

THE AMERICAN INDIAN POPULATION— HEALTH STATUS

COLORADO IS HOME TO TWO SOVEREIGN INDIAN NATIONS, the Ute Mountain Utes and Southern Utes, with reservations located in the southwest corner of the state. Additionally, members of 35 different tribal nations live in Colorado’s urban, suburban, and rural areas.⁸⁷

Determining the health status of Colorado’s American Indian population is challenging due to issues of data collection and analysis (Figure 51). To overcome this, multiple years of Colorado data have been compared with national trends to aid in determining patterns of health indicators.

Possibly most notable for this population, both nationally and in Colorado, is the observable trend toward leading causes of death that occur earlier in the life course.⁸⁸ For example, diabetes, chronic liver disease/cirrhosis, and motor vehicle crashes are areas where American Indians tend

American Indians have comparatively lower rates of chronic disease, including heart disease, cancer, and cerebrovascular disease, than other racial and ethnic groups.



to have relatively higher rates, both nationally and in Colorado. Suicide and homicide are leading causes of death nationally as well.⁸⁹ American Indians have comparatively lower rates of chronic disease,

including heart disease, cancer, and cerebrovascular disease, than other racial and ethnic groups.

Figure 51. Data Issues: Assessing the Health Status of American Indians

Population numbers are used as the denominator to calculate rates of disease, death, and disability. With a 2000 Census methodology change, multiracial individuals could, for the first time, choose to identify with more than one racial category. This change seemed to impact the American Indian population count the most. There was a 37 percent increase in the number of people identifying as American Indian from 1990 to 2000 in the Colorado Census count (Figure 51a). One reason for this may be an increase in births of interracial marriage to American Indians during the 1990s.⁹⁰ With a significant increase in the population numbers, the denominator of disease, disability, and death rate calculations were also significantly increased.

Related to the population issue is the problem that people who self-identify as American Indian on the Census may not be counted as an American Indian by others who fill out disease reporting forms or death certificates. For example, several studies have indicated that misreporting on death certificates occurs most often among people who identify as American Indian, with as many as 21 to 26 percent of deaths misidentified. Numbers of diseases and deaths are used as the numerator for calculating disease, disability, and death rates. The incongruence between Census self-identification and disease/death reporting can artificially decrease the death and disease rates for this population, making the health indicators look better than they actually are.

Figure 51a. American Indian Census Counts in Colorado: 1990, 2000

	1990	2000	Change
Total American Indians	27,776	44,241	16,465

Source: R. Lin., Colorado Division of Local Government, Table 1A: “American Indians in the Census 1990 and Census 2000 Counts” (Denver: 2004).

Finally, because of the small population of American Indians in Colorado, rates of disease, disability and death can vary widely, taking only a few events to significantly (and possibly misleadingly) increase or decrease a rate. Health indicators in this section should be interpreted with caution by considering the data issues identified.

HEALTH DISPARITIES

1. CHRONIC DISEASE

Diabetes Mellitus

Nationally, American Indians have a higher diabetes death rate than many other racial and ethnic groups, ranging between 34.1 and 45.9 per 100,000 persons for the specified years (Figure 52).⁹¹ In Colorado, for the combined years of 1995–1999, American Indians had an average diabetes death rate of 27.7 per 100,000, which was statistically higher than the state average rate of 18.3 per 100,000 (Figure 53). For the combined years of 1998–2002, the average diabetes death rate of 24.1 per 100,000 was not statistically higher than the state average rate.^{92, 93}

Figure 52. DIABETES MELLITUS: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

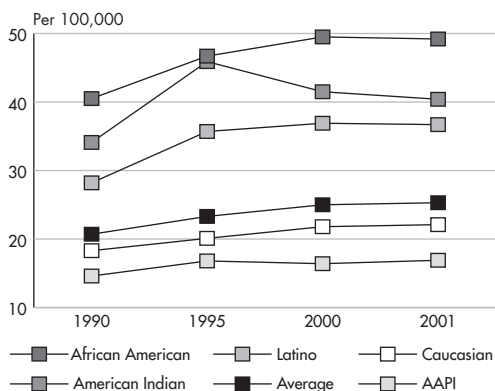
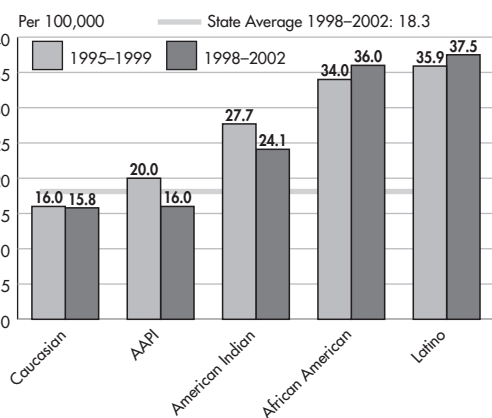


Figure 53. DIABETES MELLITUS: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



Chronic Liver Disease/Cirrhosis

Chronic liver disease can be caused by a number of factors including alcohol abuse, hepatitis and other viruses, use of certain drugs, chemical exposure, hereditary conditions, and diseases such as diabetes or an autoimmune disorder.⁹⁴

Nationally, the American Indian population shows a trend of having the highest death rate of chronic liver disease/cirrhosis, ranging between 24.1 and 27.4 per 100,000 for the years specified (Figure 54).⁹⁵ In Colorado during the years 1995–1999, this population had an average death rate from chronic liver disease/cirrhosis of 25.7 per 100,000, which was statistically higher than the state average rate.⁹⁶ During the years 1998–2002, this population's average death rate was 15.5 per 100,000, which was not statistically significantly higher than the state average rate (Figure 55).⁹⁷ The *Healthy People 2010* objective for this indicator is to reduce the rate of deaths from cirrhosis to no more than 3 per 100,000 persons.

Figure 54. Chronic Liver Disease/Cirrhosis: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

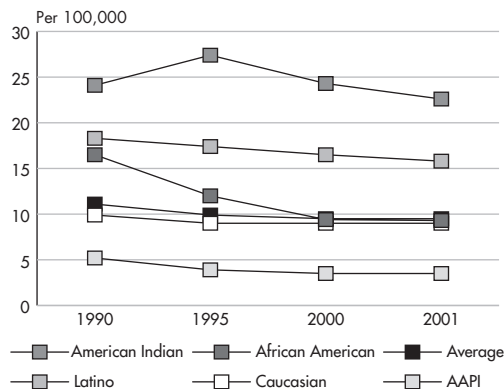
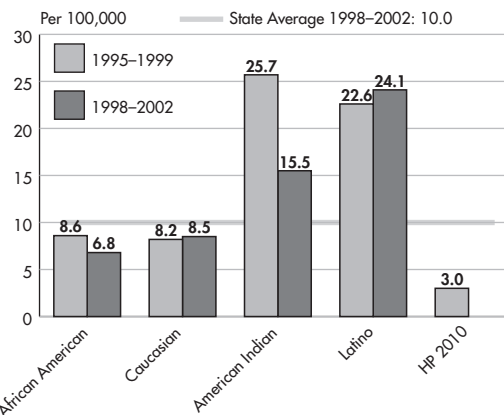


Figure 55. Chronic Liver Disease/Cirrhosis: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



Note: There were three or fewer deaths of Asian American/Pacific Islanders from chronic liver disease during the time period; therefore, a rate was not calculated.

2. INJURIES

Motor Vehicle-Related Injury Deaths

Nationally, the American Indian population shows a trend of having the highest rate of death resulting from a motor vehicle crash, ranging between 29.1 and 32.5 per 100,000 persons, for the specified years (Figure 56).⁹⁸ In Colorado, during the years 1995–1999, the American Indian population had an average rate of 25.7 per 100,000, which was statistically higher than the state average rate.⁹⁹ During the years 1998–2002, the average death rate of 10.8 per 100,000 was statistically lower than the state average death rate from motor vehicle injury deaths (Figure 57).¹⁰⁰ The *Healthy People 2010* objective for this indicator is to reduce the rate of death from motor vehicle-related injuries to no more than 9.0 per 100,000 persons.

Figure 56. MOTOR VEHICLE-RELATED INJURY DEATHS: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

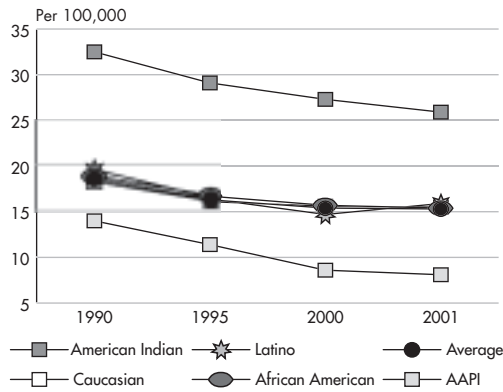
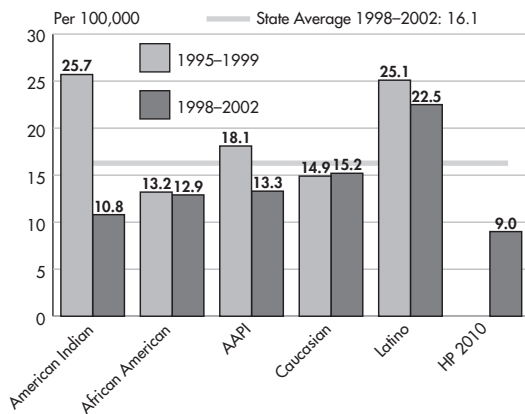


Figure 57. MOTOR VEHICLE-RELATED INJURY DEATHS: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



POSITIVE HEALTH INDICATORS

CHRONIC DISEASE

Heart Disease

Both nationally and in Colorado, heart disease is the leading cause of death for all racial and ethnic groups. Nationally, American Indians have shown a trend of having one of the lowest rates of deaths from heart disease, ranging between 159.6 (1990) and 204.6 (1995) per 100,000 (Figure 58).¹⁰¹ In Colorado, American Indians consistently have a death rate statistically lower than the state average rate. During the years 1995–1999, the average death rate from heart disease was 133.8 per 100,000.¹⁰² During the years 1998–2002, the average death rate was 98.8 per 100,000 (Figure 59).¹⁰³ The *Healthy People 2010* objective for this indicator is to reduce heart disease deaths to no more than 166 per 100,000 persons.

Figure 58. HEART DISEASE: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

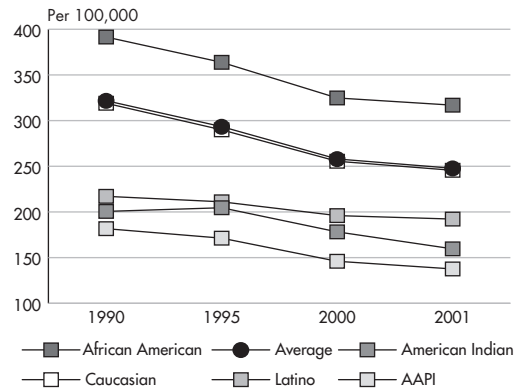
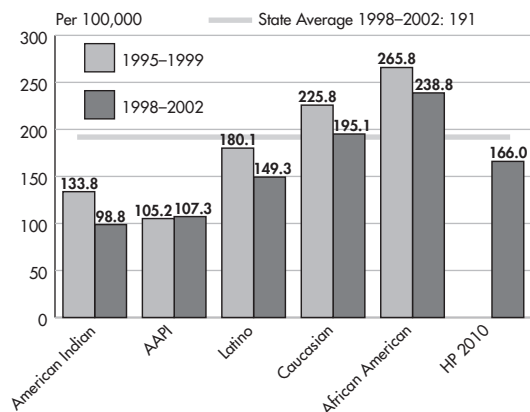


Figure 59. HEART DISEASE: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



Cancer

Nationally, the American Indian population shows a trend of having one of the lowest rates of cancer deaths (non site-specific), ranging between 121.8 (1990) and 138.2 (1995) per 100,000 persons (Figure 60).¹⁰⁴ In Colorado, American Indians consistently have lower rates of cancer deaths (Figure 61). During the years 1995–1999, the average rate was 105.1 per 100,000.¹⁰⁵ During the years 1998–2002, the average rate was 67.2 per 100,000, which was statistically lower than the state average death rate. The *Healthy People 2010* objective for this indicator is to reduce cancer deaths to no more than 158.7 per 100,000 persons.

Figure 60. CANCER: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

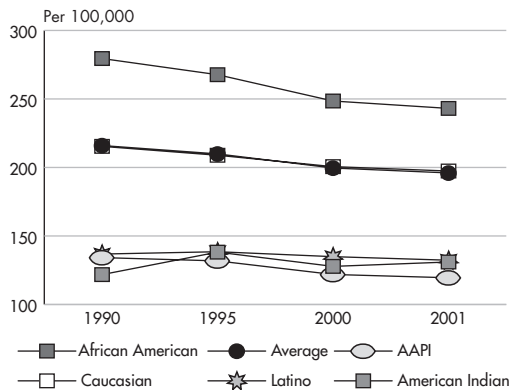
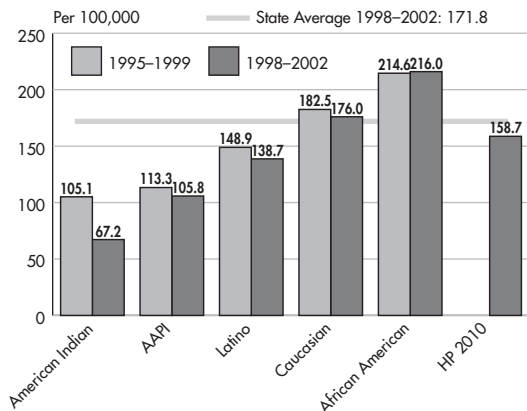


Figure 61. CANCER: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



Cerebrovascular Disease

Cerebrovascular disease is the third leading cause of death in Colorado. The most common type of a cerebrovascular disease event is a stroke. Nationally, American Indians consistently have one of the lowest rates of cerebrovascular disease deaths, ranging between 40.7 and 48.6 per 100,000 persons for the years specified (Figure 62).¹⁰⁶ This is consistent with Colorado, where

the American Indian population has death rates statistically lower than the state average. For the years 1995–1999, the average death rate was 35.9 per 100,000 (Figure 63).¹⁰⁷ During the years 1998–2002, the average death rate was 28.4 per 100,000.¹⁰⁸ The *Healthy People 2010* objective for this indicator is to reduce deaths from stroke to no more than 48 per 100,000 persons.

Figure 62. CEREBROVASCULAR DISEASE: U.S. Age-Adjusted Death Rates by Race/Ethnicity, 1990, 1995, 2000, 2001

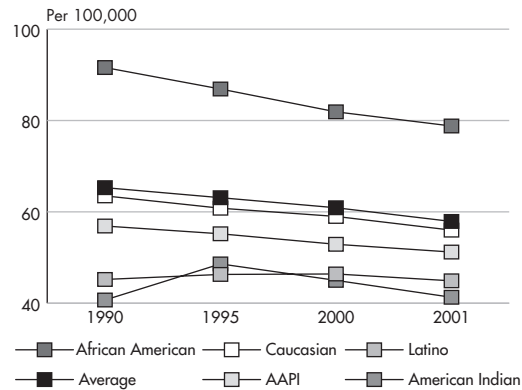
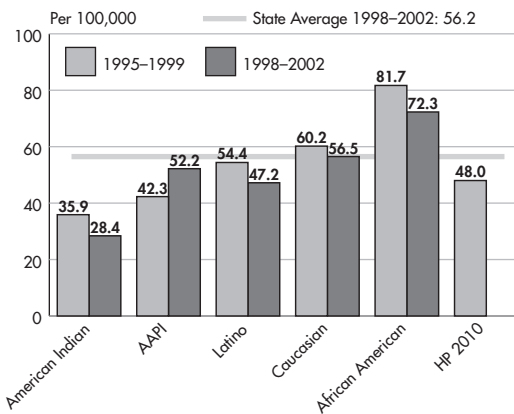


Figure 63. CEREBROVASCULAR DISEASE: Colorado Age-Adjusted Death Rates by Race/Ethnicity, Five-Year Annual Averages, 1995–1999, 1998–2002



Health Areas with Few Deaths

During the years 1998 through 2002, American Indians in Colorado had four or fewer total deaths in the following areas; therefore, rates for these health indicators are not provided.¹⁰⁹

- Atherosclerosis
- Perinatal period conditions (deaths occurring near time of birth)
- HIV/AIDS
- Septicemia (infection of the blood)
- Congenital anomalies
- Suicide
- Alzheimer's disease
- Cervical cancer
- Kidney disease
- Homicide