



American Indian and Alaska Native Heart Disease and Stroke Fact Sheet

Heart disease is the leading cause of death among American Indians and Alaska Natives. In 2003, heart disease caused 2,712 deaths. Source: <http://www.cdc.gov/nchs/hus.htm>.

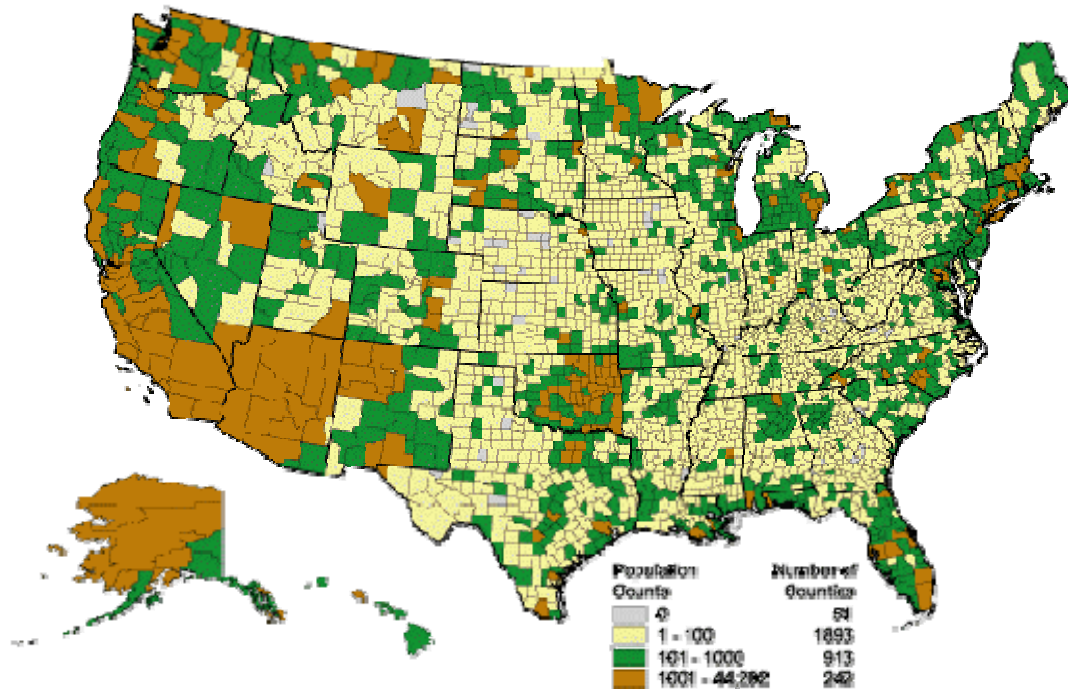
Stroke is the fifth leading cause of death among American Indians and Alaska Natives. In 2003, stroke caused 552 deaths.

Heart disease and stroke are also major causes of disability and can decrease a person's quality of life.



Photo courtesy of the Indian Health Service/U.S. Department of Health and Human Services.

American Indian and Alaska Native Adults Ages 35 Years and Older 2000 Census Population Estimates



Data Source: CDC National Center for Health Statistics (NCHS) and U.S. Census Bureau. Population estimates are based on Bridged Race Vintage 2003 Postcensal Population Estimates from NCHS.

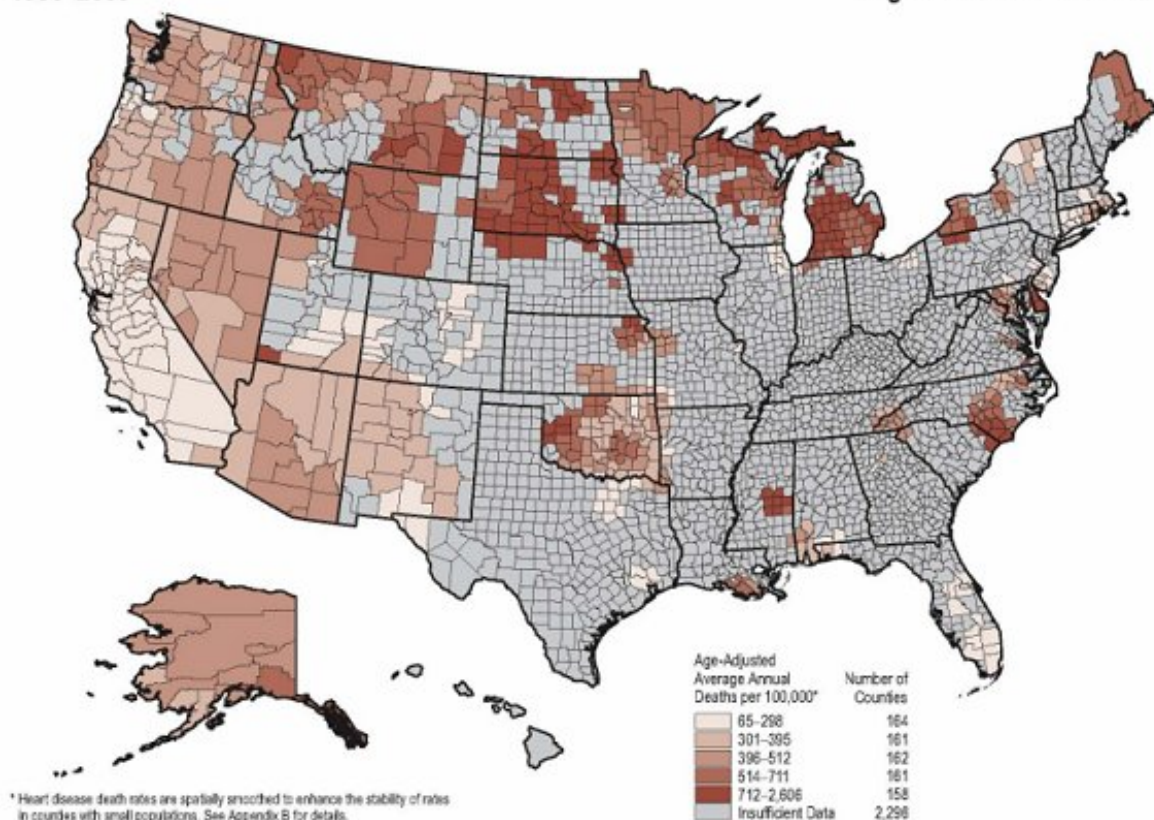
The American Indian and Alaska Native Population

- There are approximately 4.5 million American Indians and Alaska Natives in the United States, 1.5% of the population, including those of more than one race.
- The median age of American Indians and Alaska Natives is 30.7 years, younger than the 36.2 years of the total U.S. population.
- California has the largest population of American Indians and Alaska Natives (696,600), followed by Oklahoma (401,100), and Arizona (334,700). Alaska has the highest proportion of American Indians and Alaska Natives in its populations (20%), followed by Oklahoma and New Mexico (11% each). Los Angeles County is the county with the most American Indians and Alaska Natives (154,000).
- A language other than English is spoken at home by 25% of American Indians and Alaska Natives aged 5 years and older.
- A high school diploma is held by 76% of American Indians and Alaska Natives over age 25; 14 percent have a bachelor's degree or higher. The poverty rate of people who report American Indian and Alaska Native race only is 25%.
- Approximately 177,000 American Indians and Alaska Natives are veterans.

Source: U.S. Census Bureau, CB06-FF.16; September 20, 2006. http://www.census.gov/Press-Release/www/releases/archives/facts_for_features_special_editions/007489.html.

Smoothed County Heart Disease Death Rates
1996–2000

American Indians and Alaska Natives
Ages 35 Years and Older



Heart disease death rates are spatially smoothed to enhance the stability of rates in counties with small populations. Deaths are defined according to the following International Classification of Diseases (ICD) codes: ICD-9: 390–398, 402, 404–429; ICD-10: 100–109, I11, I13, 120–151. Data Sources: National Vital Statistics System, CDC, and the U.S. Census Bureau.

American Indian and Alaska Native Heart Disease and Stroke Facts

- Heart Disease is the first and stroke the sixth leading cause of death Among American Indians and Alaska Natives.*
- The heart disease death rate was 20 percent greater and the stroke death rate 14 percent greater among American Indians and Alaska Natives (1996–1998) than among all U.S. races (1997) after adjusting for misreporting of American Indian and Alaska Native race on state death certificates.*
- The highest heart disease death rates are located primarily in South Dakota and North Dakota, Wisconsin, and Michigan. †
- Counties with the highest stroke death rates are primarily in Alaska, Washington, Idaho, Montana, Wyoming, South Dakota, Wisconsin, and Minnesota. †
- American Indians and Alaska Natives die from heart diseases at younger ages than other racial and ethnic groups in the United States. Thirty–six percent of those who die of heart disease die before age 65. §
- Diabetes is an extremely important risk factor for cardiovascular disease among American Indians. ¶
- Cigarette smoking, a risk factor for heart disease and stroke, is highest in the Northern Plains (44.1%) and Alaska (39.0%) and lowest in the Southwest (21.2%) among American Indians and Alaska Natives. **

*Indian Health Service. Trends in Indian Health, 2000–2001. Rockville, Maryland: U.S. Department of Health and Human Services, 2004.

† Casper ML, Denny CH, Coolidge JN, Williams GI Jr, Crowell A, Galloway JM, Cobb N. Atlas of Heart Disease and Stroke Among American Indians and Alaska Natives. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and Indian Health Service, 2005. http://www.cdc.gov/cvh/library/aian_atlas/index.htm

§SS Oh, JB Croft, KJ Greenlund, C Ayala, ZJ Zheng, GA Mensah, WH Giles. Disparities in Premature Deaths from Heart Disease—50 States and the District of Columbia. MMWR 2004;53:121–25. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5306a2.htm>

¶Howard BV, Lee ET, Cowan LD, et al. Rising tide of cardiovascular disease in American Indians: the Strong Heart Study. Circulation. 1999;99: 2389–2395.

**CDC. Surveillance for health behaviors of American Indians and Alaska Natives: findings from the Behavioral Risk Factor Surveillance System, 1997–2000. In: CDC Surveillance Summaries (August 1). MMWR 2003;52(No. SS–7). <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5207a1.htm>

Preventing Heart Disease and Stroke Among American Indians and Alaska Natives

Prevent and Control High Blood Cholesterol

High blood cholesterol is a major risk factor for heart disease. Preventing and treating high blood cholesterol includes eating a diet low in saturated fat and cholesterol and high in fiber, keeping a healthy weight, and getting regular exercise. All adults should have their cholesterol levels checked once every five years. If yours is high, your doctor may prescribe medicines to help lower it. [See our cholesterol fact sheet.](#)

Prevent and Control High Blood Pressure

Lifestyle actions such as healthy diet, regular physical activity, not smoking, and healthy weight will help you

to keep normal blood pressure levels and all adults should have their blood pressure checked on a regular basis. Blood pressure is easily checked. If your blood pressure is high, you can work with your doctor to treat it and bring it down to the normal range. A high blood pressure can usually be controlled with lifestyle changes and with medicines when needed. [See our high blood pressure fact sheet.](#)

Prevent and Control Diabetes

Diabetes has been shown to be a very important risk factor for heart disease among American Indians and Alaska Natives.* People with diabetes have an increased risk for heart disease but can reduce their risk. Also, people can take steps to reduce their risk for diabetes in the first place, through weight loss and regular physical activity. For more information about diabetes, [see CDC's diabetes program Web site.](#)

No Tobacco

Chewing, dipping and cigarette smoking are non-traditional uses of tobacco among American Indians and Alaska Natives. Smoking increases the risk of high blood pressure, heart disease, and stroke. Never smoking is one of the best things a person can do to lower their risk. And, quitting smoking will also help lower a person's risk of heart disease. A person's risk of heart attack decreases soon after quitting. If you smoke, your doctor can suggest programs to help you quit smoking. For more information about tobacco use and quitting, [see CDC's tobacco intervention and prevention Web site.](#)

Moderate Alcohol Use

Excessive alcohol use increases the risk of high blood pressure, heart attack, and stroke. People who drink should do so only in moderation and always responsibly. More information on alcohol can be found at [CDC's alcohol and public health Web site.](#)

Maintain a Healthy Weight

Healthy weight status in adults is usually assessed by using weight and height to compute a number called the "body mass index" (BMI). BMI usually indicates the amount of body fat. An adult who has a BMI of 30 or higher is considered obese. Overweight is a BMI between 25 and 29.9. Normal weight is a BMI of 18 to 24.9. Proper diet and regular physical activity can help to maintain a healthy weight. You can compute your BMI at [CDC's nutrition and physical activity program Web site.](#)

Regular Physical Activity

Adults should engage in moderate level physical activities for at least 30 minutes on most days of the week. For more information, see [CDC's nutrition and physical activity program Web site.](#)

Diet and Nutrition

Along with healthy weight and regular physical activity, an overall healthy diet can help to lower blood pressure and cholesterol levels and prevent obesity, diabetes, heart disease, and stroke. This includes eating lots of fresh fruits and vegetables, lowering or cutting out added salt or sodium, and eating less saturated fat and cholesterol to lower these risks. For more information, see [CDC's nutrition and physical activity program Web site.](#)

Treat Atrial Fibrillation

Atrial fibrillation is an irregular beating of the heart. It can cause clots that can lead to stroke. A doctor can prescribe medications to help reduce the chance of clots. [See our fact sheet on this condition.](#)

Genetic Risk Factors

Stroke can run in families. Genes play a role in stroke risk factors such as high blood pressure, heart disease, diabetes, and vascular conditions. It is also possible that an increased risk for stroke within a family is due to factors such as a common sedentary lifestyle or poor eating habits, rather than hereditary factors. Find out more about genetics and diseases on [CDC's genomics and disease prevention Web site.](#)

* Howard BV, Lee ET, Cowan LD, et al. Rising tide of cardiovascular disease in American Indians: the Strong Heart Study. *Circulation.* 1999;99:2389-2395.

CDC Activities to Reduce the Burden of Heart Disease and Stroke Among American Indians and Alaska Natives

Atlas of Heart Disease and Stroke Among American Indians and Alaska Natives

This atlas is the first in a series of atlases to focus on a specific racial or ethnic group. It contains county level heart disease and stroke mortality maps (1995–1999) as well as state level surveillance data on heart disease and stroke risk factors (2001–2003). This information can help health professionals and concerned citizens tailor prevention policies and programs to communities with the greatest burden and risk. Available at: http://www.cdc.gov/cvh/library/aian_atlas/index.htm

CDC Funded State Heart Disease and Stroke Prevention Programs

CDC currently funds health departments in 32 states and the District of Columbia to develop, implement, and evaluate programs that promote heart-healthy and stroke-free communities; prevent and control heart disease, stroke, and their risk factors; and eliminate disparities among populations. These programs emphasize the use of education, policies, environmental strategies, and systems changes to address heart disease and stroke in various settings and to ensure quality of care. The programs in Alaska, Kansas, Maine, Minnesota, Montana, Nebraska, Oklahoma, Virginia, and Wisconsin are currently collaborating with American Indian and Alaska Native communities. For more information, visit www.cdc.gov/cvh/state_program/index.htm.

WISEWOMAN

The WISEWOMAN program provides low-income, under insured and uninsured women aged 40–64 years with chronic disease risk factor screening, lifestyle intervention, and referral services in an effort to prevent cardiovascular disease. CDC funds 15 WISEWOMAN projects, which operate on the local level in states and tribal organizations. Projects provide standard preventive services including blood pressure and cholesterol testing, and programs to help women develop a healthier diet, increase physical activity, and quit using tobacco. WISEWOMAN funds two programs working with Alaska Native women as well as programs serving American Indian women in Nebraska, Nevada, and South Dakota. For more information, visit www.cdc.gov/wisewoman.

REACH 2010

REACH 2010 is designed to eliminate disparities in cardiovascular disease as well as immunizations, breast and cervical cancer screening and management, diabetes, HIV/AIDS, and infant mortality. REACH 2010 supports community coalitions in designing, implementing, and evaluating community-driven strategies to eliminate health disparities. The activities of these community coalitions include continuing education on disease prevention for health care providers, health education and health promotion programs that use lay health workers to reach community members, and health communications campaigns. REACH funds core capacity building projects in American Indian and Alaska Native communities in Albuquerque, NM; Oklahoma City and Tahleah, OK; Anchorage, AK; and Nashville, TN. For more information, visit www.cdc.gov/reach2010.

For More Information

For more information on heart disease and stroke among American Indians and Alaska Natives, visit the following web sites.

CDC's Cardiovascular Health Program

<http://www.cdc.gov/cvh>

Indian Health Service

<http://www.ihs.gov>

Native American Cardiology Program

<http://www.ihs.gov/medicalprograms/cardiology/card/index.cfm>

American Heart Association*

<http://www.americanheart.org>

American Stroke Association*

<http://www.strokeassociation.org>

National Heart, Lung, and Blood Institute

<http://www.nhlbi.nih.gov/>