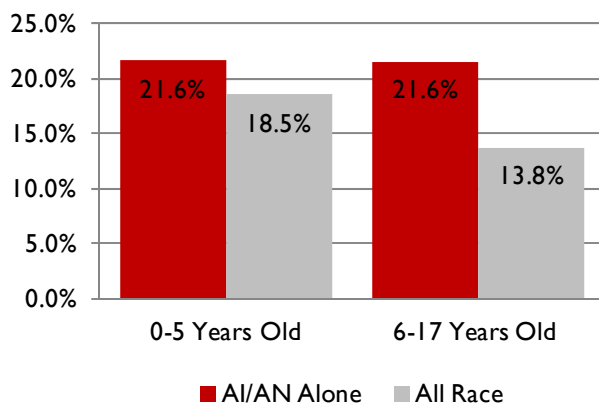
MATERNAL AND CHILD HEALTH

Social, economic, environmental and biologic factors interact to influence a child's development. Many conditions during childhood, such as poverty, obesity or low infant birth weight, may impact a person throughout life.[15]

A mother's age, level of education and use of prenatal care not only are associated with her child's health, but also are important for her own health during pregnancy and delivery.[16]

Information about prenatal care and maternal smoking collected on birth certificates have changed, and some birth risk factors (e.g. prenatal care) are not available in every state for a five-year time period. Alternative maternal and child health indicators have been used in place of these where possible.

Poverty Status

Figure 18: Children in households with income below poverty level, 2005-2009, DIHFS service area

Source: U.S. Census Bureau, American Community Survey

Poverty can 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.[15] Additionally, living in poverty as a child can affect health throughout a person's lifespan.[15]

In this service area, 21.6% of AI/AN children under age six live in households below poverty level compared with 18.5% of children in the general population.

Among children 6-17 years of age in this service area, 21.6% of AI/ANs and 13.8% of children in the general population live in households below poverty level.

Low Birth Weight

Compared with infants of normal weight, low birth weight infants, weighing less than 5 lb 8 oz (2,500 g), are more likely to have medical complications or die in their first year of life.[17]
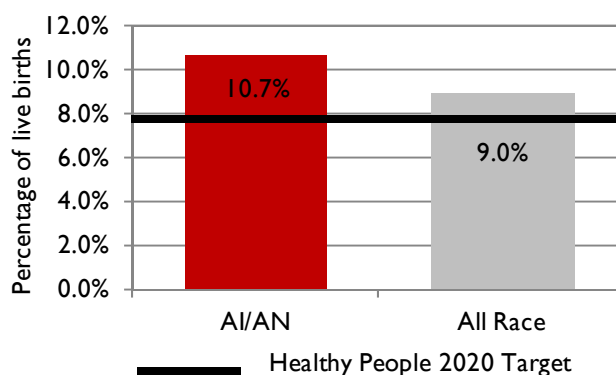
In this service area, 10.7% of AI/AN infants and 9.0% of infants of all races weigh less than 5 lb 8 oz (2,500 g) at birth.

Healthy People 2020 Objective:

Reduce low birth weight

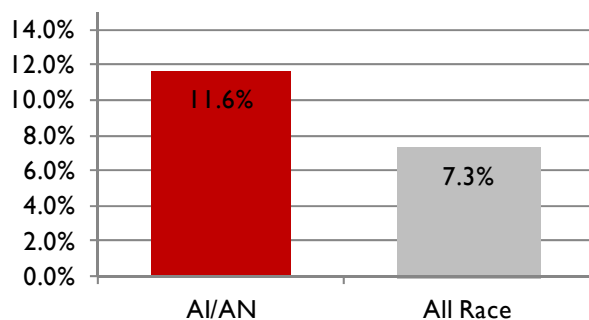**Target: < 7.8% of all infants weigh < 5 lb. 8 oz. at birth**

Figure 19: Birth weight < 5 lb 8oz (2,500 g), 2003-2007, DIHFS service area

Source: U.S. Center for Health Statistics

Teen Birth Rate

Figure 20: Births to mothers <20 years, 2003-2007, DIHFS service area*

Source: U.S. Center for Health Statistics

Infants of teenage mothers are more likely to be preterm and have higher death rates in the first year of life than infants of older mothers.[18]

Of all AI/AN births in this service area, 11.6% are to mothers less than 20 years of age compared with 7.3% in the general population. This difference is statistically significant.

Infant Mortality

Infant mortality measures the rate of death for children under the age of one. Among AI/ANs in this service area, the infant mortality rate is 9.1 per 1,000 live births. In the general population in this service area the infant mortality rate is 5.9 per 1,000 live births.

Healthy People 2020 Objective:

Reduce the rate of all infant deaths (within 1 year)

Target: < 6.0 per 1,000 live births

Figure 21: Infant mortality, 2002-2006, DIHFS service area

Source: U.S. Center for Health Statistics

ALCOHOL USE

Alcohol-attributable deaths account for 12% of all AI/AN deaths in the United States.[19] These preventable deaths are due to both acute and chronic health effects of alcohol use. In this section we describe the rates of binge drinking and death relating to alcohol use.

Binge Drinking

Binge drinking presents both immediate and long-term health risks such as cirrhosis of the liver, high blood pressure and alcohol poisoning.
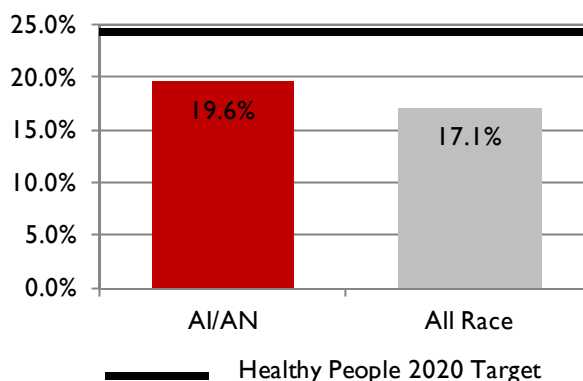
Among AI/ANs in this service area, 19.6% report that they engaged in binge drinking in the past 30 days. The rate of binge drinking in the general population in this service area is 17.1%.

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Healthy People 2020 Objective:

Reduce the proportion of persons engaging in binge drinking during the past month – adults aged 18 and older

Target: < 24.3%

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Figure 22: Binge drinking in the past 30 days, 2005-2010, DIHFS service area

Healthy People 2020 Target

Source: CDC, Behavioral Risk Factor Surveillance System

Data Note: Binge drinking is defined as five or more drinks on a single occasion for males and four or more drinks on a single occasion for females.

Mortality

Figure 23: Selected alcohol-associated mortality, 2003-2007, DIHFS service area

Cause of Death	AI/AN Mortality Rate (per 100,000)	All Race Mortality Rate (per 100,000)
Chronic liver disease and cirrhosis	16.4	9.5
Alcohol-induced death	11.9	6.7

Source: U.S. Center for Health Statistics

Data Note: Alcohol-induced deaths do not include causes that are indirectly related to alcohol use, such as accidents, homicides or infant death due to fetal alcohol syndrome. Mortality rates are age-adjusted.

Racial misclassification in death records leads to an underestimation of mortality rates in AI/AN populations.[3]

The chronic liver disease and cirrhosis death rate in this service area is 16.4 per 100,000 among AI/ANs and 9.5 per 100,000 among the general population.

The alcohol-induced death rate among AI/AN in this service area is 11.9 per 100,000. Among the general population, the rate is 6.7 per 100,000.
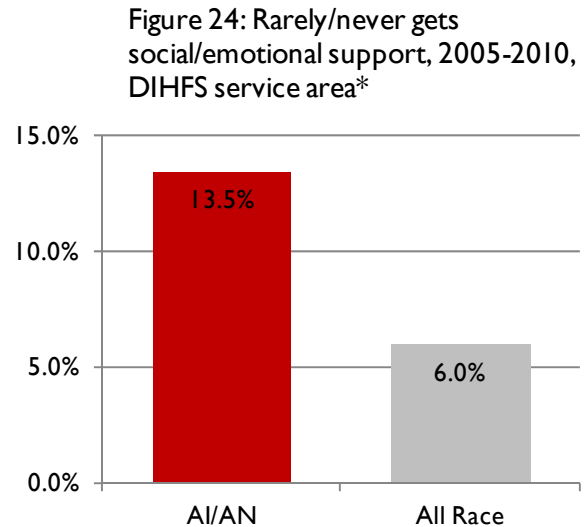
MENTAL HEALTH AND WELLNESS

The World Health Organization defines health as a "state of complete physical, mental, and social well-being and not merely the absence of disease."[20] This section describes suicide rates and data available from BRFSS assessing mental and social well-being: social support and frequent mental distress.

Social Support

Social support has been linked to lower overall mortality rates.[21] The BRFSS measures social support by asking survey participants, "How often do you get the social and emotional support you need?"

Compared with the general population (6.0%), a higher percentage of AI/ANs in this service area report rarely or never receiving the emotional and social support that they need (13.5%). This difference is statistically significant.
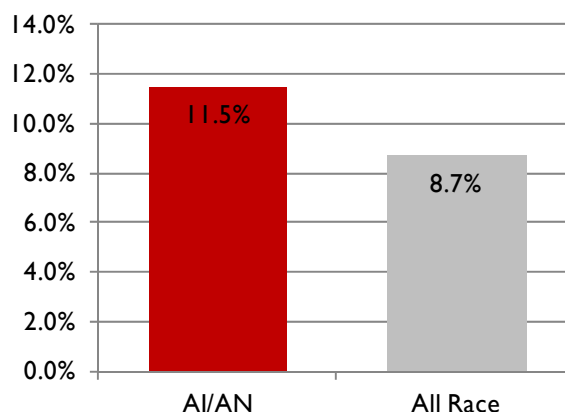
Figure 24: Rarely/never gets social/emotional support, 2005-2010, DIHFS service area*

Source: CDC, Behavioral Risk Factor Surveillance System

Mental Distress

The BRFSS collects data on mental distress by asking survey participants, "Thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the past 30 days was your mental health not good?" Individuals reporting 14 days or more of poor mental health each month are described as experiencing frequent mental distress.

In this service area, 11.5% of AI/ANs report frequent mental distress compared with 8.7% of the general population.
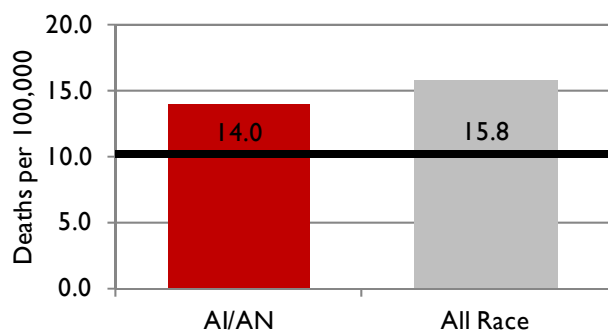
Figure 25: At least 14 poor mental health days in the past 30 days, 2005-2010, DIHFS service area

Source: CDC, Behavioral Risk Factor Surveillance System

Suicide

Figure 26: Suicide, 2003-2007, DIHFS service area

Source: U.S. Center for Health Statistics

In some cases severe mental distress or mental illness can lead to self-harm or suicide. In this service area, the rate of suicide among AI/ANs is 14.0 per 100,000. The suicide rate in the general population in this service area is 15.8 per 100,000.

Data Note: Racial misclassification in death records leads to an underestimation of mortality rates in AI/AN populations.[3]

Healthy People 2020 Objective:

Reduce the number of suicides

Target: <10.2 per 100,000

USING THIS REPORT

This community health profile examines the health of AI/ANs living in the service area of the Denver Indian Health and Family Services and presents data from the U.S. Census, the American Community Survey, the Behavioral Risk Factor Surveillance System, the U.S. Center for Health Statistics and the Air Quality System Data Mart. This report is the second community health profile published by the UIHI and will be updated on a regular basis.

Not all issues important to a community's health are included in this report. Locally collected data may provide additional information about the health of AI/ANs living in UIHO service areas. Data presented in this report may be most useful when combined with individual UIHO data; stories about patients and community members; and local surveillance or survey data, when available.   The following examples suggest possible ways to use the data from this report to support the work of UIHOs:

Program Planning

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

Grant Writing

Data and figures in this report also may be useful to include as background information for grant applications. This information can illustrate existing health disparities in the AI/AN population compared with the general population or Healthy People 2020 targets. This report can be cited as the reference.

Identify Gaps in Data

This report also may reveal current gaps in nationally collected data. For example, notably low mortality rates may indicate the need for improvements to race ascertainment in death records. State and regional linkage projects can help correctly classify AI/ANs in state death records.[22] Oversampling AI/ANs in national surveys is another way to improve data collection by providing sufficient statistical power to provide more stable estimates.

REFERENCES

1. U.S. Census Bureau. November 28, 2011. Available from *http://2010.census.gov/2010census/about/*.
2. Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005-2010.
3. 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*. Oct 2008(148):1-23.
4. Stehr-Green P, Bettles J, Robertson LD. Effect of racial/ethnic misclassification of American Indians and Alaskan Natives on Washington State death certificates, 1989-1997. *Am J Public Health*. Mar 2002;92(3):443-444.
5. CSDH. *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health*. Geneva: World Health Organization;2008.
6. Institute of Medicine (U.S.). Committee on Monitoring Access to Personal Health Care Services., Millman ML. *Access to health care in America*. Washington, D.C.: National Academy Press; 1993.
7. Wilper AP, Woolhandler S, Lasser KE, McCormick D, Bor DH, Himmelstein DU. Health insurance and mortality in US adults. *Am J Public Health*. Dec 2009;99(12):2289-2295.
8. Hadley J. Insurance coverage, medical care use, and short-term health changes following an unintentional injury or the onset of a chronic condition. *JAMA*. Mar 14 2007;297(10):1073-1084.
9. Blewett LA, Johnson PJ, Lee B, Scal PB. When a usual source of care and usual provider matter: adult prevention and screening services. *J Gen Intern Med*. Sep 2008;23(9):1354-1360.
10. Air Quality Index - A Guide to Air Quality and Your Health. In: Agency USEP, ed. Vol EPA-456/F-09-002. Research Triangle Park, NC2009.
11. Kochanek K. *Deaths: Preliminary Data for 2009*: Center for Disease Control; March 16, 2011 2011.
12. Smith SC, Jr., Allen J, Blair SN, et al. AHA/ACC guidelines for secondary prevention for patients with coronary and other atherosclerotic vascular disease: 2006 update: endorsed by the National Heart, Lung, and Blood Institute. *Circulation*. May 16 2006;113(19):2363-2372.
13. National Center for Health Statistics. *Mortality, 2003-2007*, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program.
14. National Diabetes Data Group (U.S.), National Institute of Diabetes and Digestive and Kidney Diseases (U.S.), National Institutes of Health (U.S.). *Diabetes in America*. 2nd ed. Bethesda, Md.: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases; 1995.
15. Moore K. *Children in Poverty: Trends, Consequences and Policy Implications*: Child Trends;2009.
16. *Kids Having Kids*: Catalyst Institute;1996.
17. McCormick MC. The contribution of low birth weight to infant mortality and childhood morbidity. *N Engl J Med*. Jan 10 1985;312(2):82-90.
18. Chen XK, Wen SW, Fleming N, Demissie K, Rhoads GG, Walker M. Teenage pregnancy and adverse birth outcomes: a large population based retrospective cohort study. *Int J Epidemiol*. Apr 2007;36(2):368-373.
19. Alcohol-attributable deaths and years of potential life lost among American Indians and Alaska Natives--United States, 2001--2005. *MMWR Morb Mortal Wkly Rep*. Aug 29 2008;57(34):938-941.
20. *Promoting Mental Health: Concepts, Emerging Evidence, Practice*: World Health Organization;2005.
21. Uchino BN. Social support and health: a review of physiological processes potentially underlying links to disease outcomes. *J Behav Med*. Aug 2006;29(4):377-387.
22. Hoopes, M.J., et al., *Including self-reported race to improve cancer surveillance data for American Indians and Alaska Natives in Washington state*. J Registry Manag, 2010. 37(2): p. 43-8.

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