

# Populations of Color Health Update: Birth and Death Statistics

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Minnesota Department of Health  
Center for Health Equity  
Center for Health Statistics

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## Background

The 2015 edition of *America's Health Rankings* identified Minnesota as the fourth healthiest state in the nation.<sup>1</sup> Minnesota has consistently been near the top of these rankings. Nevertheless, many population groups within the state do not share the benefits of Minnesota's good overall health status. Populations of color (African American, Asians, and Hispanics) and American Indians often continue to experience poorer health and disproportionately higher rates of illness and death.

*"Populations of Color in Minnesota Health Status Report"*, originally published in 1997 and again in 2004, provides data on a comprehensive set of key health indicators for populations of color. Periodic updates document improvements and monitor continuing disparities in the most important of these indicators. This report is an update of key health measures drawn from birth and death records.

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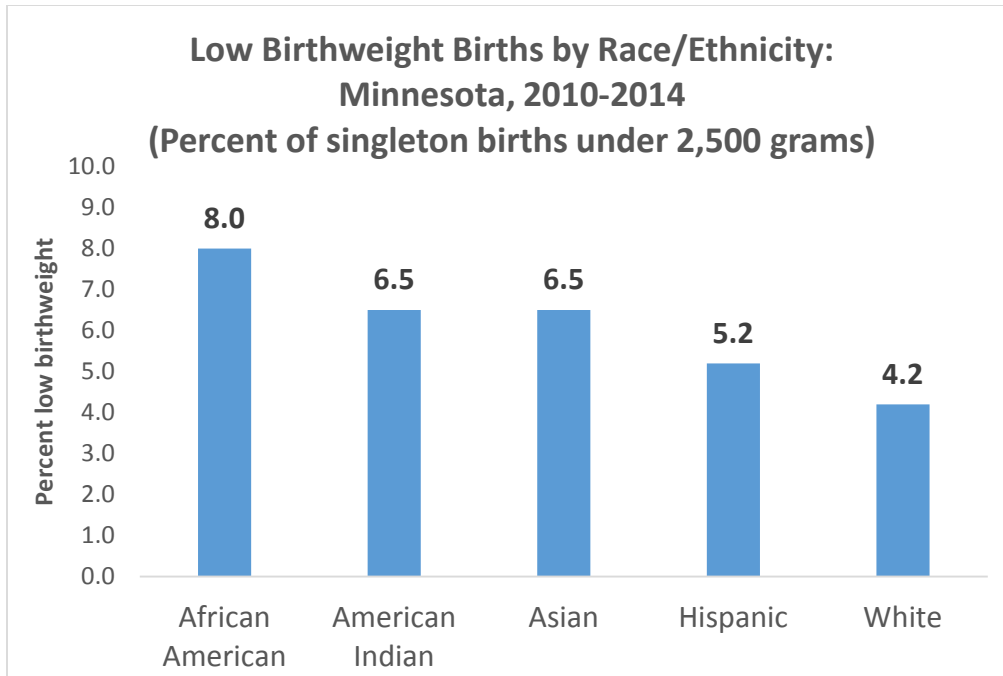
<sup>1</sup> United Health Foundation and American Public Health Foundation. *America's Health Rankings Annual Report*, 2015

## Part I: Birth-Related Health Indicators

### Low Birthweight Births

Low birthweight infants weigh less than 2,500 grams at birth. Causes of low birth weight include premature birth or growth restrictions prior to birth. Infants with low birthweight are much more likely to die within the first year of life or to have serious health and developmental complications than are infants weighing above 2,500 grams at birth.

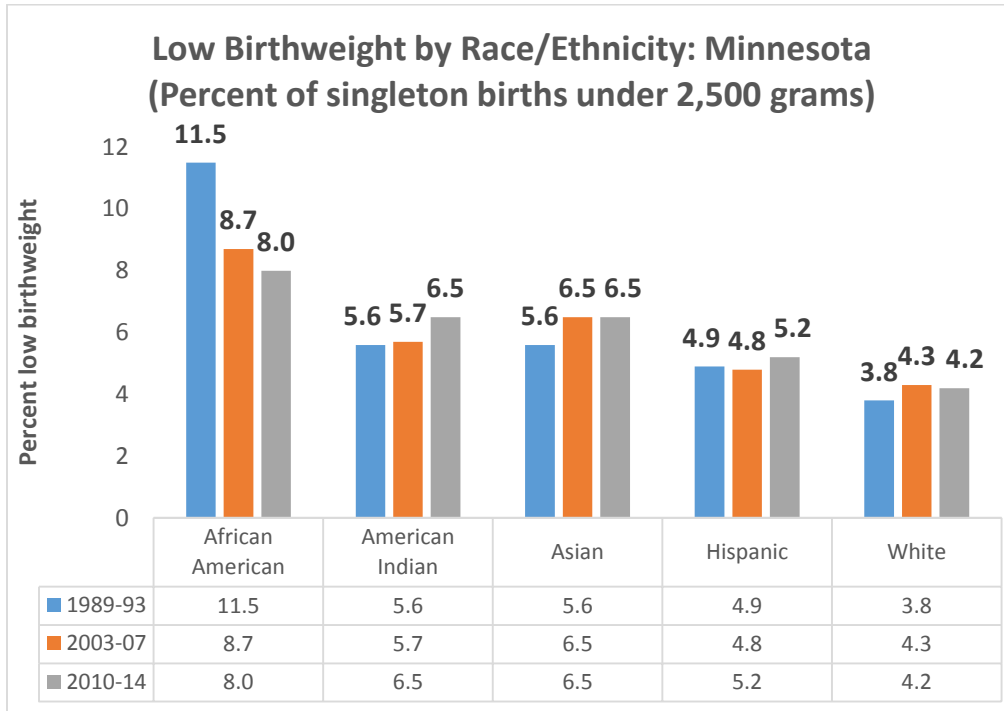
Figure 1. Percent of singleton births under 2,500 grams, by race and ethnicity, Minnesota, 2010-2014.



Source: Center for Health Statistics, Minnesota Department of Health

- One of twelve infants born to African American mothers (8.0%) were born with low birthweight, a rate that is almost twice as high as that of infants born to White mothers (4.2%).
- Babies born to American Indian, Asian, and Hispanic mothers were also more likely to have low birthweight compared to babies born to White mothers.

Figure 2. Percent of singleton births under 2,500 grams, by race and ethnicity, Minnesota, for three time periods: 1989-1993, 2003-2007, and 2010-2014.



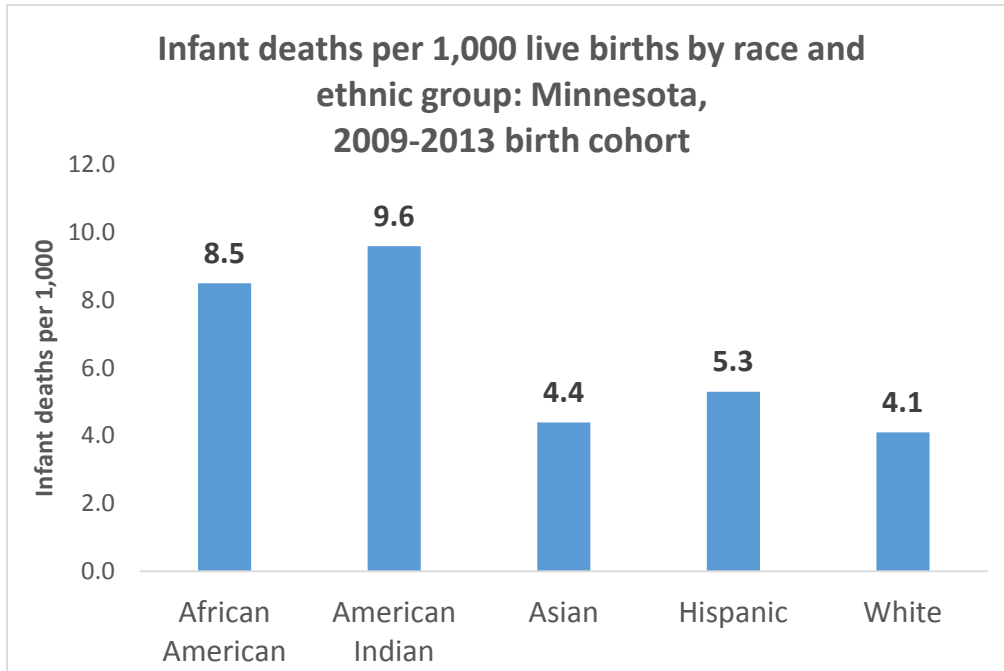
Source: Center for Health Statistics, Minnesota Department of Health

- African American infants were the only group to experience a substantial decline in low birthweight over the past 25 years, falling from 11.5 percent in 1989-1993 to 8.0 percent in 2010-2014.
- Low birthweight increased for American Indian and Asian infants (in both cases rising from 5.6 percent to 6.5 percent) and edged up slightly for Hispanic and White infants during the same time period.
- Despite the progress seen in the African American community, the percent of infants with low birthweight is still about two times higher than in the White community.

## Infant Mortality

An infant death is the death of an infant less than one year of age. Many risk factors have been associated with infant mortality, including low birthweight, preterm birth, lack of adequate and timely prenatal care, substance use, and lack of access to care.

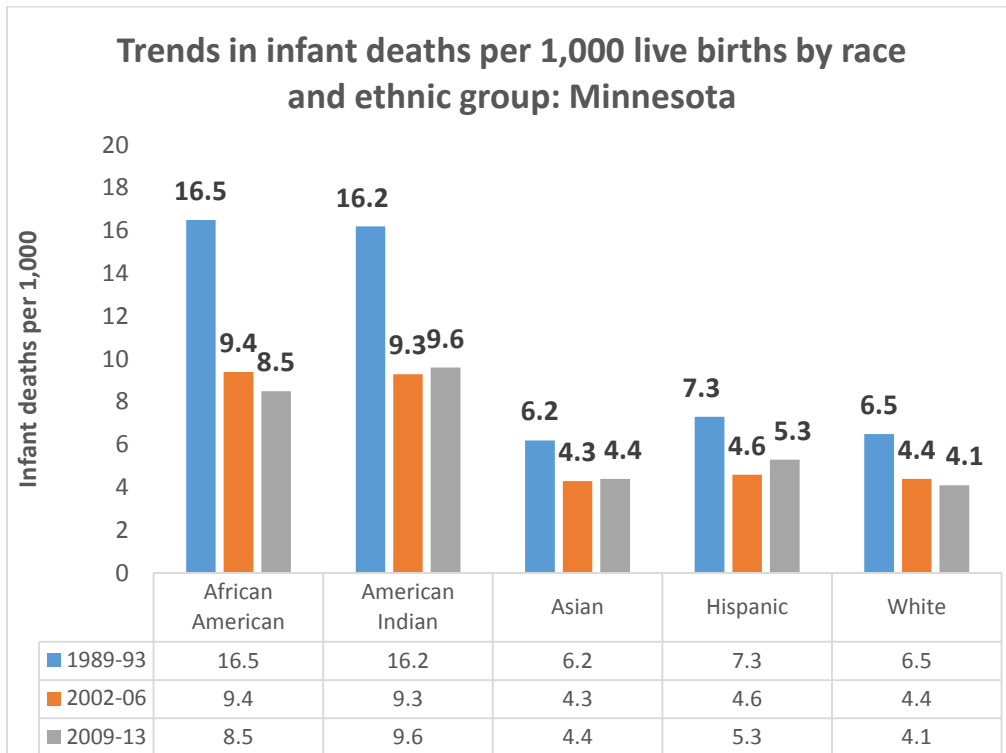
Figure 3. Infant mortality rate by race and ethnic group for infants born in Minnesota from 2009-2013.



Source: Center for Health Statistics, Minnesota Department of Health

- For every 1,000 live births during 2009-2013, there were 9.6 deaths to American Indian infants and 8.5 deaths to African American infants during the first year of life. These rates were more than twice as high as the rates for White infants.
- Infant mortality rates for Asian and Hispanic infants were just slightly higher than for White infants.

Figure 4. Infant mortality rate by race and ethnic group for infants born in Minnesota, for three time periods: 1989-1993, 2002-2006, and 2009-2013.



Source: Center for Health Statistics, Minnesota Department of Health

- Infant mortality rates fell substantially in all race and ethnic groups between 1989-1993 and 2002-2006. The largest declines occurred among African American infants (from 16.5% to 9.4%) and American Indian infants (from 16.2% to 9.3%). Disparities between African American and American Indian infants on the one hand and White infants on the other narrowed during this time period.
- However, in the more recent period between 2002-2006 and 2009-2013, there has been little progress. Death rates for African American infants declined slightly from 9.4 to 8.5 percent. Rates for other race and ethnic groups remained about the same or increased slightly.
- Despite progress since 1989-1993, infant mortality rates in the African American and American Indian communities are still twice as high as in the Asian and White communities.

## Prenatal Care

Early and adequate prenatal care can contribute to improved birth outcomes. The Minnesota Department of Health uses a composite index, called the GINDEX, to measure the adequacy of care. This index takes into account the month or trimester in which prenatal care began, the number of prenatal care visits, and the gestational age of the infant at the time of birth.

Table 1. Percent receiving inadequate or no prenatal care by race and ethnic group, Minnesota, for three time periods.

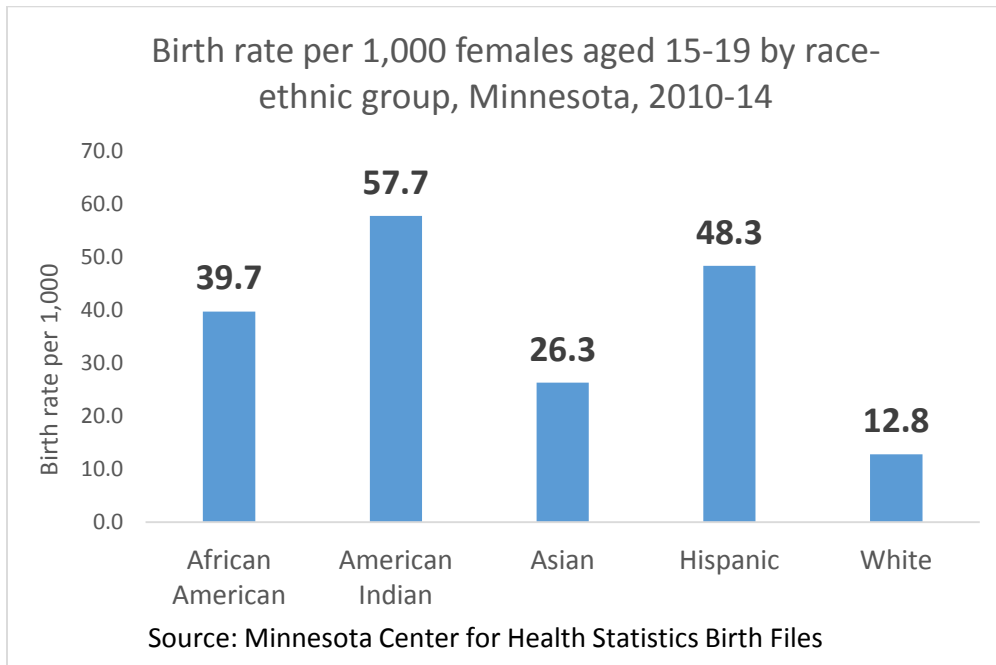
Race or ethnic group	Years 1989-93	Years 2003-07	Years 2010-14
African American	20.1%	8.1%	8.1%
American Indian	27.2%	16.0%	20.6%
Asian	20.6%	5.1%	6.4%
Hispanic	14.7%	7.0%	5.3%
White	3.3%	2.3%	2.5%

Source: Center for Health Statistics, Minnesota Department of Health

- Only 1 in 40 White mothers (2.5%) received inadequate prenatal care or no prenatal care during the 2010-2014 period.
- In all other race and ethnic groups, the percent receiving inadequate or no care was two to eight times higher than the rate for Whites.
- One in five American Indian mothers (20.6%) received inadequate or no care, far higher than any other group.
- Between 1989-1993 and 2003-2007, there were sharp drops in the percent receiving inadequate or no care among all non-white groups. However, between 2003-2007 and 2010-2014, that progress was reversed and rates increased or remained the same in most communities.

## Births to Teen Mothers

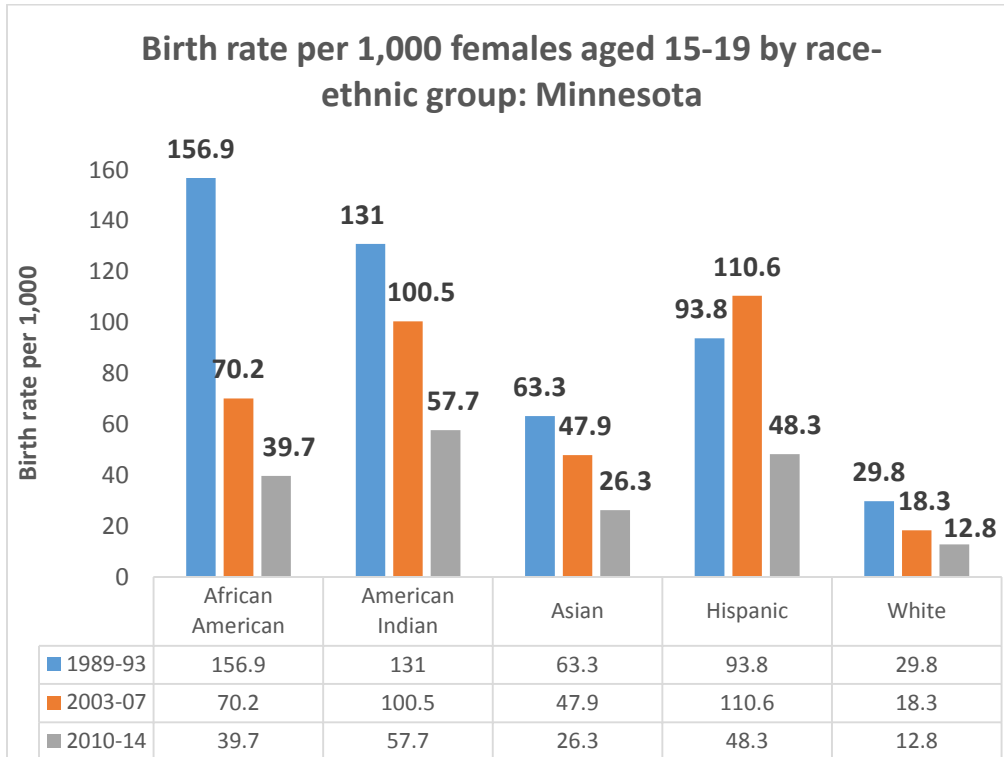
Figure 5. Teen birth rate per 1,000 females aged 15-19 years old by race and ethnic group for Minnesota, 2010-2014.



- Each year during the 2010-2014 time period, there were 57.7 births for every 1,000 females between the ages of 15 and 19 in the American Indian community, or about one birth for every 17 females in that age group. This rate is more than four times higher than the birth rate for White teens.
- Compared to White teens, birth rates were nearly four times higher for Hispanic teens, about three times higher for African American teens, and two times higher for Asian teens.



Figure 6: Teen birth rate per 1,000 females aged 15-19 years old by race and ethnic group, Minnesota, for three time periods: 1989-1993, 2003-2007, and 2010-2014.



Source: Center for Health Statistics, Minnesota Department of Health

- Over the past twenty-five years, the rate of births to teen mothers has fallen dramatically in all population groups.
- The sharpest decrease occurred among African American teens, where the birth rate fell from 156.9 in 1989-1993 to 39.7 in 2010-2014. The birth rate among African American teens is about one-fourth of what it was roughly twenty-five years ago.
- Birth rates for American Indian, Asian and White teens are less than half of what they were about twenty-five years ago.
- Birth rates for Hispanic teens increased between 1989-1993 and 2003-2007, but then fell sharply by 2010-2014.
- Despite these dramatic declines, teen birth rates in the African American, American Indian, Asian, and Hispanic communities were still two to four times higher than in the White community during the most recent time period (2010-2014).

## Part II: Death Rates and Causes of Death

### Death Rates by Age Group

Mortality rates were obtained by analyzing data on all deaths to Minnesota residents occurring between 2010 and 2014. The five year time period provides a large enough number of deaths to allow us to look at deaths by age group and later on by cause of death.

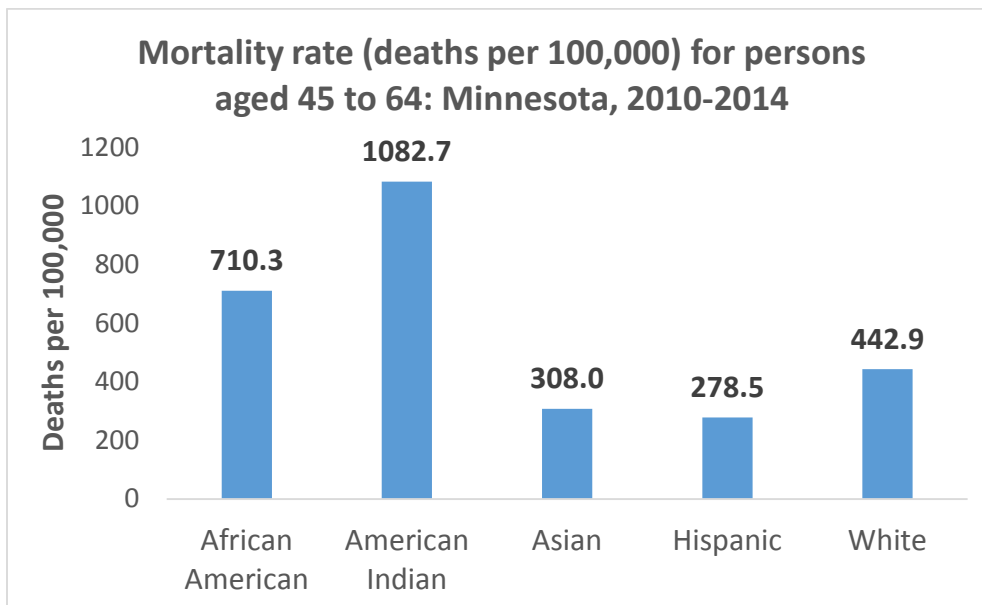
Table 2. Crude death rate (deaths each year per 100,000) by race and ethnic group and by age group, Minnesota, 2010-2014

Age group	African American	American Indian	Asian	Hispanic	White
5 to 14	19.1	28.8	10.5	13.3	10.8
15 to 24	67.6	139.1	33.2	39.6	49.7
25 to 44	132.0	338.6	63.5	60.7	90.9
45 to 64	710.3	1082.7	308.0	278.5	442.9
65 to 74	2028.6	3211.7	1213.4	1193.8	1513.9

Source: Center for Health Statistics, Minnesota Department of Health

- American Indians and African Americans are much more likely to die prematurely than other race or ethnic groups.
- In each age group, the mortality rate was highest for American Indians and was second highest for African Americans.
- Among persons aged 45 to 64, the death rate was 1,082.7 for American Indians and 710.3 for African Americans, compared to 442.9 for Whites and just 278.5 for Hispanics.
- Except for the 5 to 14 age group, mortality rates for Asians and Hispanics were lower than for Whites.

Figure 7. Mortality rate for 45-64 year-olds by race and ethnic group, Minnesota, 2010-2014

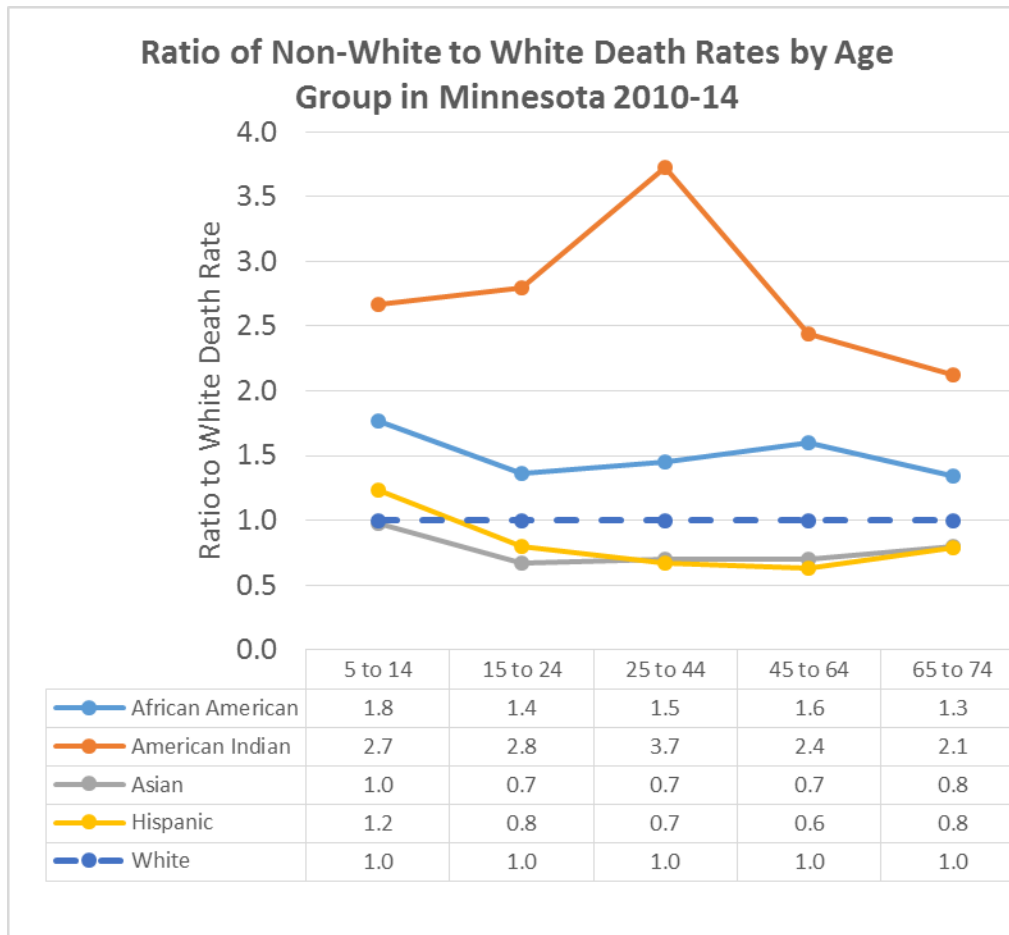


Source: Center for Health Statistics, Minnesota Department of Health

## Death Rate Ratio

The following chart shows the ratio of age-specific death rates for racial and ethnic groups compared to Whites. This measure shows how many times higher the death rate is for populations of color than for Whites within several age groupings. The dotted line represents the ratio for the White population, which is always 1.0.

Figure 8. Ratio of mortality rate of non-white race and ethnic groups to mortality rate for Whites, by age group, Minnesota, 2010-2014.



Source: Center for Health Statistics, Minnesota Department of Health

- Death rates for American Indians are roughly two to almost four times higher than for Whites in each age group.
- Death rates for African Americans are roughly one-and-a-half times higher than for Whites in each age group.
- Among 5-14 year-olds, Hispanic children have slightly higher death rates than Whites. For all other age groups, the ratio for both Asians and Hispanics is less than 1.0, meaning that they have a lower death rate than Whites.

## Cause of Death

The following table shows the age-adjusted death rates for major causes of death. Age-adjusted rates take into account how age is distributed within different populations and provides unbiased comparisons between groups.

Table 3. Age Adjusted Mortality Rates per 100,000 by Race and Ethnic Group, Minnesota, 2010-2014

Cause of death	African American	American Indian	Asian	Hispanic	White
AIDS/HIV	4.7	**	**	**	0.4
Alzheimer's Disease	15.6	**	10.2	10.3	23.0
Cancer	176.3	220.7	106.9	94.4	157.1
Chronic Lower Respiratory Disease	30.6	48.7	20.3	11.3	36.1
Cirrhosis	5.8	41.6	**	6.1	7.5
Congenital Anomalies	4.8	5.8	3.8	2.5	3.2
Diabetes	28.9	67.6	27.2	18.5	17.9
Heart Disease	107.8	184.6	68.9	65.8	116.9
Homicide	12.3	8.5	1.7	3.0	1.2
Nephritis	21.3	21.0	19.8	9.1	11.0
Perinatal Conditions	5.7	3.8	2.8	2.5	2.4
Pneumonia and Influenza	8.1	22.7	7.1	8.2	10.3
Septicemia	11.3	13.6	4.8	4.6	5.6
Stroke(Cerebrovascular Disease)	41.5	34.4	41.6	25.2	32.9
Suicide	7.5	18.2	8.4	3.7	12.2
Unintentional Injury	41.2	98.8	20.7	27.6	38.8

\*\*Age adjusted rates are not calculated for 20 or fewer cases.

Source: Center for Health Statistics, Minnesota Department of Health

- American Indians had the highest mortality rates for 10 of the 16 causes of death listed in Table 3, including cancer, heart disease, diabetes, suicide and unintentional injury.
- African Americans had the highest mortality rates for AIDS/HIV, homicide, nephritis, and perinatal conditions.
- Asians and African Americans had the highest death rates due to stroke.
- Whites had the highest death rates due to Alzheimer's disease.