Community Health Profile
2009

Eastern Montana
Great Falls, Billings

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Community Health Profile

Note to Readers

For a complete list of urban Indian health organizations, and links to their health profiles, please visit: www.uihi.org

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

This health profile provides an overview of the health status of the AI/AN population living in the service area of "Eastern Montana" including; Great Falls and Billings. We have combined these service areas so that we can present data specific to this region. This profile examines preventable causes of illness, death, access to care, and burden of disease for this urban community. While this report covers key health indicators, not every health concern affecting the AI/AN community is examined.

The health indicators covered provide data across two comparison groups: AI/AN and the general population (all race). In the instance where local data are unavailable, state or national data are presented.

For more information please contact the
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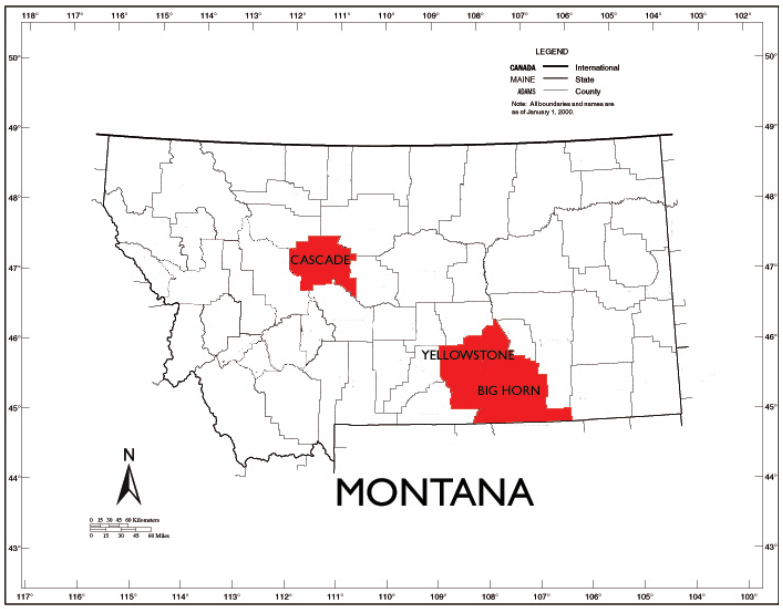
Counties served by the combined service area of Eastern Montana:

- Big Horn
- Cascade
- Yellowstone

Figure 1. Eastern Montana



Source: 2000 US Census.
Note: Counties served by the combined service area of Eastern Montana are highlighted in red.

Notes on Data Use and Limitations

General Limitations:
Racial misclassification is defined as incorrect coding of an individual's race or ethnicity in public records. Racial misclassification of AI/AN on surveillance data is well documented,[1, 2] complicating epidemiologic assessments. For example, the monitoring of AI/AN health status and evaluation of health outcomes are made more difficult by racial misclassification, which often results in a gross underestimate of the true disease burden.[3] Additionally, racial misclassification distorts overall population counts and can negatively impact equitable resource allocation. Because of this consistently documented research, we assume that many of the health disparities presented in this community health profile using vital records data are larger than reported.
Data presented are specific to the county(s) in this urban Indian health organization service area. However, in some instances, county level data are aggregated with other counties because the number of events (e.g., births, deaths, respondents) are too small to report.

Behavioral Risk Factors Surveillance System (BRFSS):
While the BRFSS is the world's largest on-going telephone survey, and includes enough AI/AN respondents at the national level for meaningful analysis, it has several limitations. First, as a telephone survey, only households with phone service are included in this survey, which eliminates certain segments of the population that may be more at risk of poor health outcomes. Second, phone surveys introduce the possibility of bias. There may be something inherently different about people who agree to participate in the phone survey compared to those who do not. Because we have no information about individuals who do not participate in the survey, we cannot assess the degree to which there is a difference in health and behaviors between these groups. Finally, individuals may have difficulty recalling information accurately or may choose not to answer questions truthfully. For more information about the BRFSS, please visit: http://www.cdc.gov/BRFSS.

Census Data:
Readers of this community health profile will note the use of 2000 U.S. Census data. While this data is currently the only data available, it is almost 10 years old at the time of this report's publication. As such, it does not reflect the changes in population count and poverty that are predicted.

Vital Records:
Collection methods for prenatal care and maternal smoking collected on birth certificates have recently changed. In order to address this, we present data pre-certificate change (1998-2002). To protect individual confidentiality, some indicators (e.g., SIDS) are presented with more years (1995-2004) so that reporting on this important indicator is possible.

Notes on Race Classification:
Data from the 2000 Census allow for multiple race categories, and mixed racial background reporting. Census data presented in this profile include people reporting AI/AN heritage alone and AI/AN heritage in combination with another race. The terms "all race" and "general population" are used interchangeably.

For the BRFSS data, respondents are asked two questions regarding race:
1. Which one or more of the following would you say is your race?
2. Which one of these groups would you say best represents your race?

The BRFSS data presented in this community health profile reports on individuals who selected AI/AN as "the group that best represents your race."

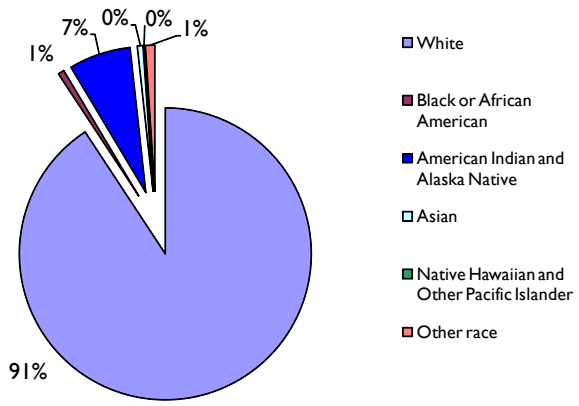
Census Overview

The Eastern Montana service area is home to a diverse group of AI/AN people. According to the 2000 Census, over **17,000*** residents reported that they are of AI/AN heritage.

* This number includes AI/AN alone and in combination with another race

Race/Ethnicity

Figure 2. Total Population, Eastern MT Service Area



Source: 2000 US Census.
Note 1: Legend corresponds clockwise on the pie graph starting from the largest population group, White.
Note 2: This figure refers to those who identify themselves as AI/AN alone.

Population

Figure 3. Eastern MT Service Area

Total population:	222,380
AI/AN population:	17,698

Source: 2000 US Census.

Age

The AI/AN population in the combined service area is younger than the population overall.

Figure 4. Age Distribution

Age	All Race	AI/AN
0-17 yrs	26.3%	40.1%
18-24 yrs	9.2%	11.4%
25-44 yrs	28.4%	28.4%
45-64 yrs	22.9%	15.9%
65+ yrs	13.3%	4.1%

Source: 2000 US Census.

Educational Attainment

AI/AN suffer disparities in educational attainment. In the combined service area, 23.9% of AI/AN residents do not have a high school degree compared with 12.6% of the general population.

Figure 5. Educational Attainment, 25 and older

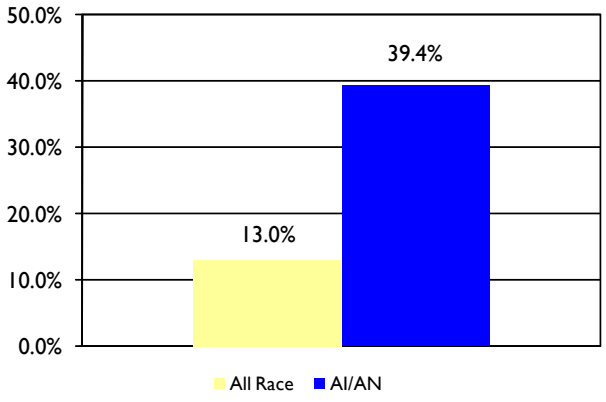
Highest Level of Education	All Race	AI/AN
No High School Diploma/GED	12.6%	23.9%
High School Diploma/GED	31.8%	29.9%
Some College	31.5%	35.6%
BA/MA/PhD Degree	24.0%	10.5%

Source: 2000 US Census.

Poverty

In the combined service area, 39.4% of AI/AN residents are living in poverty - three times the general population (13%).

Figure 6. Poverty Status



Source: 2000 US Census.

Mortality Overview

Top Causes of Mortality

Similar to the general population, heart disease and cancer are the two most common causes of death among AI/AN residents in the network of urban Indian health organizations.*

Racial miscoding of AI/AN on vital records has been well documented (see limitations section), therefore many of the results presented in Figure 7 may be unrealistically low.

* National data substituted for local data, see limitations section

Figure 7. AI/AN Top Cause Mortality, 2001-2005

Top Causes of Death	Rate (Per 100,000)
1. Heart disease	101.6
2. Cancer	80.0
3. Unintentional injury	34.0
4. Diabetes	26.8
5. Cerebrovascular disease	24.9

Source: US Centers for Health Statistics.

Cancer Mortality

Lung cancer is the leading cause of cancer deaths among AI/AN living in the network of urban Indian health organizations.* Many factors contribute to the risk of developing lung cancer including: smoking and being around others who smoke, exposure to radon gas or asbestos, and a family history of lung cancer. [4]

* National data substituted for local data, see limitations section

Figure 8. AI/AN Cancer Mortality, 2001-2005

Top Causes of Cancer Mortality	Rate (Per 100,000)
1. Lung	22.1
2. Prostate	11.2
3. Breast	10.1
4. Colorectal	6.8

Source: US Centers for Health Statistics.

Disparities in Mortality

Figure 9 shows select mortality disparities among the AI/AN population living in the network of urban Indian health organizations.*

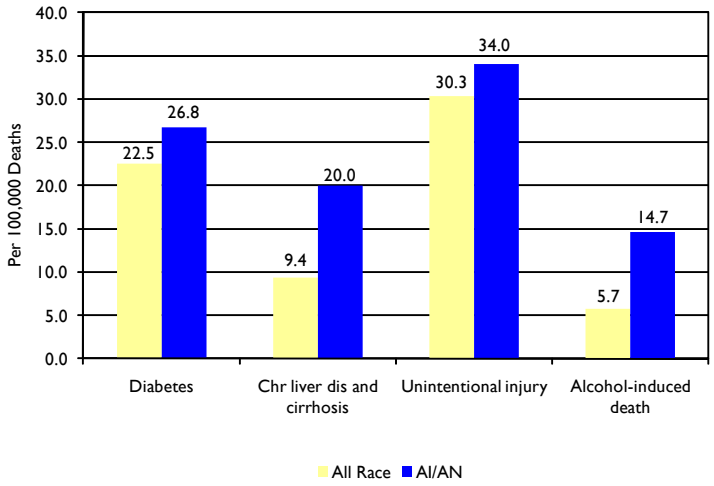
Among AI/AN residents, the alcohol-induced mortality rate is 14.7/100,000, higher than the general population (5.7/100,000)

Among AI/AN residents, the chronic liver disease and cirrhosis mortality rate is 20.0/100,000, higher than the general population (9.4/100,000)

Among AI/AN residents, the diabetes mortality rate is 26.8/100,000, higher than the general population (22.5/100,000)

* National data substituted for local data, see limitations section

Figure 9. Select Mortality Disparities, 2001-2005



Source: US Centers for Health Statistics.

Reported Health and Health-Influencing Behaviors

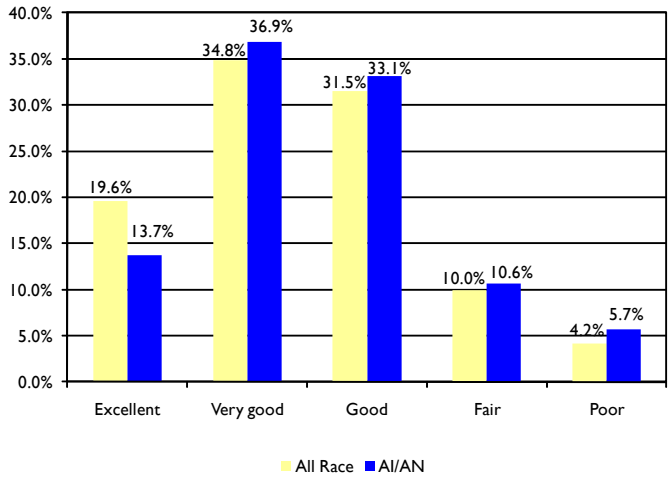
Self-Reported Health Status

Self-reported health status captures symptoms of disease in addition to diagnosed illness. Its use broadens the scope of information gathered to include perceptions of health, treatment adherence, and resources available within the environment. [5]

For the Behavioral Risk Factors Surveillance System (BRFSS), respondents are asked to rate their own health using one of the following options: "Excellent", "Very Good", "Good", "Fair" or "Poor".

Over 16% of the AI/AN population in the combined service area rated their own health as fair or poor compared with 14.2% in the general population.

Figure 10. Self-Reported Health Status, 2004-2008



Source: CDC, Behavioral Risk Factor Surveillance System.

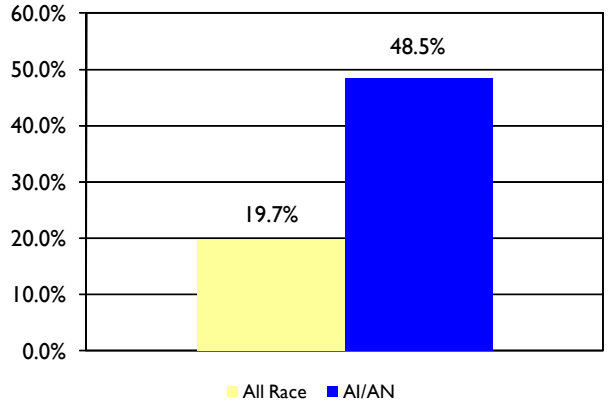
Tobacco Use

Over 48% of AI/AN residents in the combined service area report that they are current smokers compared with 19.7% of the general population.

The negative health effects of smoking are well documented and include an increased risk of lung cancer and stroke. [6]

For information on how your urban Indian health organization can help reduce rates of smoking in your service area, contact your local health department.

Figure 11. Current Smoker, 2004-2008



Source: CDC, Behavioral Risk Factor Surveillance System.

Disease Prevention Note: No matter how long one has been smoking, quitting is the most important step to take in order to reduce the risk of developing cancer and lung disease. According to the American Cancer Society, people who stop smoking before age 50 cut their risk of dying in the next 15 years in half compared with those who keep smoking. [7]

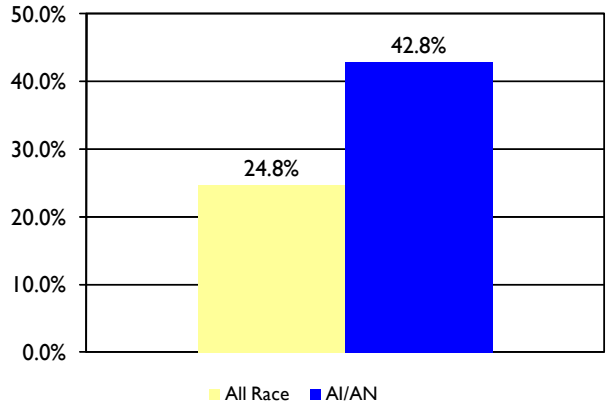
Reported Health and Health-influencing Behaviors (cont'd)

Obesity

The prevalence of obesity in AI/AN communities points to an urgent need for culturally appropriate prevention programs and increased access to healthy foods. Over 42% of AI/AN living in the combined service area report they are obese compared with 24.8% of the general population.

The lack of fitness and physical activity combined with overconsumption of unhealthy foods likely drive the obesity epidemic. Exercising and eating healthy are two ways to prevent obesity.

Figure 12. Obesity (BMI≥30), 2004-2008



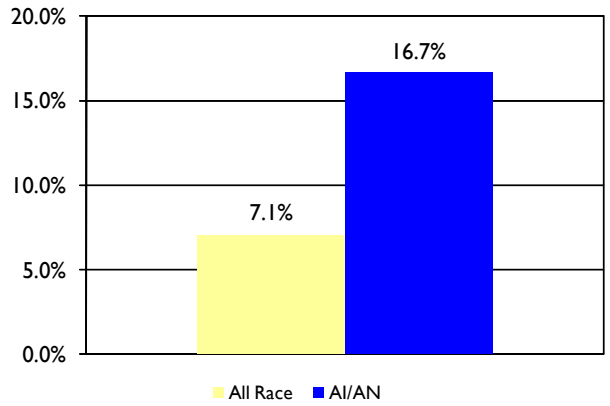
Source: CDC, Behavioral Risk Factor Surveillance System.

Diabetes

Nationally, AI/AN suffer a disproportionate burden of diabetes. Among AI/AN living in the combined service area, 16.7% have been told by a doctor that they have diabetes compared to 7.1% of the general population.

With diagnosis of diabetes comes the additional cost of managing the disease. According to the American Diabetes Association, people with diabetes, on average, have medical expenditures that are 2.3 times higher than those without diabetes.

Figure 13. Diagnosed with Diabetes, 2004-2008



Source: CDC, Behavioral Risk Factor Surveillance System.

Disease Prevention Note: There is a strong relationship between obesity and diabetes,[8] and research suggests weight loss can help prevent the onset of type 2 diabetes. Diabetes is associated with a number of life threatening conditions including heart disease, stroke, high blood pressure and kidney disease. If not properly managed, diabetes can result in amputations, blindness and premature death. [8]

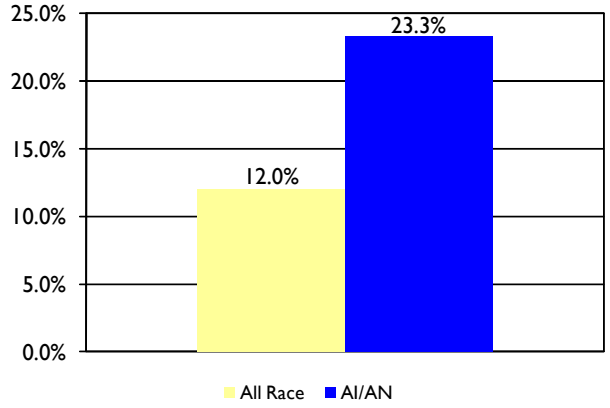
Barriers to Care

Could Not See Doctor Because of Cost

Affordable health care is an essential component of health promotion and disease prevention. One of the Healthy People 2010 (HP 2010) goals is to reduce the proportion of families that experience difficulties or delays in obtaining health care or do not receive needed care for one or more family members.

The HP 2010 target is 7%. Over 23% of AI/AN living in the combined service area report they were unable to see a doctor in the past year because of cost issues.

Figure 14. Could Not See a Doctor Because of Cost, 2004-2008



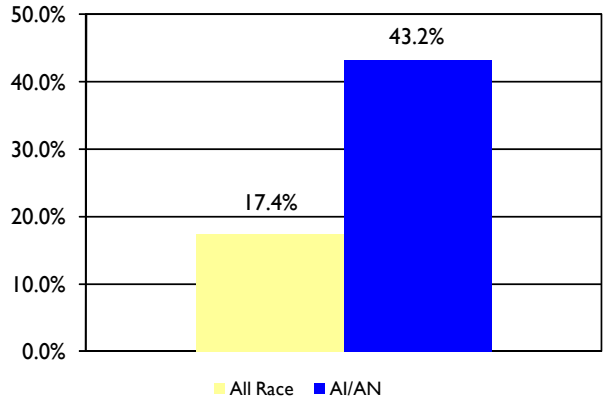
Source: CDC, Behavioral Risk Factor Surveillance System.

Had No Insurance in Past 12 Months

Over 43% of AI/AN living in the combined service area report not having health care coverage (including federal programs) in the past year compared to 17.4% of the general population.

Health service research has documented serious health and financial consequences associated with being uninsured. Those without adequate health coverage have 55% fewer interactions with health care providers. The uninsured receive less preventive care, are typically diagnosed with more advanced disease status, and have higher mortality rates compared to the insured. [9]

Figure 15. No Health Insurance, 2004-2008



Source: CDC, Behavioral Risk Factor Surveillance System.

Disease Prevention Note: Access to health care is an essential component of preventing illness and treating disease. The network of title V urban Indian health organizations make outpatient health services accessible to urban Indians, either directly or by referral. Despite increasing numbers of AI/AN in census defined urban areas, funding for urban Indian health has remained at approximately 1% of Indian Health Services' annual appropriations since 1979. [10]

The Health of Mothers and Children

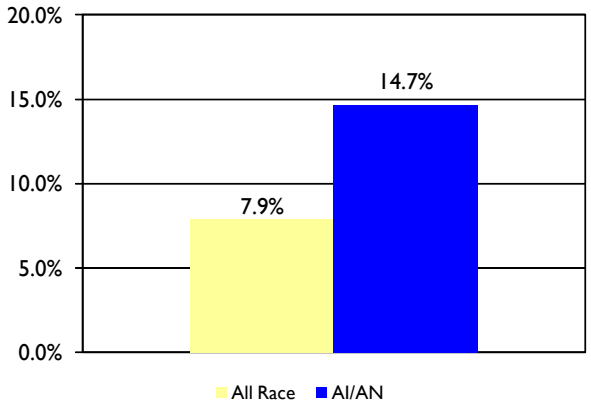
Smoking During Pregnancy

In the network of urban Indian health organizations, 14.7 of AI/AN women report smoking during pregnancy compared to 7.9% of the general population.*

Smoking during pregnancy has been identified as the most important potentially preventable cause of low birth-weight in the United States. According to the CDC, babies born to women who smoke during pregnancy are about 30% more likely to be born prematurely.[11]

* National data substituted for local data, see limitations section

Figure 16. Smoking During Pregnancy, 1998-2002*



Source: US Centers for Health Statistics.
* See limitations section for use of data 1998-2002

Births to Teen Mothers

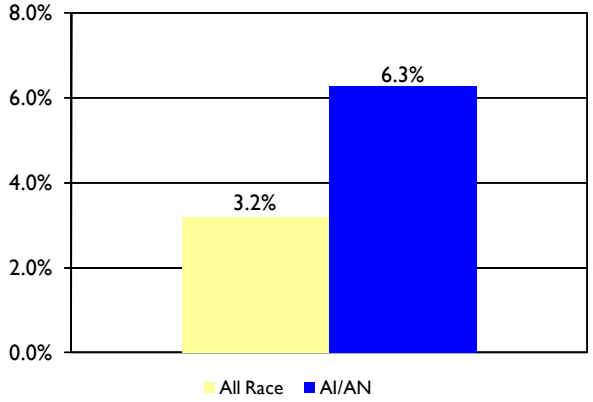
In the network of urban Indian health organizations, 6.3% of births to teen mothers are among AI/AN compared with 3.2% in the general population..*

Adolescent pregnancies carry additional health risks for the mother and the baby, including premature birth and low birth weight.[12]

Accessing prenatal resources and navigating the health care system is difficult enough for most new mothers, but the risk of inadequate prenatal care for young mothers is even greater.[12]

* National data substituted for local data, see limitations section

Figure 17. Births to Teen Mothers, 2001-2005



Source: US Centers for Health Statistics.

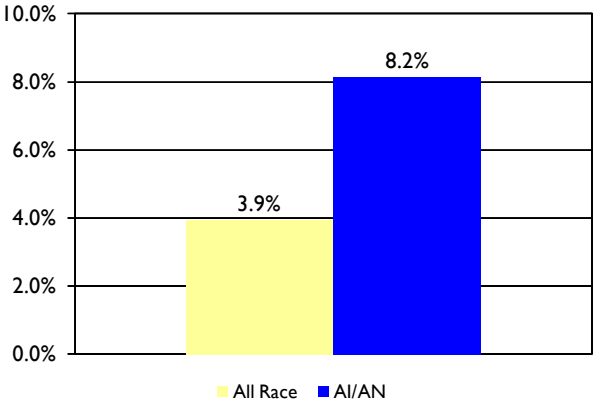
Late or No Prenatal Care

Late prenatal care is defined as care received at the 7th month of pregnancy or later. In the network of urban Indian health organizations, 8.2% of AI/AN women are receiving late or no prenatal care compared with 3.9% of the general population.*

Comprehensive prenatal care can promote healthy pregnancies. Women who receive early prenatal care can detect and manage preexisting conditions and receive health behavior advice, reducing the risk of adverse birth outcomes.[13]

* National data substituted for local data, see limitations section

Figure 18. Late or No Prenatal Care, 1998-2002*



Source: US Centers for Health Statistics.
* See limitations section for use of data 1998-2002

The Health of Mothers and Children (cont'd)

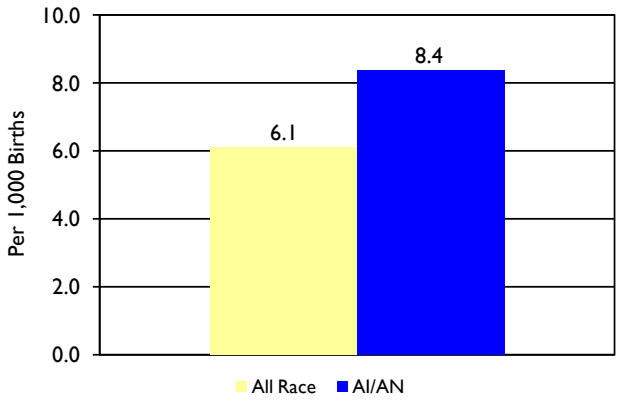
All Cause Infant Mortality

The infant mortality rate is defined as the number of babies less than one year of age that die per 1,000 live births.

In the network of urban Indian health organizations, the rate of AI/AN infant deaths is 8.4 out of every 1,000 live births - higher than that reported in the general population (6.1). *

* National data substituted for local data, see limitations section

Figure 19. All Cause Infant Mortality, 2000-2004



Source: US Centers for Health Statistics.

SIDS

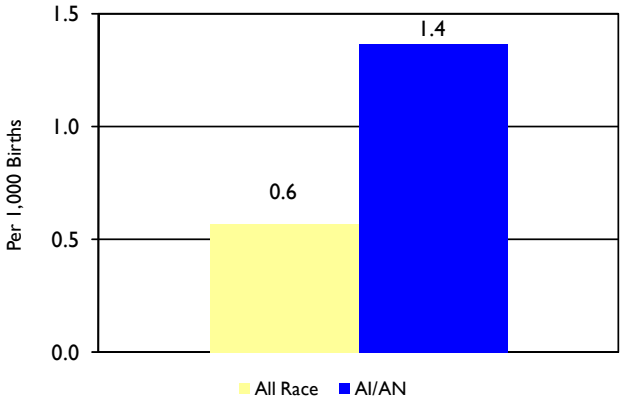
In the network of urban Indian health organizations, the rate of AI/AN infant deaths due to Sudden Infant Death Syndrome (SIDS) is 1.4 out of every 1,000 live births *

Little is known about the causes of SIDS, or why the AI/AN community has a higher prevalence of SIDS related deaths.

Parents can reduce the risk to their baby by always placing the baby on his/her back to sleep, placing the baby on a firm sleep surface, and avoid letting the baby overheat during sleep.[14]

* National data substituted for local data, see limitations section

Figure 20. Infant Mortality Due to SIDS, 1995-2004



Source: US Centers for Health Statistics.

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For questions or comments please contact:
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