Urban Indian Health Institute
A Division of the Seattle Indian Health Board

Community Health Profile:
National Aggregate of Urban Indian Health Organization Service Areas

December 2011

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 23 with comments or questions.

ACKNOWLEDGEMENTS

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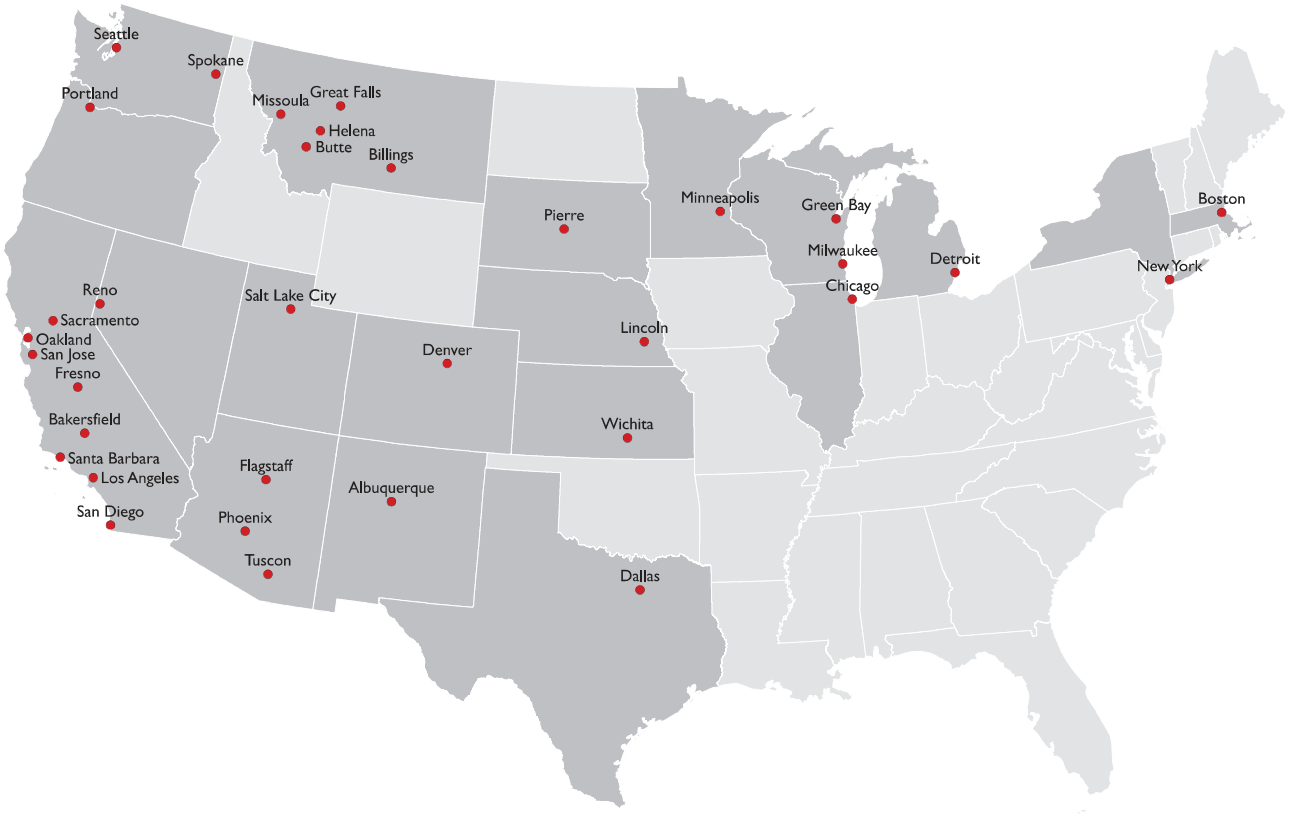
URBAN INDIAN HEALTH ORGANIZATION SERVICE AREAS



Source: U.S. Census Bureau, 2010

Note: States shaded in dark grey contain an urban Indian health organization (UIHO). For more information on individual UIHOs, visit http://www.uihi.org/ urban-indian-health-organization-profiles/.

PURPOSE

This health profile, produced by the Urban Indian Health Institute (UIHI), provides an overview of the health status 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.

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 (referred to as the general population). 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 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, combined UIHO service areas

Race	Population
Total	74,120,713
AI/AN Alone or in Combination	1,289,490

Source: U.S. Census Bureau

Age

Figure 2: Age distribution, 2010, combined UIHO service areas

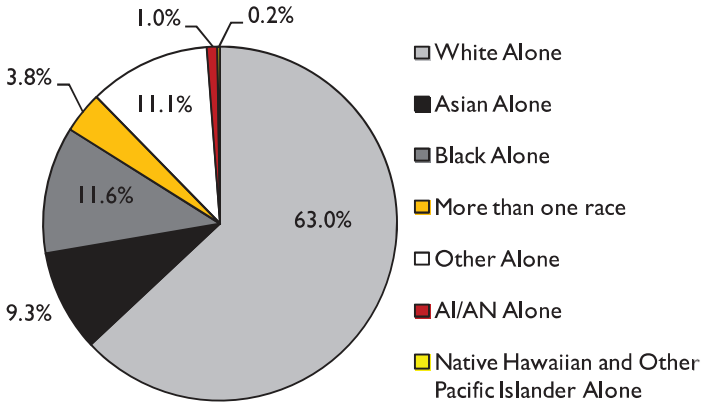
Age	AI/AN Alone	All Race
0-17 years	29.6%	24.3%
18-24 years	12.7%	10.2%
25-44 years	30.0%	28.9%
45-64 years	21.7%	25.1%
65+ years	6.0%	11.5%

Source: U.S. Census Bureau

In all UIHO service areas combined, 42.3% of the AI/AN population is under the age of 25 years compared with 34.5% of the general population.

Race/Ethnicity

Figure 3: Total population, 2010, combined UIHO service areas

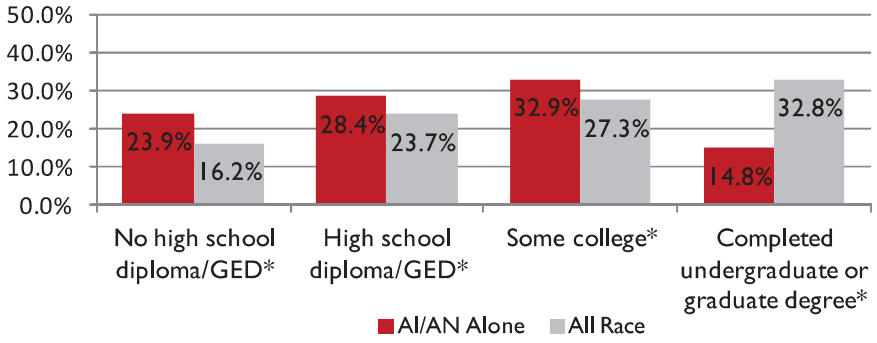


Source: U.S. Census Bureau

In all UIHO service areas combined, 1.0% of the population identify as AI/AN alone. According to the 2010 Census, 1,289,490 or 1.7% of residents of all counties served by UIHOs 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, combined UIHO service areas

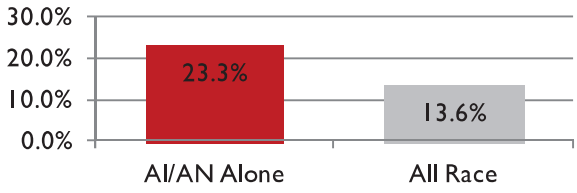


Source: U.S. Census Bureau, American Community Survey

In all UIHO service areas combined, a higher percentage of AI/ANs age 25 and older have not completed high school or obtained a GED (23.9%) compared with the general population (16.2%). A lower percentage of AI/ANs (14.8%) report an undergraduate or graduate degree as their highest level of education compared with the general population (32.8%). These differences are statistically significant.

Poverty Status

Figure 5: Income below the federal poverty level, 2005-2009, combined UIHO service areas*



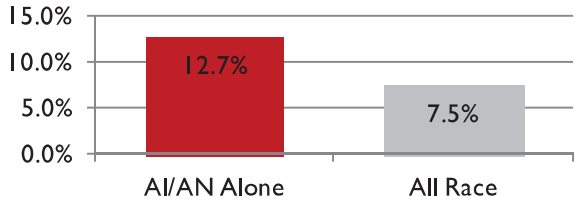
Source: U.S. Census Bureau, American Community Survey

A higher percentage of AI/ANs in all UIHO service areas combined live below the federal poverty level (23.3%) compared with the general population (13.6%). 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, combined UIHO service areas*



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

In all UIHO service areas combined, AI/ANs age 16 and older experience higher rates of unemployment (12.7%) compared with the general population (7.5%). This difference is statistically significant. 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 all UIHO service areas combined.

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

Top Causes of Mortality

Figure 7: Top causes of mortality, 2003-2007, combined UIHO service areas

	AI/AN		All Race	
Rank	Cause	Rate (per 100,000)	Cause	Rate (per 100,000)
1	Heart disease	109.5	Heart disease	202.3
2	Cancer	87.6	Cancer	170.2
3	Unintentional Injury	38.1	Stroke	43.0
4	Diabetes	28.3	Chronic lower respiratory disease	36.1
5	Stroke	24.5	Unintentional Injury	31.5

Source: U.S. Center for Health Statistics

Cancer and heart disease are the two most common causes of death among AI/ANs and among the general population in all UIHO service areas combined. Unintentional injury ranks third out of all causes of mortality among AI/ANs in all UIHO service areas combined. The unintentional injury mortality rate among AI/ANs (38.1 per 100,000) is significantly higher than the rate in the general population (31.5 per 100,000).

Cancer Mortality

Figure 8: Top causes of cancer mortality, 2003-2007, combined UIHO service areas

	AI/AN		All Race	
Rank	Cause	Rate (per 100,000)	Cause	Rate (per 100,000)
1	Tracheal/bronchus/lung cancer	23.6	Tracheal/bronchus/lung cancer	44.0
2	Prostate cancer	11.4	Prostate cancer	24.1
3	Breast cancer (female)	10.6	Breast cancer (female)	23.4

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 all UIHO service areas combined. Prostate cancer among men and breast cancer among women are also among the leading causes of death among AI/ANs and the general population in all UIHO service areas combined.

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]

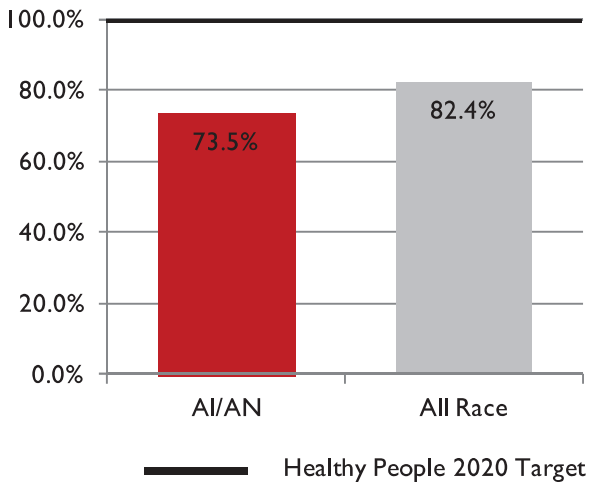
In all UIHO service areas combined, 73.5% of AI/ANs under age 65 report having medical insurance (including insurance through federal programs) compared with 82.4% of the general population. This difference is statistically significant.

Healthy People 2020 Objective:

Increase the proportion of people with medical insurance

Target: 100%

Figure 9: Self-reported health insurance coverage, for individuals <65 years, 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

Affordable Care

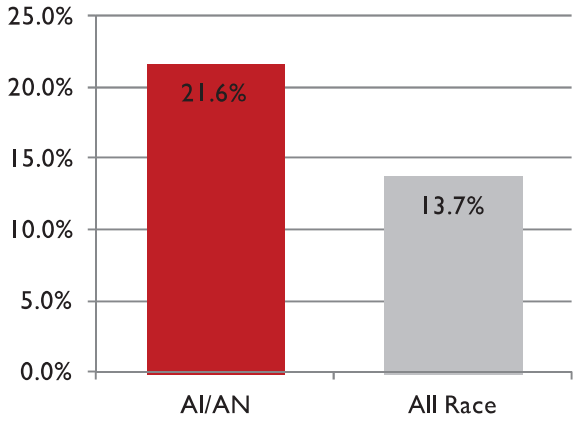
Cost is just one of several reasons why people may be unable to obtain needed healthcare. In all UIHO service areas combined, 21.6% of AI/ANs and 13.7% of the general population report being unable to see a doctor because of cost. This difference is statistically significant.

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.

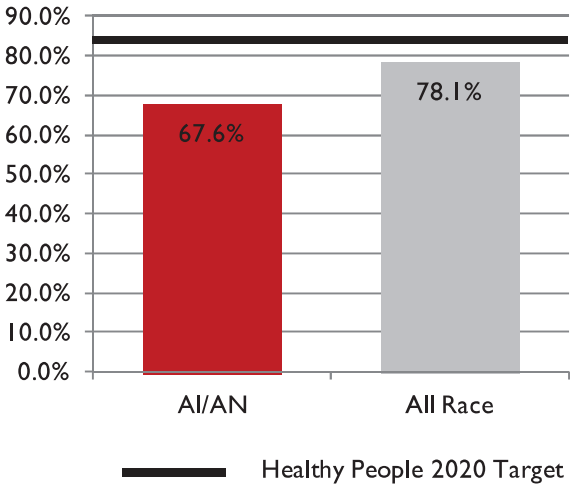
Figure 10: Could not see a doctor because of cost in the past year, 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

Usual Primary Care Provider

Figure 11: Has personal health care provider(s), 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

Individuals with a usual source of primary care are more likely to receive preventative services.[9] In all UIHO service areas combined, 67.6% of AI/ANs compared with 78.1% of the general population identified one or more providers from whom they usually receive care. This difference is statistically significant.

Healthy People 2020 Objective:

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

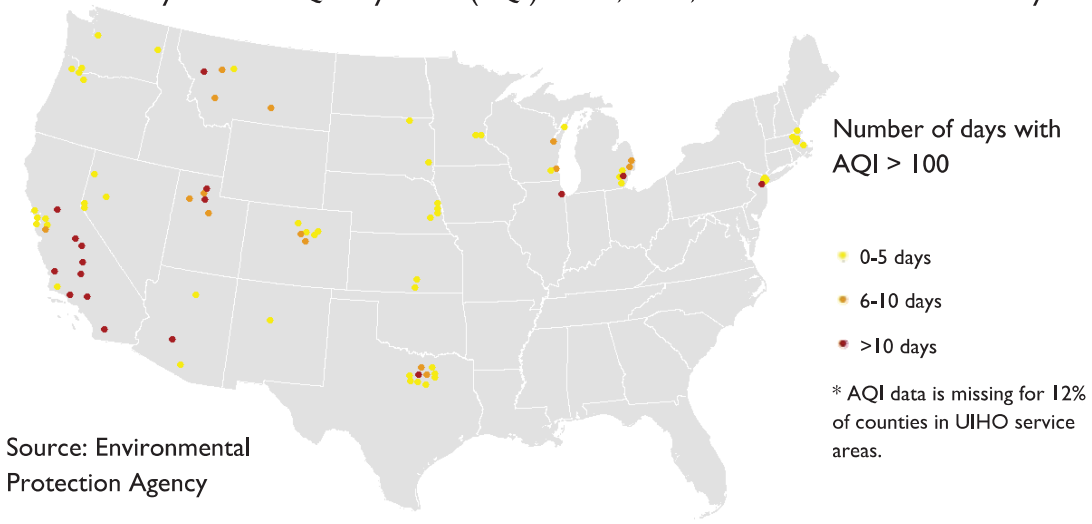
Target: >83.9%

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 counties served by UIHOs. 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 Air Quality Index (AQI) > 100, 2010, individual counties served by UIHOs



Source: Environmental Protection Agency

In 2010, 17 counties in UIHO service areas had over ten days with an Air Quality Index (AQI) greater than 100 (see Appendix A for complete list). 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:

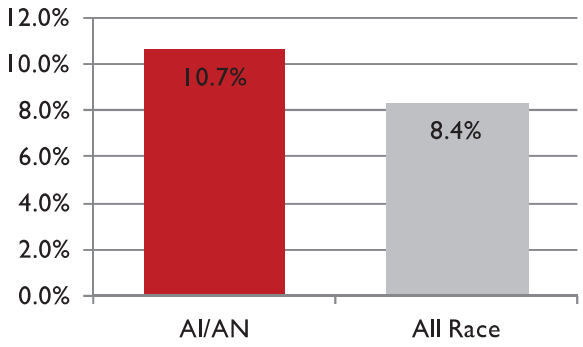
Reduce the number of days the Air Quality Index (AQI) exceeds 100

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

Asthma

In all UIHO service areas combined, 10.7% of AI/ANs have asthma compared with 8.4% of the general population. This difference is statistically significant. Providing preventive treatment to those with asthma can help meet the Healthy People 2020 goal of reducing days of school and work missed, hospitalizations and deaths due to asthma.

Figure 13: Currently has asthma, 2005-2010, combined UIHO service areas*



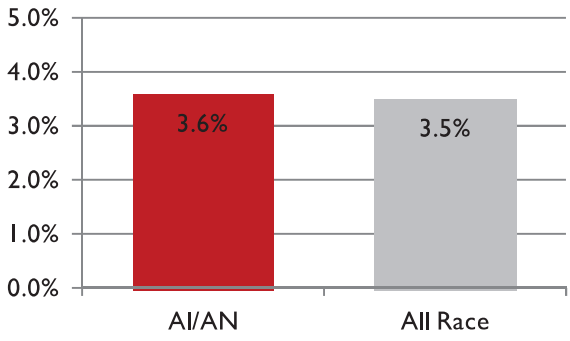
Source: CDC, Behavioral Risk Factor Surveillance System

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 prevalence of coronary heart disease and available data measuring modifiable cardiovascular disease risk factors in all UIHO service areas combined.

Heart Disease

Figure 14: Ever recieved a diagnosis of coronary heart disease, 2005-2010, combined UIHO service areas



Source: CDC, Behavioral Risk Factor Surveillance System

In all UIHO service areas combined, 3.6% of AI/ANs and 3.5% of the general population have ever received a diagnosis of angina or coronary heart disease from a health professional.

The heart disease death rate among AI/ANs in all UIHO service areas combined is 109.5 per 100,000 (data not shown).[13] In the general population in all UIHO service areas combined, the heart disease death rate is 202.3 per 100,000 (data not shown).[13] Although this difference is statistically significant, racial misclassification in death records leads to an underestimation of mortality rates in AI/AN populations.[3]

Smoking

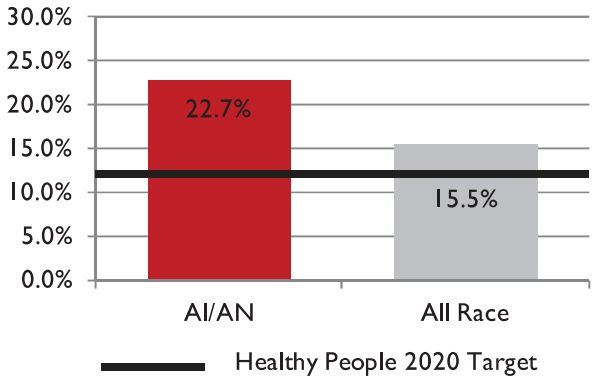
In all UIHO service areas combined, 22.7% of AI/ANs currently smoke compared with 15.6% of the general population. This difference is statistically significant.

Healthy People 2020 Objective:

Reduce tobacco use by adults

Target: <12.0%

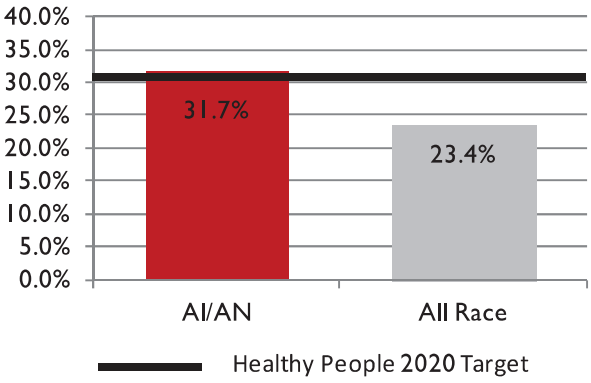
Figure 15: Current smoker, 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

Obesity

Figure 16: Currently obese, 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

In all UIHO service areas combined, the prevalence of obesity is higher among AI/ANs (31.7%) than the general population (23.4%). 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%

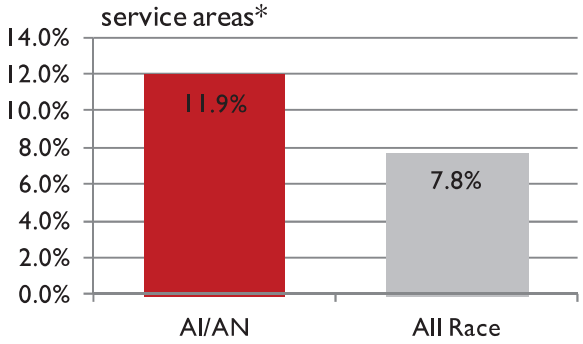
Diabetes

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 living in all UIHO service areas combined, 11.9% report having been told by a doctor that they have diabetes compared with 7.8% of the general population. This difference is statistically significant. The diabetes mortality rate among AI/ANs in all UIHO service areas combined is 28.3 per 100,000 compared with 22.2 per 100,000 in the general population (data not shown).[13] This difference is also 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, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

MATERNAL AND CHILD HEALTH

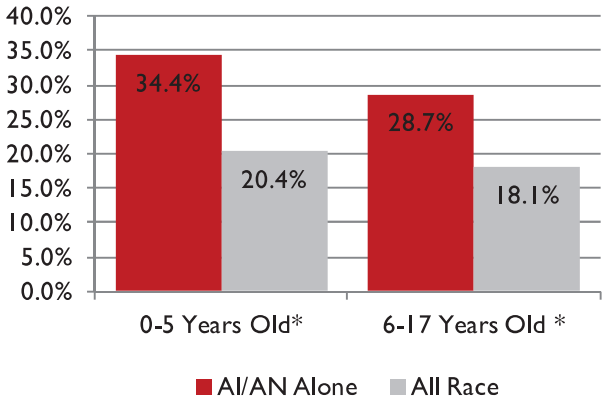
Social, economic, environmental and biologic factors interact to influence a child's development. Many conditions during childhood, such as poverty, obesity or low infant birth weight, may impact a person throughout life.[15]

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, combined UIHO service areas



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 all UIHO service areas combined, 34.4% of AI/AN children under age six live in households below poverty level compared with 20.4% of children in the general population. Similarly, among children 6-17 years of age in all UIHO service areas combined, a higher percentage of AI/ANs (28.7%) live in households below poverty level compared with all children (18.1%). These differences are statistically significant.

Low Birth Weight

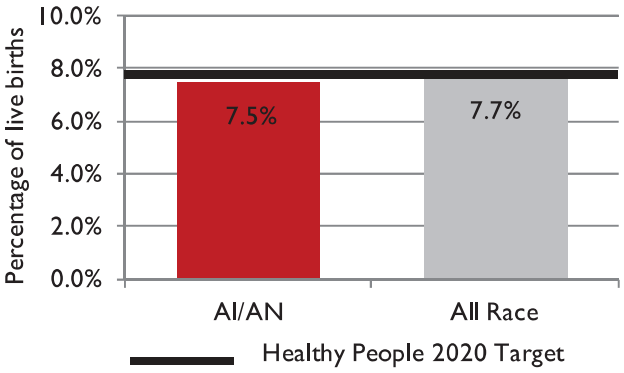
Compared with infants of normal weight, low birth weight infants, weighing less than 5 lb 8 oz (2,500 g), are more likely to have medical complications or die in their first year of life.[17] In all UIHO service areas combined, 7.5% of AI/AN infants weighed less than 5 lb 8 oz at birth compared with 7.7% of infants of all races.

Healthy People 2020 Objective:

Reduce low birth weight

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

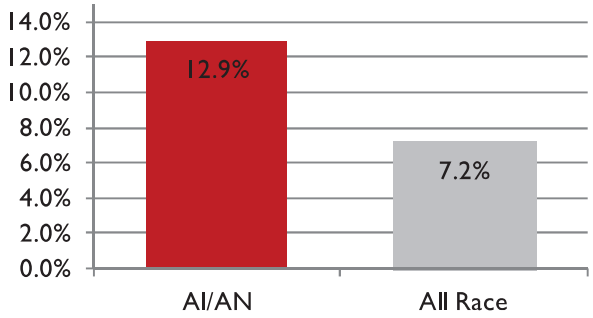
Figure 19: Birth weight < 5 lb 8oz (2,500 g), 2003-2007, combined UIHO service areas



Source: U.S. Center for Health Statistics

Teen Birth Rate

Figure 20: Births to mothers <20 years, 2003-2007, combined UIHO service areas*



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 all UIHO service areas combined, 12.9% are to mothers less than 20 years of age compared with 7.2% in the general population. This difference is statistically significant.

Infant Mortality

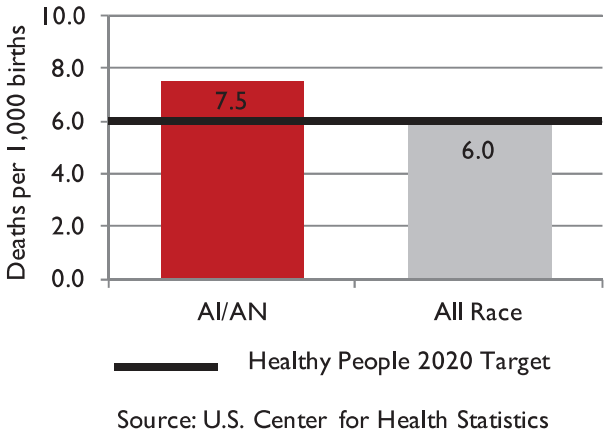
Infant mortality measures the rate of death for children under the age of one. Among AI/ANs in all UIHO service areas combined, the infant mortality rate is 7.5 per 1,000 live births compared with 6.0 per 1,000 live births in the general population. This difference is statistically significant.

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, combined UIHO service areas*



Source: U.S. Center for Health Statistics

Figure 22: Top causes of infant mortality, 2002-2006, combined UIHO service areas

	AI/AN		All Race	
Rank	Cause	Rate (per 1,000 births)	Cause	Rate (per 1,000 births)
1	Congenital anomalies	1.5	Congenital anomalies	1.0
2	Sudden infant death syndrome	0.7	Short gestation	0.8
3	Short gestation	0.6	Sudden infant death syndrome	0.3
4	Unintentional injury	0.4	Maternal pregnancy complications	0.3
5	Maternal pregnancy complications	0.2	Placenta, cord or membrane complications	0.2

Source: U.S. Center for Health Statistics

In all UIHO service areas combined, the top causes of infant mortality among both AI/ANs and the general population include congenital anomalies, sudden infant death syndrome (SIDS), short gestation and maternal pregnancy complications. Unintentional injury mortality among AI/AN infants (0.4 per 1,000 births) is significantly higher compared with the general population (0.1 per 1,000 births). The rates of death due to congenital malformations and SIDS are also significantly higher among AI/AN compared with general population.

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 prevalence of binge drinking and rates of alcohol-associated mortality.

Binge Drinking

Binge drinking presents both immediate and long-term health risks such as cirrhosis of the liver, high blood pressure and alcohol poisoning.

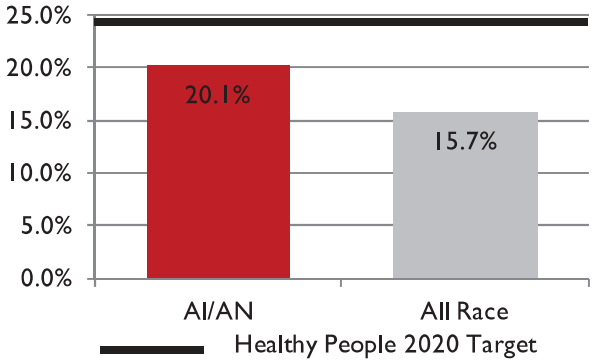
Among AI/ANs in all UIHO service areas combined, 20.1% of AI/ANs report that they engaged in binge drinking in the past 30 days compared with 15.7% of the general population. This difference is statistically significant.

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%

Figure 23: Binge drinking in the past 30 days, 2005-2010, combined UIHO service areas*



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 24: Selected alcohol-associated mortality, 2003-2007, combined UIHO service areas*

Cause of Death	AI/AN Mortality Rate (per 100,000)	All Race Mortality Rate (per 100,000)
Chronic liver disease and cirrhosis	21.6	9.2
Alcohol-induced death	16.4	5.9

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 all UIHO service areas combined is 21.6 per 100,000 among AI/ANs. This rate is notably higher than the rate of 9.2 per 100,000 people in the general population. This difference is statistically significant.

The alcohol-induced death rate among AI/AN in all UIHO service areas combined (16.4 per 100,000) also is notably higher than the rate in the general population (5.9 per 100,000). This difference is statistically significant.

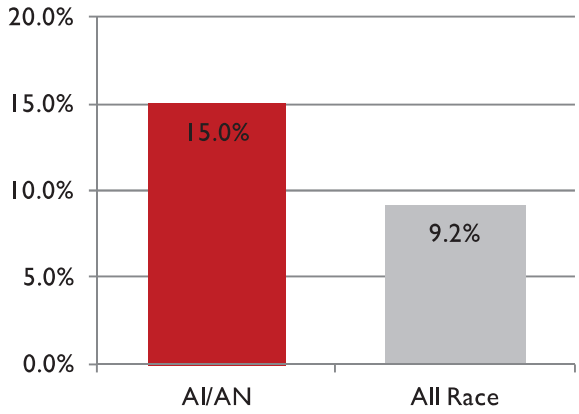
MENTAL HEALTH AND WELLNESS

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 (9.2%), a higher percentage of AI/ANs in all UIHO service areas combined report rarely or never receiving the emotional and social support that they need (15.0%). This difference is statistically significant.

Figure 25: Rarely/never gets social/emotional support, 2005-2010, combined UIHO service areas*



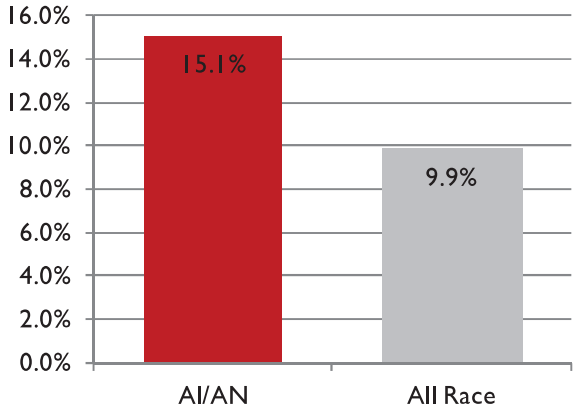
Source: CDC, Behavioral Risk Factor Surveillance System

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 all UIHO service areas combined, a higher percentage of AI/ANs report frequent mental distress (15.1%) compared with the general population (9.9%). This difference is statistically significant

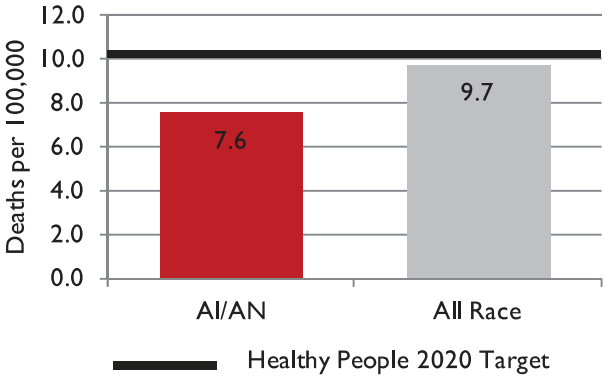
Figure 26: At least 14 poor mental health days in the past 30 days, 2005-2010, combined UIHO service areas*



Source: CDC, Behavioral Risk Factor Surveillance System

Suicide

Figure 27: Suicide, 2003-2007, combined UIHO service areas*



Source: U.S. Center for Health Statistics

In some cases severe mental distress or mental illness can lead to self-harm or suicide. In all UIHO service areas combined, the rate of suicide among AI/ANs is 7.6 per 100,000. The suicide rate in the general population is 9.7 per 100,000. Although this difference is statistically significant, 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 all UIHO service areas 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.

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APPENDIX A: Detailed Tables of AQI Data

The table below shows the number of days in 2010 with an AQI over 100 in each UIHO service county. The Healthy People 2020 target is 10 or fewer days per year with an AQI over 100.

Table A: Number of days with Air Quality Index (AQI) > 100, 2010, individual counties served by UIHOs

County	Number of days with AQI >100
Kern County, CA	87
Tulare County, CA	82
Los Angeles County, CA	80
Fresno County, CA	63
Missoula County, MT	34
Cook County, IL	23
Sacramento County, CA	21
Wayne County, MI	20
San Diego County, CA	19
San Luis Obispo County, CA	18
Salt Lake County, UT	17
Madera County, CA	15
Weber County, UT	15
Tarrant County, TX	14
Ventura County, CA	13
Maricopa County, AZ	13
Richmond County, NY	12
Yellowstone County, MT	9
Lewis and Clark County, MT	9
Santa Clara County, CA	8
Silver Bow County, MT	8
Denton County, TX	8
Douglas County, CO	8
Jefferson County, CO	8
Milwaukee County, WI	8
Dallas County, TX	7
Davis County, UT	7
Tooele County, UT	7
Utah County, UT	7
Macomb County, MI	6
St. Clair County, MI	6
Brown County, WI	6
Door County, WI	5
Johnson County, TX	5
Queens County, NY	5

County	Number of days with AQI >100
Alameda County CA	4
Contra Costa County, CA	4
Hood County, TX	4
Santa Barbara County, CA	4
Arapahoe County, CO	3
Bernalillo County, NM	3
Collin County, TX	3
Douglas County, NE	3
Essex County, MA	3
Norfolk County, MA	3
Boulder County, CO	2
Bronx County, NY	2
Marin County, CA	2
New York County, NY	2
Parker County, TX	2
Pima County, AZ	2
Ramsey County, MN	2
San Francisco County, CA	2
Sarpy County, NE	2
Sedgwick County, KS	2
Suffolk County, MA	2
Sumner County, KS	2
Clackamas County, OR	1
Coconino County, AZ	1
Hennepin County, MN	1
King County, WA	1
Middlesex County, MA	1
Minnehaha County, SD	1
Monroe County, MI	1
Oakland, County, MI	1
Rockwall County, TX	1
San Mateo County, CA	1
Washoe County, NV	1
Waukesha County, WI	1
Woodbury County, IA	1

APPENDIX A: Detailed Tables of AQI Data (continued)

Table A (continued): Number of days with Air Quality Index (AQI) > 100, 2010, individual counties served by UIHOs

County	Number of days with AQI >100
Adams County, CO	0
Brown County, SD	0
Carson City County, NV	0
Cascade County, MT	0
Churchill County, NV	0
Clark County, WA	0
Denver County, CO	0
Douglas County, NV	0
Ellis County, TX	0
Kaufman County, TX	0
Kings County, NY	0
Lancaster County, NE	0
Multnomah County, OR	0
Plymouth County, MA	0
Spokane County, WA	0
Stanley County, SD	0
Washington County, NE	0
Washington County, OR	0
Washtenaw County, MI	0

County	Number of days with AQI >100
Big Horn County, MT	no data available
Broadwater County, MT	no data available
Broomfield County, CO	no data available
Butler County, KS	no data available
Gilpin County, CO	no data available
Hughes County, SD	no data available
Jefferson County, MT	no data available
Livingston County, MI	no data available
Reno County, KS	no data available
Storey County, NV	no data available
Wise County, TX	no data available

Source: Environmental Protection Agency

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