

Health Status of American Indians in Nebraska

Office of Health Disparities and Health Equity

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Thomas Williams, MD

Chief Medical Officer Director, Division of Public Health Department of Health and Human Services

Judy Martin, MS

Deputy Director, Community and Environmental Health Division of Public Health Department of Health and Human Services

Susan A. Medinger, RD

Administrator, Community and Rural Health Planning Unit Division of Public Health Department of Health and Human Services

Josie Rodriguez, MS

Administrator, Office of Health Disparities and Health Equity Division of Public Health Department of Health and Human Services

Report Prepared by:

Anthony Zhang, MA, MPhil

Minority Health Epidemiologist, Office of Health Disparities and Health Equity Division of Public Health Department of Health and Human Services

Shandana Khattak

Statistical Analyst, Office of Health Disparities and Health Equity Division of Public Health Department of Health and Human Services



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LOSSARY OF TERMS

Introduction

We aim to provide a comprehensive look at health disparities among racial and ethnic minorities in Nebraska. As a building block toward that goal, the Office of Health Disparities and Health Equity (OHDHE), has compiled this data report based on the most recent statistical information available. This report presents health status facts coupled with socioeconomic status information on the American Indian population in Nebraska, and will illustrate the contrast between this minority population and the White majority population. The statistical information contained here spans several different health issues including mortality, chronic diseases, infectious diseases, intentional and unintentional injuries, maternal and child health, and behavioral risk factors.

For the purpose of this report, race and ethnicity are defined by the United States Census Bureau and the Federal Office of Management and Budget (OMB) as "self-identification data items in which residents choose the race or races with which they most closely identify, and indicate whether or not they are of Hispanic or Latino origin (ethnicity)." The racial classifications used by the Census Bureau adhere to the October 30, 1997 Federal Register Notice entitled *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity* issued by the OMB.¹ The OMB defines five minimum race categories: White, African American, American Indian, Asian, and Native Hawaiian or Other Pacific Islander.

The following definition is provided by OMB and the U.S. Census Bureau to identify the races related to this report:²

White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as *"White,"* or report entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish.

American Indians: A person having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment.

The data referred to as *American Indian* on the charts in this report contains data for both American Indians and Alaska Natives; however the Nebraska population size for Alaska Natives is so small that this report essentially represents the health status of American Indians.

This report is one of a series of four *Nebraska Minority Health Disparities Facts Reports,* each of which focus on one racial/ethnic group. The information and analysis methodology presented here is consistent with the report series, which provides a multi-dimensional view, and captures and tracks trends in disparities, while quantifying the potential for future progress in meeting quality goals.

¹ U.S. Census Bureau. (1997). Race. Retrieved from www.census.gov/quickfacts/meta/long_RHI525215.htm ² lbid.

Data Sources

The data sources for this report come from the Nebraska Department of Health and Human Services Vital Statistics, Nebraska Behavioral Risk Factor Surveillance System (BRFSS), HIV Prevention Program, the Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS), and other programs. From Vital Statistics, different race/ethnic groups' data are presented in the format of age adjusted rate per 100,000 population. Age adjustment is a statistical technique for calculating the rates or percentages for different populations as if they all had the age distribution of a standard population. Rates adjusted to the same standard population can be directly compared or contrasted to each other, so that any differences attributed to factors of the population can be more easily seen. The BRFSS data presented in this report are age adjusted as well, and surveys have been conducted annually since 1986 for the purpose of data collection on the prevalence of major health risk factors among adults residing in the State. The BRFSS data used in this report is the Nebraska regular BRFSS 2011-2014 combined data.

Executive Summary

American Indians in Nebraska have made progress on various health issues and diseases in the last ten years.

- From 2006-2010 to 2011-2014, the diabetes mortality rate decreased by 25.3 points from 93.2 to 67.9 per 100,000.
- The alcohol induced mortality rate decreased from 86.1 per 100,000 (2006-2010) to 54.6 per 100,000 (2011-2014).
- The unintentional and accident mortality rate decreased by 6.6 points from 49.2 per 100,000 in 2006-2010 to 42.6 per 100,000 in 2011-2014.
- The teen birth rate decreased from 100.2 per 1,000 births (2006-2010) to 34.3 per 1,000 (2011-2014).

Despite the progress made, a large gap can still be seen between the American Indian and White populations. Particularly high disparities were reported in diabetes, mental health disorders, cardiovascular disease, liver cirrhosis, and accident and injury mortality. Key disparities are highlighted below.

- The majority of the state's American Indian population lived in the counties of Thurston (3,963), Douglas (3,731), and Lancaster (2,140).
- Approximately 21.6% of American Indians age 25 and older had less than a high school education and only 11% had a bachelor's degree or higher.
- The median annual income of American Indian households from 2010-2014 was approximately \$26,879. This was \$28,490 less than the median income of White households at \$55,369.
- Unemployment was four times higher among American Indians (12.9%) than among Whites (3.1%).
- American Indians were more than three times as likely to die from diabetes mellitus compared to Whites and twice as likely to die of diabetes-related diseases or complications compared to Whites.
- American Indians were almost 7.5 times more likely to die of liver disease as compared to Whites.
- From 2010-2014, American Indians were five times more likely to die of homicide than were Whites.
- Death due to lung cancer was more common among American Indians than among Whites in Nebraska.

- American Indian adults in Nebraska were twice as likely as were non-Hispanic White adults to be current smokers.
- Heart disease was more often diagnosed in American Indians and American Indians were twice as likely to be diagnosed with a heart attack compared to non-Hispanic Whites.
- From 2010-2014, the teen birth rate for American Indian female teens aged 15-19 was 3.5 times the rate of White female teens.
- From 2009-2013, 25.8% of American Indian women smoked while pregnant, while White pregnant women were half as likely to smoke while pregnant (12.7%).

Health Status of American Indians in Nebraska

Nebraska American Indian Population:18,427

Progress

Diabetes Mortality Rate From 2006-2010 to 2011-2014, the diabetes mortality rate among American Indians decreased by 25.3 points from 93.2 to 67.9 per 100,000.





The alcohol induced mortality rate among American Indians decreased from 86.1 per 100,000 (2006-2010) to 54.6 per 100,000 (2011-2014).

Alcohol Induced Mortality Rate

Teen Birth Rate The teen birth rate among American Indians decreased from 100.2 per 1,000 births (2006-2010) to 34.3 per 1,000 births (2011-2014).



Nebraska DHHS Office of Health Disparities and Health Equity Source: Nebraska BRFSS 2011-2014





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Health Status of American Indians in Nebraska Compared to Non-Hispanic Whites

Nebraska American Indian Population:18,427



Nebraska DHHS Office of Health Disparities and Health Equity Source: Nebraska BRFSS 2011-2014





Health Status of American Indians in Nebraska Compared to Non-Hispanic Whites

Nebraska American Indians Population:18,427

Key Disparities

Smoking Status
More likely to be currently smoking 2x
 •

vs 19.4%

40.5%

Alcohol Induced Death

More likely to die due to alcohol

7x

iiii × i



54.6 per 100,000 vs 7.5 per 100,000

Homicide

More likely to die due to homicide

5x

10.5 per 100,000 vs 2.1 per 100,000

Nebraska DHHS Office of Health Disparities and Health Equity





Source: Nebraska BRFSS 2011-2014

Health Status of American Indians in Nebraska Compared to Non-Hispanic Whites

Nebraska American Indian Population:18,427

Key Disparities



Higher teen birth rate (Females age 15-19)

3.5x



34.3 per 1,000 live births vs 9.7 per 1,000 live births

Nebraska DHHS Office of Health Disparities and Health Equity Source: Nebraska BRFSS 2011-2014





Socioeconomic Status of American Indians in Nebraska Compared to Non-Hispanic Whites

Nebraska American Indian Population:18,427

Key Disparities



12.9% vs 3.1%

Poverty

4.5x Higher rate of individuals below the poverty level



43.2% vs 9.7%

Nebraska DHHS Office of Health Disparities and Health Equity Source: Nebraska BRFSS 2011-2014





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American Indian Indicators Compared to Whites

Nationwide, many states have used report cards to measure health disparities among different racial and ethnic groups. The following disparity report card is not an epidemiological report and is intended to be user-friendly in order to succinctly convey key disparity findings between Whites and American Indians in Nebraska. This report is not only designed to indicate the Office of Health Disparities and Health Equity's activities, but also to increase awareness of health disparities. The following report card compares the ratio of each health indicator between two periods, 2006-2010 and 2011-2014, in order to draw conclusions regarding existing gaps.

The ratio is calculated by dividing the rate or percentage of each health indicator of the American Indian population by the rate or percentage of the White population. The resulting ratio indicates how the American Indian population is doing compared to Whites. A ratio of less than or equal to '1' indicates that no health disparity exists between American Indians and Whites. Ratios between 1.1 and 1.4 indicate that little disparity exists between the two populations. Ratios between 1.5 and 1.9 indicate that a disparity exists. These disparities should be monitored and may require intervention. Any ratio greater than or equal to '2' indicates an unacceptable disparity that should require immediate intervention.

Between the two periods, the American Indian population showed progress in many health indicators. The American Indian population reported a decrease in diabetes mortality rate from 93.2 per 100,000 to 67.9 per 100,000. The American Indian population was also able to decrease the alcohol-induced morality rate from 86.1 per 100,000 (2006-2010) to 54.6 per 100,000 (2011-2014).

Despite this progress, disparities between the American Indian population and the White population persisted in many areas. From 2011-2014, the American Indian population experienced much higher mortality rates due to diabetes, liver disease, kidney disease, alcohol, and homicide, compared to the White population. Each of these mortality rates showed unacceptable disparity ratios compared to Whites, denoting the need for an immediate intervention.

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American Indians also reported progress in several maternal and child health indicators. From 2006-2010 to 2011-2014, American Indians saw a notable improvement in the teen birth rate from 100.2 per 1,000 live births to 34.3 per 1,000 live births. Despite this improvement, the rate was still much higher than that of Whites at 9.7 per 1,000 live births. The resulting ratio of 3.5 indicates an unacceptable disparity.

Though the American Indian population has made progress on many indicators from 2006-2010 to 2011-2014, there remains a large gap in many areas between American Indians and Whites. While the improvement on numerous health indicators within the American Indian population is encouraging, the disparities seen with the White population show the continued need for intervention efforts.

Health Indicators

Disparity Ratio	Meaning/Interpretation	Sym
0.0 - 1.0	No disparity or minority group- favorable measure	×
1.1 - 1.4	Little disparity	\checkmark
1.5 – 1.9	A disparity exists, should be monitored, and may require intervention	
2.0 - 2.4	Disparity requires intervention	
≥ 2.5	Unacceptable disparity. Immediate intervention needed	

SymbolMeaning★No progress made✓Progress made

Disparity Ratio: The ratio is calculated by dividing the rate or percentage for each indicator of the American Indian population by the rate or percentage of the White population between 2006-2010 and 2011-2014.

Health Indicators	2006-2010	Ratio to Whites	2011-2014	Ratio to Whites	Progress	
	Heart	Disease Mortality per	100,000 Population			
White	160.2		146.4			
American Indian	131.7	0.8	167.0	1.1	×	
	Str	oke Mortality per 100	,000 Population			
White	40.8		35.9			
American Indian	38.7	0.9	40.3	1.1	×	
	Diak	petes Mortality per 10	0,000 Population			
White	21.1		20.4			
American Indian	93.2	4.4	67.9	3.3	\checkmark	
	Diabetes	s-Related Mortality pe	er 100,000 Population			
White	78.7		78.4			
American Indian	221.4	2.8	160.2	2.0	\checkmark	
Liver Disease Mortality per 100,000 Population						
White	6.7		7.5			
American Indian	46.5	6.9	55.3	7.4	×	
Chronic Obstructive Pulmonary Disease Mortality per 100,000 Population						
White	47.9		49.6			
American Indian	73.1	1.5	68.4	1.4	\checkmark	
Cancer Mortality per 100,000 Population						
White	171.8		162.3			
American Indian	153.2	0.9	170.0	1.0	×	

Health Indicators

Health Indicators	2006-2010	Ratio to Whites	2011-2014	Ratio to Whites	Progress		
Lung Cancer Mortality per 100,000 Population							
White	43.1		42.5				
American Indian	58.2	1.4	60.9	1.4	×		
	Colorect	al Cancer Mortality pe	er 100,000 Population				
White	17.7		16.1				
American Indian	11.1	0.6	21.9	1.4	×		
	Kidney	Disease Mortality per	100,000 Population				
White	10.6		9.6				
American Indian	25.2	2.4	32.6	3.4	×		
	Unintentional	and Accidental Morta	lity per 100,000 Popu	lation			
White	35.9		36.2				
American Indian	49.2	1.4	42.6	1.2	\checkmark		
	Motor Ve	hicle Crash Mortality	per 100,000 Populatio	n			
White	13.7		11.9				
American Indian	16.1	1.2	17.5	1.5			
	Non-Motor V	ehicle Accident Morta	lity per 100,000 Popul	ation			
White	22.2		24.3				
American Indian	29.2	1.3	25.1	1.0	\checkmark		
	Suicide per 100,000 Population						
White	10.7		12.0				
American Indian	12.7	1.2	9.7	0.8	\checkmark		
		Homicide per 100,00	0 Population				
White	2.1		2.1				
American Indian	13.6	6.5	10.5	5.0	\checkmark		
	Fire	earm Mortality per 10	0,000 Population				
White	7.1		7.8				
American Indian	9.5	1.3	10.1	1.3	×		
Mortality Due to Drugs per 100,000 Population							
White	5.8		7.4				
American Indian	8.8	1.5	12.5	1.7	×		
Drugs Induced Mortality per 100,000 Population							
White	6.4		7.7				
American Indian	10.1	1.6	13.5	1.8	×		

Health Indicators

Health Indicators	2006-2010	Ratio to Whites	2011-2014	Ratio to Whites	Progress		
	Alcohol	Induced Mortality pe	r 100,000 Population				
White	28.2		7.5				
American Indian	86.1	3.1	54.6	7.3	\checkmark		
	I	nfant Mortality per 1,0	000 Live Births				
White	5.7		5.0				
American Indian	7.7	1.4	6.8	1.4	\checkmark		
	Те	en Births per 1,000 Bir	ths (Ages 15-19)				
White	23.5		9.7				
American Indian	100.2	4.3	34.3	3.5	\checkmark		
	Low Birth Weight (Percent)						
White	6.6		6.6				
American Indian	7.3	1.1	6.2	0.9	\checkmark		
Inadequacy of Prenatal Care (Percent)							
White	11.3		11.5				
American Indian	32.6	2.9	32.0	2.8	\checkmark		

Health Indicators

Demographics and Socioeconomics

Nebraska's Population: 2015 Estimates

According to the U.S. Census estimates, Hispanics continued to be the largest minority group in Nebraska (10.4%). They were followed by non-Hispanic African Americans at 4.7%, non-Hispanic Asians at 2.3%, and non-Hispanic American Indians at 0.8%.



Nebraska American Indian Population by Age and Gender

In 2015, approximately 34% of American Indians were under 15 years of age and approximately 78% of American Indians were younger than 45 years of age. Only 4.8% of the American Indian population was 65 years of age or older. In the same year, 18% of non-Hispanic Whites were under 15 years of age and 55.8% of non-Hispanic Whites were younger than 45 years of age. Approximately 17% of non-Hispanic Whites were 65 years of age or older, a significantly larger proportion of the population than that of American Indians.



Age	Total	Percent	Males	Percent	Females	Percent
Under 18 years	10,561	39.9	5,445	20.6	5,116	19.3
Under 5 years	3,622	13.7	1,818	6.9	1,804	6.8
5 to 13 years	4,933	18.6	2,582	9.7	2,351	8.9
14 to 17 years	2,006	7.6	1,045	3.9	961	3.6
18 to 64 years	14,664	55.4	7,372	27.8	7,292	27.5
18 to 24 years	3,011	11.4	1,541	5.8	1,470	5.5
25 to 44 years	7,006	26.4	3,621	13.7	3,385	12.8
45 to 64 years	4,647	17.5	2,210	8.3	2,437	9.2
65 years and over	1,267	4.8	575	2.2	692	2.6
85 years and over	90	0.3	23	0.1	67	0.3

Source: U.S. Census Bureau, 2015 Population Estimates

Distribution of Nebraska American Indian Population

According to the U.S. Census, there were 18,427 Hispanic and non-Hispanic American Indians in Nebraska in 2010. This number represented approximately 1.0% of the total Nebraska population. Non-Hispanic American Indians represented 0.8% of the population and nearly 1.6% of the total Nebraska population was comprised of American Indians alone or in combination.³

Race	Number	Percent
Total Nebraska population	1,826,341	
One Race		
American Indian and Alaska Native	18,427	1.0
Two or More Races		
American Indian and Alaska Native; White	7,587	0.4
American Indian and Alaska Native; Black or African American	1,317	0.1
American Indian and Alaska Native; Asian	157	0.0
American Indian and Alaska Native; Native Hawaiian and Other	27	0.0
Pacific Islander	37	0.0
American Indian and Alaska Native; Some Other Race	536	0.0
American Indian and Alaska Native alone or in combination*	29,816	1.6
American Indian and Alaska Native alone	18,427	1.0
American Indian and Alaska Native in combination	11,389	0.6
Hispanic or Latino		
American Indian and Alaska Native alone, Hispanic or Latino	3,630	0.2
American Indian and Alaska Native alone, Not Hispanic or Latino	14,797	0.8

Table 1: Distribution of Nebraska American Indian and Alaska Native Population

*The race concept alone or in combination includes people who reported a single race alone and people who reported that race in combination with one or more of the other race groups. The "alone or in combination" concept, therefore, represents the maximum number of people who reported as that race group, either alone or in combination with another race(s). The sum of the six individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race are tallied in each race category.

³ Population Division, U.S. Census Bureau. (2010). Annual estimates of the population by sex, race, and Hispanic origin for Nebraska.

American Indian Population by Counties

According to the U.S. Census Bureau, the total American Indian population in Nebraska was 18,427 in 2010. The map below illustrates the distribution of the population over the various counties in Nebraska. The majority of American Indians in Nebraska lived in the counties of Thurston (3,963), Douglas (3,731), and Lancaster (2,140). Other counties with a population greater than 400 individuals were Knox (786), Scotts Bluff (782), Sarpy (733), Sheridan (619), Dakota (566), Hall (529), Box Butte (409), and Madison (401).



Socioeconomics

Socioeconomic factors, such as income, education, and poverty, have a large effect on the health of individuals and greatly influence health inequalities among racial and ethnic minorities and underserved populations. While a wide variety of factors can affect health, an increasing amount of research and importance has been growing around the social determinants of health. Social determinants of health are the conditions that people live and work in, which include such factors as education, housing, transportation, and economic stability.⁴ Each of these categories includes a number of indicators. For example, economic stability can include such determinants as poverty and employment rates, while education can include rates of graduation and enrollment in higher education.

These social and economic factors can affect health in various ways. The positive link between education and good health is often attributed to learning healthy behaviors in school, as well as to the increased income that often comes with higher education levels.⁵ Moreover, individuals with higher incomes have more resources to pay for health services and nutritious foods and often have more time to devote to physical activity. Conversely, those with lower income levels are more likely to be unable to pay for needed healthcare and often live in environments with more stressors, which can be detrimental to health.⁶

Racial and ethnic minority populations are far more likely to fall at the low end in each of these categories and disproportionately incur the negative consequences associated with these circumstances. This interplay between race and the social determinants of health is important to consider in reducing health disparities and advancing health equity. There are disparities solely between social determinants of health levels as well as disparities between race and ethnicity. Though the factors are intertwined, they play distinct and independent roles.

⁴ World Health Organization. (2013). The economics of social determinants of health and health inequalities: a resource book. Retrieved from apps.who.int/iris/bitstream/10665/84213/1/9789241548625_eng.pdf

⁵ Cutler, D. & Lleras-Muney, A. (2006). Education and health: evaluating theories and evidence. National Bureau of Economic Research. Working Paper 12352.

⁶ Kawachi, I. & Kennedy, B.P. (1999). Income inequality and health: pathways and mechanisms. Health Services Research, 1999 Apr, 215-227.

Educational Attainment

Approximately 67.3% of American Indians age 25 and older were high school graduates, a slightly higher percentage than that of Whites (63.5%). However, American Indians with a bachelor's degree or higher (11%) were notably fewer than that of Whites (30.7%).



Male Educational Attainment

Approximately 26% of American Indian males age 25 and older had less than a high school diploma and only 10.2% had a bachelor's degree or higher. Among White males, only 6.2% had less than a high school diploma and 30.4% had a bachelor's degree or higher.



Female Educational Attainment

Among American Indian females, 18.3% had less than a high school diploma and 11.7% had earned a bachelor's degree or higher. Only 5.3% of White females had less than a high school diploma and 31.1% had earned a bachelor's degree or higher.



Employment Status

A proportion of 48.5% of American Indians were employed, compared to 67% of Whites. Unemployment was four times higher among American Indians (12.9%) than it was among Whites (3.1%).



Note: The category of "Employed" includes all civilians 16 years old and over who either (1) were "at work" – those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work"--those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are all institutionalized people and people on active duty in the United States Armed Forces. Source: U.S. Census Bureau, 2010-2004 American Community **Survey, Detailed Tables**

Poverty

The federal poverty level is the amount of income considered essential to meet an individual or family's basic needs and varies by family size. American Indians (43.2%) were four times more likely than were Whites (9.7%) to be below the poverty level.



Median Income

The median income for American Indian households for the period of 2010-2014 was \$26,879, which was half the median income of Whites at \$55,369.



Life Expectancy at Birth

The results below show that American Indians have a lower life expectancy at birth as compared to Whites in Nebraska. According to the life expectancy at birth data for 2012-2014, American Indians had a life expectancy of 75.7 years, compared to 80 years for Whites, a gap of 4.3 years. In general, life expectancy at birth has been increasing, yet relatively stable in the most recent years. However, American Indians had a life expectancy of 77.0 from 2007-2009, which has since been decreasing.

	Nebraska Total				Whites		American Indians			
YEARS	Total	Male	Female	Total	Male	Female	Total	Male	Female	
2012-2014	79.8	77.5	82.0	80.0	77.8	82.2	75.7	74.0	77.9	
2011-2013	79.8	77.6	82.0	80.1	77.9	82.2	76.4	74.3	77.5	
2010-2012	79.8	77.5	82.0	80.1	77.9	82.2	76.2	74.3	77.5	
2009-2011	79.9	77.6	82.0	80.1	78.0	82.2	76.1	74.3	77.1	
2008-2010	79.8	77.6	82.0	79.8	77.5	82.0	75.5	71.7	78.4	
2007-2009	79.4	77.0	81.6	79.7	77.3	81.9	77.0	74.8	78.9	
2006-2008	79.2	76.7	81.6	79.5	77.0	81.9	74.0	71.6	76.1	
2005-2007	79.2	76.7	81.6	79.5	77.0	81.9	70.2	67.9	72.5	
2004-2006	79.3	76.7	81.8	79.5	76.9	82.0	70.1	66.7	75.2	
2003-2005	79.0	76.5	81.3	79.2	76.8	81.6	70.4	66.9	74.0	
2002-2004	78.6	76.2	81.0	78.9	76.4	81.2	70.7	66.7	75.2	
2001-2003	78.4	75.9	80.7	78.6	76.2	80.9	69.0	66.5	71.3	
2000-2002	78.3	75.7	80.8	78.3	75.7	80.8	67.9	65.6	70.1	
1999-2001	78.2	75.6	80.7	78.3	75.6	80.9	66.5	65.8	67.4	
1998-2000	78.2	75.5	80.8	78.3	75.5	80.9	66.7	65.0	68.3	
1997-1999	77.7	74.8	80.5	78.1	75.2	80.9	65.9	63.5	67.9	
1996-1998	77.6	74.7	80.4	77.9	75.1	80.7	68.1	64.2	72.3	
1994-1996	77.4	74.3	80.3	77.7	74.6	80.6	67.6	62.6	73.2	
1989-1991	77.0	73.7	80.3	77.5	73.9	80.6	66.6	62.9	70.4	
1984-1986	76.4	72.8	80.0	76.6	72.9	80.3	67.4	63.5	72.0	

Nebraska Life Expectancy at Birth

Mortality

Mortality data reflects current health problems and suggests patterns of risk across population subgroups. Many causes of death are preventable or treatable, and therefore warrant the attention of public health prevention efforts. Mortality data is an important indicator of where federal, state and local prevention efforts should be placed in building healthy communities. Mortality data is one of the best sources of information in relation to the health of communities.

The death rate from all causes is a key measure of health status across populations. An overview chart of the death rates from all causes is shown on the next page. From 2010-2014, American Indians were almost 1.3 times more likely to die from all causes as compared to Whites.



Leading Causes of Death for American Indians

The tables below show the leading causes of death for American Indians for the period of 2010-2014.

Total	Ν	%
All Causes	558	100
Heart Disease	90	16.1
Cancer	89	15.9
Liver Disease	47	8.4
Unintentional Injury	42	7.5
Diabetes	39	7.0
Chronic Lung Disease	29	5.2
Septicemia	18	3.2
Nephritis	17	3.0
Stroke	15	2.7
Homicide	14	2.5
All Others	158	28.3

Female	Ν	%
All Deaths	281	100
Cancer	45	16.0
Heart Disease	40	14.2
Liver Disease	26	9.3
Diabetes	21	7.5
Unintentional Injury	17	6.0
Chronic Lung Disease	16	5.7
Septicemia	13	4.6
Nephritis	12	4.3
All Others	91	32.4

Male	Ν	%
All Deaths	277	100
Heart Disease	50	18.1
Cancer	44	15.9
Unintentional Injury	25	9.0
Liver Disease	21	7.6
Diabetes	18	6.5
Chronic Lung Disease	13	4.7
Homicide	10	3.6
All Others	96	34.7

Source: National Center for Health Statistics Vital Statistics System 2010-2014

Leading Causes of Death for Whites

The tables below show the leading causes of death for Whites for the period of 2010-2014.

%

100

20.8

20.5

6.6

6.0

5.0

3.7

2.7

2.2

1.8

1.5

29.3

Ν

37,878

7,874

7,748

2,494

2,284

1,881

1,385

1,010

852

673

573

11,104

Total	Ν	%	Female
All Causes	74,363	100	All Deaths
Cancer	16,456	22.1	Heart Disease
Heart Disease	15,957	21.5	Cancer
Chronic Lung Disease	5,118	6.9	Chronic Lung Disease
Stroke	3,900	5.2	Stroke
Unintentional Injury	3,464	4.7	Alzheimer's
Alzheimer's	2,740	3.7	Unintentional Injury
Diabetes Mellitus	2,115	2.8	Diabetes
Influenza and Pneumonia	1,518	2.0	Influenza and Pneumonia
Nephritis	1,107	1.5	Hypertension
Suicide	1,041	1.4	Nephritis
All Others	20,947	28.2	All Others

Male	Ν	%
All Deaths	36,485	100
Cancer	8,709	23.9
Heart Disease	8,083	22.2
Chronic Lung Disease	2,624	7.2
Unintentional Injury	2,079	5.7
Stroke	1,616	4.4
Diabetes	1,105	3.0
Alzheimer's	859	2.4
Suicide	832	2.3
Influenza and Pneumonia	666	1.8
Parkinson's	578	1.6
All Others	9,335	25.6

Source: National Center for Health Statistics Vital Statistics System 2010-2014

Leading Causes of Death by Age Group: Whites

Unintentional injury was the leading cause of death from age 1-44 years old. Cancer was the leading cause of death among 45 -54 and 55-64 year olds. Of those 65 years and older, a majority, 27,695, died of heart disease and overall, cancer was the leading cause of death among white Nebraskans.

	Whites by Age Group										
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 273	Unintentional Injury 48	Unintentional Injury 36	Unintentional Injury 58	Unintentional Injury 634	Unintentional Injury 541	Unintentional Injury 583	Malignant Neoplasms 2,221	Malignant Neoplasms 5,408	Heart Disease 27,695	Malignant Neoplasms 32,306
2	SIDS 120	Congenital Anomalies 25	Malignant Neoplasms 30	Malignant Neoplasms 23	Suicide 276	Suicide 276	Malignant Neoplasms 532	Heart Disease 1,374	Heart Disease 2,601	Malignant Neoplasms 23,846	Heart Disease 32,274
3	Short Gestation 95	Malignant Neoplasms 18	Congenital Anomalies 15	Suicide 20	Malignant Neoplasms 76	Malignant Neoplasms 148	Heart Disease 427	Unintentional Injury 774	Chronic Low. Respiratory Disease 827	Chronic Low. Respiratory Disease 8,804	Chronic Low. Respiratory Disease 9,914
4	Maternal Pregnancy Comp. 62	Homicide 15	Homicide 	Homicide 	Homicide 34	Heart Disease 120	Suicide 307	Suicide 407	Unintentional Injury 672	Cerebro- vascular 7,198	Cerebro- vascular 7,922
5	Placenta Cord Membranes 57	Heart Disease 	Influenza & Pneumonia 	Congenital Anomalies 	Heart Disease 32	Homicide 54	Cerebro- vascular 75	Liver Disease 339	Diabetes Mellitus 493	Alzheimer's Disease 5,378	Unintentional Injury 6,446
6	Unintentional Injury 33	Influenza & Pneumonia 	Heart Disease 	Chronic Low. Respiratory Disease 	Congenital Anomalies 21	Liver Disease 27	Diabetes Mellitus 75	Chronic Low. Respiratory Disease 233	Cerebro- vascular 417	Diabetes Mellitus 3,320	Alzheimer's Disease 5,441
7	Respiratory Distress 23	Cerebro- vascular 		Heart Disease 	Influenza & Pneumonia 17	Influenza & Pneumonia 22	Liver Disease 75	Diabetes Mellitus 231	Liver Disease 360	Unintentional Injury 3,067	Diabetes Mellitus 4,143
8	Bacterial Sepsis 21	Chronic Low. Respiratory Disease 		Cerebro- vascular 	Cerebro- vascular 	Congenital Anomalies 19	Homicide 47	Cerebro- vascular 204	Suicide 311	Influenza & Pneumonia 2,789	Influenza & Pneumonia 3,120
9	Atelectasis 19	Septicemia				Diabetes Mellitus 18	Influenza & Pneumonia 34	Influenza & Pneumonia 90	Nephritis 153	Nephritis 2,082	Nephritis 2,294
10	Intrauterine Hypoxia 18					Complicated Pregnancy 16		Viral Hepatitis 75	Influenza & Pneumonia 152	Parkinson's Disease 1,796	Hypertension 1,903

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2006-2015 Note: (---) indicates less than 10 cases

Leading Causes of Death by Age Group: American Indians

Unintentional injury was the leading cause of death among 10-44 year old American Indians in Nebraska. Among 45-54 year olds, heart disease is the leading cause of death for American Indians. Cancer is the leading cause of death among those aged 55 and older. Among all age groups combined, cancer is the leading cause of death.

	American Indians by Age Group										
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Congenital Anomalies 	Homicide 	Congenital Anomalies 	Unintentional Injury 	Unintentional Injury 20	Unintentional Injury 20	Unintentional Injury 17	Heart Disease 28	Malignant Neoplasms 48	Malignant Neoplasms 92	Malignant Neoplasms 167
2	SIDS	Cerebro- vascular 	Homicide 		Suicide 11	Homicide 	Liver Disease 14	Liver Disease 24	Heart Disease 38	Heart Disease 74	Heart Disease 153
3	Bacterial Sepsis 	Influenza & Pneumonia 	Unintentional Injury 		Homicide 	Diabetes Mellitus 	Heart Disease 	Malignant Neoplasms 16	Liver Disease 28	Diabetes Mellitus 36	Unintentional Injury 88
4	Gastritis 	Perinatal Period 			Malignant Neoplasms 	Suicide 	Malignant Neoplasms 	Diabetes Mellitus 15	Diabetes Mellitus 24	Chronic Low. Respiratory Disease 35	Diabetes Mellitus 83
5	Homicide 	Unintentional Injury 			Heart Disease 	Heart Disease 	Suicide 	Unintentional Injury 15	Chronic Low. Respiratory Disease 	Cerebro- vascular 19	Liver Disease 76
6	Short Gestation 				Liver Disease 	Liver Disease 	Diabetes Mellitus 	Cerebro- vascular 	Nephritis 	Influenza & Pneumonia 15	Chronic Low. Respiratory Disease 51
7						Malignant Neoplasms 	HIV 	Chronic Low. Respiratory Disease 	Septicemia	Nephritis 15	Cerebro- vascular 33
8						Gallbladder Disorders 	Homicide 	Septicemia	Unintentional Injury 	Septicemia 15	Septicemia 31
9						HIV 	Nephritis 	Viral Hepatitis 	Viral Hepatitis 		Homicide 30
10						Septicemia		Nephritis			Nephritis 29

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2006-2015 Note: (---) indicates less than 10 cases

Years of Potential Life Lost

Years of potential life lost (YPLL) is a measure of premature death as well as a measure of the relative impact of various diseases and other causes of mortality in a population. Death before age 75 is considered premature mortality, as the average life expectancy in the United States is now over 75 years.⁷ In 2007, the average age at death among Nebraska residents was 75.2 years.⁸

For each person who died prematurely, the age at death is subtracted from 75; for example, a person dying at age 50 would contribute 25 years of potential life lost. The total years of potential life lost in the population is then divided by the size of the population under age 75.

Leading causes of years of potential life lost for Nebraska Whites and American Indians are listed on the following pages. These graphs help emphasize what some populations are struggling with in terms of mortality

Leading Causes of Years of Potential Life Lost: Whites

Among the 438,956 total years of life lost among Whites in Nebraska between 2011 and 2015, approximately 24.30% of them were attributed to malignant Neoplasms. Unintentional Injury was responsible for the next largest proportion of years of life lost (14%), followed by heart disease (13%).



Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

⁷ National Center for Health Statistics. (2008). Health, United States, 2008. Hyattsville, Maryland.

⁸ Nebraska Department of Health and Human Services. (2009). Nebraska 2007 vital statistics report.
Cause of Death	YPLL	Percent
All Causes	438,956	100%
Malignant Neoplasms	106,039	24.20%
Unintentional Injury	61,291	14.00%
Heart Disease	57,272	13.00%
Suicide	30,067	6.80%
Chronic Respiratory Disease	16,311	3.70%
Perinatal Period	15,954	3.60%
Congenital Anomalies	15,049	3.40%
Diabetes Mellitus	11,800	2.70%
Liver Disease	10,452	2.40%
Cerebrovascular	10,033	2.30%
All Others	104,688	23.80%

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Leading Causes of Years of Potential Life Lost: American Indians

Among the 11,249 total years of life lost among American Indians between 2011 and 2015 in Nebraska, 16.70% of those years lost were attributed to unintentional injury. Malignant Neoplasms accounted for 9.40% of those total years lost. Heart disease, liver disease, and homicide respectively accounted for 8.30%, 8%, and 5.90% of years lost among American Indians.



Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	11,249	100%
Unintentional Injury	1,875	16.70%
Malignant Neoplasms	1,059	9.40%
Heart Disease	939	8.30%
Liver Disease	896	8.00%
Homicide	659	5.90%
Congenital Anomalies	525	4.70%
Perinatal Period	450	4.00%
Diabetes Mellitus	426	3.80%
Suicide	366	3.30%
Chronic Respiratory Disease	226	2.00%
All Others	3,828	34.00%

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Chronic Diseases

During the 20th century, chronic diseases replaced infectious diseases (e.g., pneumonia, tuberculosis, and diarrhea) as the leading causes of death in the United States. Chronic diseases – including all cardiovascular diseases, all cancers, diabetes mellitus, and chronic lower respiratory diseases – accounted for a large portion of all deaths among Nebraska residents during 2010-2014.

Data for this section of the report was taken from 2010-2014 Nebraska DHHS Vital Statistics

Heart Disease Mortality

Cardiovascular disease involves the body's vascular or circulatory system, which is responsible for supplying oxygen and nutrients to the organs and cells. Heart disease and cerebrovascular disease (stroke) are the major cardiovascular diseases and leading causes of death in Nebraska.

From 2010-2014, American Indians saw a higher rate of death due to heart disease at 167 per 100,000, compared to Whites, who had a lower rate of mortality at 146.4 per 100,000.



Stroke Mortality

Stroke is the most severe clinical manifestation of cerebrovascular disease. From 2010-2014, American Indians were more likely to die of stroke (40.3 per 100,000) than were Whites at 35.9 per 100,000.



Diabetes Mortality

Diabetes is a disease in which the body's inability to produce any or enough insulin causes elevated levels of glucose in the blood. The death rate due to diabetes among American Indians (67.9 per 100,000) was over three times higher than that of Whites (20.4 per 100,000).



Diabetes-Related Mortality

Diabetes is associated with serious complications and premature death, and people with diabetes have an increased risk of many adverse health outcomes, including heart disease and stroke. Most people with diabetes die from diabetes-related complications rather than directly from the disease itself. From 2010-2014, the number of deaths attributed to diabetes-related causes was nearly twice as high among American Indians (160.2 per 100,000) as among Whites (78.4 per 100,000).



Liver Disease Mortality

American Indians had a death rate of 55.3 per 100,000 from cirrhosis/liver disease, while Whites had a death rate of 7.5 per 100,000. American Indians were almost 7.5 times more likely to die of liver disease compared to Whites.



Chronic Obstructive Pulmonary Disease (COPD) Mortality

From 2010-2014, the death rate due to COPD among Nebraska's American Indians (68.4 per 100,000) was higher than for non- Hispanic Whites (49.6 per 100,000).



Cancer Mortality

The chart below provides death rate data due to all cancers for American Indians and Whites during 2010-2014. American Indians (170 per 100,000) were slightly more likely than were Whites (162.3 per 100,000) to die of cancer.



Lung Cancer Mortality

More deaths due to lung cancer occurred among American Indians than among Whites in Nebraska. The death rate among American Indians was almost 61 per 100,000, whereas it was 42.5 per 100,000 among Whites.



Colorectal Cancer Mortality

Colorectal cancer deaths among American Indians occurred at a rate of 21.9 per 100,000, which was higher than the rate for Whites at 16.1 per 100,000.



Kidney Disease Mortality

For the reporting period of 2010-2014, the death rate of 32.6 per 100,000 due to kidney disease among American Indians was more than three times that of Whites, who had a death rate of 9.6 per 100,000.



Intentional and Unintentional Injuries

Injuries are a leading cause of premature death in Nebraska. This includes unintentional injuries, such as from motor vehicle crashes and falls, as well as intentional injuries including homicides and suicides.

Data for this section of the report was taken from 2010-2014 Nebraska DHHS Vital Statistics

Unintentional/Accidental Mortality

The unintentional/accidental death rate for American Indians was 42.6 per 100,000, which was higher than that of Whites who had a rate of 36.2 per 100,000.



Motor Vehicle Crash Mortality

In Nebraska from 2010-2014, American Indians had a death rate of 17.5 per 100,000 due to motor vehicle crashes, which was approximately 1.5 times higher than that of Whites (11.9 per 100,000).



Non-Motor Vehicle Accident Mortality

Death rates due to non-motor vehicle accidents for the White and American Indian populations were very similar at 24.3 and 25.1 per 100,000 respectively.



Suicide

The death rate of 9.7 per 100,000 due to suicide for American Indians was 1.2 times lower than for Whites at 12 per 100,000.



Homicide

Homicide includes deaths inflicted on one person by another person with the intention to injure or kill. From 2010-2014, American Indians were five times more likely to die of homicide than were Whites.



Firearm Mortality

The death by firearms rate was higher among American Indians than among Whites. There were 7.8 deaths per every 100,000 among Whites, as opposed to 10.1 per 100,000 for American Indians.



Substance Abuse

Mortality Due to Drugs

The death rate due to drugs refers to drug overdose deaths. The death due to drugs rate of 12.5 per 100,000 among American Indians was 1.7 times higher than that of Whites, whose death rate was at 7.4 per 100,000.



Drug Induced Mortality

Drug-induced deaths include all deaths were drugs were considered the underlying cause, including deaths attributable to acute poisoning by drugs (drug overdoses) and deaths from medical conditions resulting from chronic drug use. Drug-induced deaths among American Indians were almost double that of the White population with 13.5 and 7.7 deaths per 100,000 respectively.



Alcohol Induced Mortality

Alcohol-induced deaths include causes such as deterioration of the nervous system due to alcohol, alcoholic liver disease, gastritis, myopathy, pancreatitis, poisoning, and more. It does not include accidents, homicides, and other causes indirectly related to alcohol use. Between 2010 and 2014, American Indians (54.6 per 100,000) in Nebraska saw a rate of alcohol-induced mortality at approximately seven times the rate for Whites (7.5 per 100,000).



Tobacco-Related Mortality

Deaths related to tobacco use were higher among American Indians. American Indians had a death rate of 143.9 per 100,000 as compared to the death rate of 106.8 per 100,000 for Whites.



Behavior Risk Factors for Illness

Behaviors that have a significant influence on health are presented in this section. Taking preventive measures, eating a healthy diet, being physically active and avoiding tobacco and excessive alcohol have a bearing on health outcomes.

Data for this section of the report was taken from the 2011-2014 Nebraska BRFSS

Access to Healthcare

Does Not Have a Personal Physician

Approximately 17% of non-Hispanic Whites reported not having a personal physician, compared to 30% of American Indians. American Indians were almost 1.8 times more likely to not have a personal physician.



	Percent	95% CI Level
White, NH	17.1	16.6 - 17.6
American Indian	30.0	25.3 – 35.3

Could Not See Doctor Due to Cost

From 2011-2014, just over one-tenth of non-Hispanic Whites (11.1%) reported being unable to see a physician due to cost, compared to one-fourth of the American Indian population (25.1%).



	Percent	95% CI Level
White, NH	11.1	10.7 – 11.5
American Indian	25.1	20.3 - 30.5

No Healthcare Coverage

The proportion of American Indians (23.5%) with no healthcare was ten percentage points higher than the proportion of non-Hispanic Whites (13.3%) who reported the same.



	Percent	95% CI Level
White, NH	13.3	12.9 - 13.8
American Indian	23.5	18.1 – 29.8

Self-Reported Health Status

Respondents were asked, "Would you say that in general your health is: excellent, very good, good, fair, or poor?" American Indian adults in Nebraska were over two times more likely (26.7%) than non-Hispanic White adults (11.6%) to report having had fair or poor health.



Activity Limitation

Non-Hispanic Whites reported having limited activity during 1.7 days in the past month due to physical or mental problems, whereas American Indian adults reported 3.5 days. American Indians had double the number of days of limited activity compared to non-Hispanic White adults.



	Percent	95% CI Level
White, NH	1.7	1.7 – 1.8
American Indian	3.5	2.7 – 4.2

Physically Unwell: 14 or More Days in the Past 30 Days

When respondents were asked the number of days that they felt physically unwell in the past month, 15.6% of American Indians responded with 14 or more days, compared to 8.6% of non-Hispanic Whites who reported the same.



Physically Unwell: Average Number of Days

When looking at the average number of days each group was physically unwell within the last month, American Indians reported an average of 4.8 days and non-Hispanic Whites reported only 2.9 days.



	Days	95% CI Level
White, NH	2.9	2.8 - 3.0
American Indian	4.8	3.9 – 5.6

Mentally Unwell: 14 or More Days in the Past 30 Days

In Nebraska, 16.9% of American Indian respondents reported not feeling well mentally for 14 or more of the past 30 days. The American Indian population was twice as likely as the non-Hispanic White population (8.7%) to have felt mentally unwell for 14 or more days in the past 30 days.



Mentally Unwell: Average Number of Days

On average, American Indians reported being mentally unwell for an average of approximately five days in the past 30 days, compared to only three days reported by non-Hispanic Whites.



	Days	95% CI Level
White, NH	3.0	2.9 - 3.1
American Indian	5.1	4.2 - 6.1

Depression

Approximately 27% of American Indians reported having ever been diagnosed with depression, a proportion that was nine percentage points above that of non-Hispanic Whites (18%).



Heavy Drinking

Heavy drinking was classified as the consumption of more than 60 drinks for men (an average of more than two drinks per day) and 30 drinks for women (an average of more than one drink per day) in the 30 days preceding the survey. American Indian adults age 18 and older in Nebraska (6.5%) were less likely to report heavy drinking than non-Hispanic White adults at 7.5%.



	Percent	95% CI Level
White, NH	7.5	7.1 – 7.8
American Indian	6.5	4.1 - 10.2

Binge Drinking

Adults 18 and older were asked if they had five or more alcoholic drinks for men or four or more alcoholic drinks for women on at least one occasion in the past 30 days. Binge drinking was slightly lower among American Indians at 20.2% than among non-Hispanic Whites at 23.8%.



Tobacco Use

Respondents were classified as current smokers if they reported smoking at least 100 cigarettes in their lifetime, currently smoked, and smoked all of the past 30 days. American Indian adults (40.5%) in Nebraska were twice as likely to be current smokers as were non-Hispanic White adults (19.4%).



	Percent	95% CI Level
White, NH	19.4	18.9 – 20.0
American Indian	40.5	35.1 – 46.3

Diabetes

Respondents were asked whether they had ever been told by a doctor that they had diabetes (gestational diabetes not included). American Indians (17.2%) experienced over double the rate of diagnosed diabetes as non-Hispanic Whites (7.6%).



Physically Inactive

American Indians (29.9%) reported higher rates of physical inactivity than did non-Hispanic Whites (21.3%).



	Percent	95% CI Level
White, NH	21.3	20.9 - 21.8
American Indian	29.9	25.1 - 35.2

Overweight or Obese

Being overweight or obese substantially raises the risk of illness from heart disease and stroke, high blood pressure, elevated blood cholesterol levels, type 2 diabetes, certain cancers, liver and gallbladder disease, arthritis, sleep disturbances, and breathing problems. Being overweight or obese also increases the risk of death. The Body Mass Index (BMI) is used as a proxy measure to identify overweight and obese adults. BMI is calculated by dividing a person's weight in kilograms by the square of the person's height in meters.

- Overweight: BMI of 25.0 to 29.9
- Obese: BMI of 30.0 or higher

From 2011-2014, 42.1% of American Indians reported a BMI of 30 or higher, compared to only 28.7% of non-Hispanics Whites. Additionally, over three-fourths of American Indians (76.6%) reported being overweight or obese, compared to 64.8% of non-Hispanic Whites.



	Percent	95% CI Level
White, NH	28.7	28.1 – 29.2
American Indian	42.1	36.4 - 48.0



	Percent	95% CI Level
White, NH	64.8	64.2 - 65.4
American Indian	76.6	71.0 - 81.4

Seatbelt Usage

According to data from the Nebraska 2011-2014 BRFSS, American Indians (76.3%) were somewhat more likely to always wear a seatbelt than were non-Hispanic Whites (70.7%).



Heart Attack

Of American Indian BRFSS respondents, 7.5% reported having been told by a healthcare provider that they had suffered a heart attack. American Indians had double the rate of being diagnosed with a heart attack, compared to non-Hispanic Whites (3.6%).



	Percent	95% CI Level
White, NH	3.6	3.4 - 3.7
American Indian	7.5	5.2 – 10.7

Coronary Heart Disease

Of American Indians, 6.1% responded that they had ever been told they had coronary heart disease, compared to 3.6% of non-Hispanic Whites.



Stroke

A larger proportion of American Indians (4.1%) reported having ever been diagnosed with a stroke, compared to 2.3% of non-Hispanic Whites.



	Percent	95% CI Level
White, NH	2.3	2.1 – 2.4
American Indian	4.1	2.5 – 6.7

Arthritis

Approximately 28% of the American Indian population in Nebraska responded that they had been diagnosed with arthritis. This was higher than the percentage of non-Hispanic Whites (23.1%) who reported the same.



Asthma

American Indians (16.6%) were more likely than non-Hispanic Whites (11.6%) to report having ever been diagnosed with asthma.



	Percent	95% CI Level
White, NH	11.6	11.2 – 12.0
American Indian	16.6	12.9 – 21.1

Kidney Disease

American Indians (2.7%) were slightly more likely to have ever been diagnosed with kidney disease than were non-Hispanic Whites (2.3%).



Flu Shot

Of Nebraskans 18 and older, 48.8% of American Indians reported having had a flu vaccination in the past year, compared to 42.8% of non-Hispanic Whites.



	Percent	95% CI Level
White, NH	42.8	42.3 - 43.4
American Indian	48.8	43.5 – 54.2

HIV Test

Approximately half of the American Indian population (51.4%) reported having ever been tested for HIV, compared to only 30.5% of non-Hispanic Whites.



Consumed Vegetables

Assessment of fruit and vegetable intake can be used to identify populations at risk, as well as to track trends and intake over time. BRFSS data for 2011 and 2013 showed that 32.4% American Indians ate vegetables less than once daily. The percentage of non-Hispanic White Nebraskans who ate vegetables less than once per day was 24.4%.



Note: only 2011 & 2013 data was available for this indicator

	Percent	95% CI Level
White, NH	24.4	23.7 – 25.2
American Indian	32.4	25.4 - 40.3

Consumed Fruit

Approximately 50% of American Indians consumed fruit less than once a day, while 41% of non-Hispanic Whites reported the same.



Note: only 2011 & 2013 data was available for this indicator

	Percent	95% CI Level
White, NH	40.7	39.8 – 41.6
American Indian	50.4	42.7 – 58.2

Cancer

Respondents were asked whether they had ever been told by a doctor that they had cancer. American Indians (7.7%) were somewhat less likely to report having ever been diagnosed with cancer than non-Hispanic Whites (10.7%).



	Percent	95% CI Level
White, NH	10.7	10.4 - 11.0
American Indian	7.7	5.6 - 10.4

Cancer Screenings

Cancer screenings help to check for cancer before there are symptoms. Getting screening tests regularly can help find breast, cervical, and colorectal (colon) cancers early and when treatment is likely to be most effective.

Mammograms

Women in the BRFSS survey were read a statement describing a mammogram as an "x-ray of each breast to look for breast cancer". They were then asked if they had a mammogram in the past two years. Between 2011 and 2014, similar percentages of American Indian and non-Hispanic White women age 50-74 reported having had a mammogram.

The newest recommendation is for women between ages 50 and 74 to have a mammogram every two years.



Note: data is not age adjusted for this indicator

	Percent	95% CI Level
White, NH	75.6	74.0 - 77.1
American Indian	75.9	58.4 – 87.6

Clinical Breast Exam

Women were given the definition of a clinical breast exam as "when a doctor, nurse, or other health professional feels the breast for lumps." They were then asked if they had a clinical breast exam in the past year. From 2011-2014, American Indian women (66.4%) were more likely than non-Hispanic Whites (59.3%) to have had a clinical breast exam in the past year among women age 50 to 74.



Note: data is not age adjusted for this indicator

	Percent	95% CI Level
White, NH	59.3	57.5 – 61.1
American Indian	66.4	46.0 - 82.1

Pap Exam

American Indian women (71.9%) were slightly more likely to have had a Pap test than non-Hispanic White women (69%) within the past two years.



Note: data is not age adjusted for this indicator

	Percent	95% CI Level
White, NH	69.0	67.4 – 70.6
American Indian	71.9	54.7 – 84.4

Colorectal Exam

The colorectal screening chart below represents the percentage of adults ages 50-75 who reported having had a fecal occult blood test (FOBT) during the past year, or a sigmoidoscopy during the past five years and FOBT during the past three years, or a colonoscopy during the past 10 years. Of American Indians, 53.4% reported having received colorectal screening, compared to 63.4% of non-Hispanic Whites.



Note: data is not age adjusted for this indicator

	Percent	95% CI Level
White, NH	63.4	62.3 - 64.4
American Indian	53.4	39.7 - 66.5

Infectious Disease

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) remain a major public health challenge in the United States. STDs can cause serious complications including infertility, ectopic pregnancy, blindness, and congenital defects. Racial and ethnic minorities are at a higher risk for sexually transmitted diseases and experience higher rates of disease and disability than the overall population. STDs are also the cause of many harmful and often irreversible complications, such as reproductive health problems, fetal and prenatal health problems, and cancer.

Gonorrhea

In Nebraska, for the period of 2010 to 2014, the rate of gonorrhea among American Indians fluctuated. The rate was at its lowest (117.9 per 100,000) in 2013 but saw a sharp increase in rate to 209.7 per 100,000 in 2014. The increase in rate was seen among Whites too, where the most noticeable jump was from 2011 to 2012 (18.7 to 26.6 per 100,000). The disparity remained large from 2010-2014, with American Indians reporting a rate approximately 4.5-9 times higher than that of Whites.



Chlamydia

Chlamydia is a bacterial infection caused by chlamydia trachomatis and is a common STD, affecting both men and women. From 2010-2014, chlamydia rates were approximately 4-5 times higher in American Indians, compared to Whites. The rate of chlamydia was the highest among American Indians during 2011, when the incidence was 812.3 per 100,000. During 2014, Whites saw the highest rate at 168.5 per 100,000.



PRAMS and Breastfeeding

The Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing population-based surveillance system of maternal behaviors and experiences before, during, and after pregnancy. It is an initiative to reduce infant mortality and low birth weight, which was developed to supplement vital records data with state-specific data to be used for planning and evaluating prenatal health programs.

Breastfeeding is associated with numerous health benefits for both infants and mothers, and has been associated with a decreased risk of pre-menopausal breast cancer in women. However, breastfeeding rates remain low among some groups of women, such as women who are young, Black, below the federal poverty threshold, unmarried, or not college-educated.

Data for this section of the report was taken from Nebraska PRAMS 2010 to 2012.

Prenatal Care Counseling about Breastfeeding

More American Indian women (87.2%) received counseling about breastfeeding than White women (83.1%).



Initiated Breastfeeding

A lower percentage of American Indian women (75.8%) reported having initiated breastfeeding than White women at 86.7%.



Breastfed at Least Four Weeks

Approximately 58% of American Indian women breastfed for at least four weeks. Overall, 73.9% of all Nebraska women breastfed for at least four weeks.



Breastfed at Least Eight Weeks

Approximately 43% of American Indian women breastfed for at least eight weeks, compared to 63% of White women.



Breastfed at Hospital

Of American Indian women, 95.3% breastfed their babies at the hospital. This was only slightly lower than the percentage of White women who reported the same (97.4%).


Received Formula Gift at Hospital

Approximately 68% of American Indian women and 57% of White women received formula as a gift from the hospital.



Hospital Staff Helped Learn Breastfeeding

Seventy-six percent of American Indian women responded that the hospital staff had helped them with breastfeeding. White women received help with breastfeeding more often, with 85.5% responding that they had received this help.



Hospital Staff Provided Information about Breastfeeding

A similar proportion of American Indian and White women received information about breastfeeding from the hospital staff at 96.1% and 97.4% respectively.



Baby Fed Only Breast Milk at Hospital

Approximately 60% of American Indian babies were exclusively fed breast milk at the hospital, compared to 72% of White babies who received only breast milk while at the hospital.



Maternal and Child Health

Racial and ethnic minority groups are disproportionately at risk for infant death, maternal death, and babies being born at low birth weights. Inadequate prenatal care, poor environmental and economic conditions, and lifestyle choices such as alcohol and tobacco use during pregnancy lead to a higher incidence of adverse birth outcomes.

Data for this section of the report was taken from 2010-2014 Nebraska Vital Statistics.

Infant Mortality

The infant mortality rate refers to the number of deaths in infants up to one year old. The rate for American Indian mortality was 6.8 deaths per 1,000 live births as opposed to five deaths for White infants.



Teen Births

The teen birth rate for American Indian females (34.3%) ages 15-19 was 3.5 times higher than the rate for White females (9.7%).



First Trimester Prenatal Care

From 2010-2014, the percentage of those beginning prenatal care in the first trimester was 53.9% for American Indian mothers, compared to 76.4% for White mothers.



Preterm Births

Babies born before 37 weeks are considered preterm. Nearly 9% of American Indian babies were born preterm, whereas 9.5% of White babies were born preterm.



Low Birth Weight

Newborns weighing less than 2,500 grams (5 lbs., 8 oz.) at birth are considered to be of low birth weight. These babies experience higher rates of illness and death compared to other infants. From 2010-2014, 6.2% of American Indian babies had a low birth weight, compared to 6.6% of White babies.



Tobacco Use While Pregnant

Smoking during pregnancy increases the risk for pregnancy complications. From 2009-2013, 25.8% of American Indian women smoked while pregnant. White women were half as likely to smoke while pregnant at 12.7%.



Note: data for 2014 was not released for this measure at the time this report was compiled

Kotelchuck Index (Inadequacy of Prenatal Care)

Kotelchuck is a measure of adequacy or inadequacy of prenatal care measures by using a combination of the number of prenatal visits, gestation, and the trimester that prenatal care began. Based on the Kotelchuck Index, approximately one third (32.0%) of American Indian mothers received inadequate prenatal care, compared to 11.5% of White mothers.



Note: data for 2014 was not released for this measure at the time this report was compiled

Conclusion

This report highlights the disparities between American Indians and Whites (and, where appropriate, the results for the entire state) in Nebraska. In general, compared with Whites, American Indians were more likely to have poorer health, unmet medical needs due to cost, diabetes, activity limitations, and mental and physical health problems.

American Indian adults were more likely to be smokers compared to White adults. According to the causes of death data, chronic liver disease and cirrhosis was the third leading cause of death among American Indians from 2010-2014. However, it was not ranked in the top ten for the White population in Nebraska.

Lower education levels and poverty are associated with poorer health outcomes, and the findings for American Indians in Nebraska are no exception. Poverty rates were over four times as high among American Indians (43.2%) as among Whites (9.7%). According to data from the 2011-2014 Nebraska Behavioral Risk Factor Survey, 26.7% of American Indians reported being in poor or fair health as compared to 11.6% of the state's non-Hispanic White population. According to the 2009-2013 Nebraska Vital Statistic's birth data, the proportion of American Indians who reported smoking during pregnancy was two times that of Whites across the state.

American Indians lack adequate health insurance compared to the state's non-Hispanic White population. Overall, American Indians have less access to health care than do Nebraska's non-Hispanic White residents. The proportion of American Indians who reported having no health insurance in the 2011-2014 Behavioral Risk Factor Surveillance System was 1.8 times greater than that of non-Hispanic Whites. The percentage of American Indians who did not have the ability to see a doctor due to cost was over twice that of the non-Hispanic White population.

Glossary of Terms

Age-Adjusted Death Rate: A weighted average of a crude death rate according to a standard distribution. Age adjusting is a process by which the age composition of a population is held constant so that changes or differences in age composition can be eliminated from the analysis. This is necessary because older populations have higher death rates merely because death rates increase with age. Age adjusting allows the researcher to make meaningful comparisons over time and among groups in the risk of mortality.

The death rates in this report have been adjusted according to the age distribution of the United States population in 2000 so that these rates are stabilized from fluctuation due to changes and differences in age composition of the population under study. This is calculated by the sum of age-specific death rates for each age group, multiplied by the standard population in each age group, and divided by the total standard population.

Death Rate: A death rate is a ratio between mortality and population: the number of deaths per specific number of people. This is the most widely used measure to determine the overall health of a community. Death rates are usually computed per 100,000 population. Rates allow meaningful comparisons between groups of unequal size.

Body Mass Index (BMI): A measure of weight relative to height. A BMI of less than 25 is considered ideal or healthy; a BMI of 25-29 is considered overweight; and a BMI greater than 30 is considered indicative of obesity. BMI is calculated by dividing an individual's weight in kilograms by the individual's height in meters squared.

Diabetes: Often times called diabetes mellitus, diabetes is a disease of the pancreas in which the body does not produce or properly use insulin, a hormone that is needed to convert glucose into energy. According to the Centers for Disease Control and Prevention (CDC), "Diabetes mellitus is a group of diseases characterized by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can be associated with serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications."

Incidence: Incidence is an estimate of the number of new cases of disease that develop in a population in a specified period, usually one year. Incidence is often used as an indicator of the need for preventive measures, or to evaluate the effectiveness of existing programs.

Infant Death: Death of a person under one year of age.

Infant Death Rate: The number of infant deaths per 1,000 live births, calculated as the number of infant deaths divided by number of live births, multiplied by 1,000.

Kotelchuck Index: A prenatal care index. Special national data summaries are prepared by the Office of Health Care Information. The office uses special programs to create an adequacy of prenatal care index, as formulated by Dr. Milton Kotelchuck. The index characterizes births as inadequate, intermediate, adequate and adequate plus as evaluated by when prenatal care began, weeks of gestation, and number of recommended physician's visits.

The Adequacy of Prenatal Care Utilization Index (APNCU), also known as the Kotelchuck Index, is one of the methods used to assess adequacy of prenatal care. Data for assessing prenatal care is taken from

information collected on birth certificates. This index combines the month of pregnancy when prenatal care began with the number of prenatal visits to their health care provider during pregnancy. It also takes into account the length of gestation. Using these criteria, prenatal care is rated inadequate, intermediate, adequate, or intensive use.

Morbidity: A term used to describe disease, sickness, or illness, as a departure from normal physiological and psychological conditions, normally expressed as a morbidity rate. Morbidity rates give the closest frame of the quality of life and health status in a given population.

Mortality: A term used describe the rate of death, which expresses the proportion of a particular population who die of one or more diseases or of all causes during a specified unit of time, usually a year. It is also the probability of dying within a specified time period. This rate is also called the "crude death rate."

Unemployment Rate: The unemployment rate represents the number of unemployed people as a percentage of the civilian labor force. For example: if the civilian labor force equals 100 people and seven people are unemployed, then the unemployment rate would be 7%.

Labor Force: All people classified in the civilian labor force, as well as members of the U.S. Armed Forces (people on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard).

Not in Labor Force: All people 16 years old and older who are not classified as members of the labor force. This category consists mainly of students, housewives, retired workers, seasonal workers interviewed in an off season who were not looking for work, institutionalized people, and people doing only incidental unpaid family work (less than 15 hours during the reference week).

Household: A household includes all the people who occupy a housing unit. (People not living in households are classified as living in group quarters.) A family household consists of a householder and one or more people living together in the same household who are related to the householder by birth, marriage, or adoption. It may also include people unrelated to the householder. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living arrangements.

Poverty: Following the Office of Management and Budgets (OMBs) Directive 14, the U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

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