

# Nebraska **Health Disparities** Report

### **Health Equity for All Nebraskans**

**Division of Public Health** Department of Health & Human Services 2020

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#### **State of Nebraska Health Disparities Report**

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### Introduction

### **Health Disparities and Health Equity**

As defined by the Centers for Disease Control and Prevention (CDC), health disparities are differences in health that are closely linked with social or economic disadvantage and negatively impact groups of individuals who have experienced greater social or economic obstacles to good health.<sup>1</sup> Eliminating these disparities is essential to improving health outcomes for all Nebraskans.

Acknowledging Nebraska's health disparities is an important step in achieving health equity, which has been defined as being achieved when all individuals have the opportunity to attain the highest level of health, and no one is disadvantaged due to their social or economic position.<sup>2</sup> According to the World Health Organization, health is a fundamental human right, and achieving health equity among all populations is important in order to provide all individuals with the opportunity to pursue a healthy and fulfilling life.<sup>3</sup>

### **Achieving Health Equity for All Nebraskans**

Achieving health equity for all Nebraskans is the primary concern and mission of the Office of Health Disparities and Health Equity. Identifying the existing health disparities among diverse populations in Nebraska plays a vital role in achieving health equity. Understanding and recognizing where disparities exist allows for a more focused and integrated approach in eliminating those inequalities.

This report assesses the current state of Nebraska's racial and ethnic minority populations and the changes, both positive and negative, which occurred over the 15-year period from 2000-2015. The report focuses primarily on health disparities between Nebraska's racial and ethnic populations, including diseases, health status, and health behaviors. However, various disparities by gender, immigrant status, language ability, income, and education are also included.

### **Report Format**

Each chapter begins with a brief summary of the subject matter, along with an infographic highlighting key disparities in the section. Following this overview, the indicators relative to the chapter are presented. Each indicator includes a short description, relevant charts, and key disparity sections.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention. (2014). NCHHSTP Social determinants of health. Retrieved from www.cdc.gov/nchhstp/socialdeterminants/definitions.html <sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> World Health Organization. (2017). Equity. Retrieved from www.who.int/healthsystems/topics/equity/en

Where applicable, trend charts are also included, and key trends are discussed. When available, 95% confidence intervals were included below the charts. These confidence intervals represent the margin of error and accuracy of the estimates provided.

### **Data and Methodology**

In accordance with the Centers for Disease Control and Prevention, this report recognizes that race and ethnicity are social constructs, representing distinct histories, languages, and cultures of groups within the United States. They are not valid biological or genetic categories and not scientifically based. Indicators in the report were categorized by race and ethnicity using the standards defined by the Office of Management and Budget, the federal agency that defines guidelines for government publications. The descriptor "Hispanic or Latino" is considered a designation of ethnicity, not a race, and people of Hispanic or Latino origin may be of any race. There is a minimum of five federally recognized categories for classifying race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, and White.

Due to varying source methodology, some data is available for non-Hispanic Whites, in which case non-Hispanic White data is used instead of White alone data. Please note the majority of White data from Vital Statistics represents those who consider themselves White, regardless of ethnicity. The Behavioral Risk Factor Surveillance System (BRFSS) data represents those from all racial groups who are not Hispanic.

In this report, Asians, Native Hawaiians, and other Pacific Islanders were grouped together due to the relatively small numbers of Hawaiians and Pacific Islanders. The chapter on Social Determinants of Health is the only exception, where Asians alone are included in the estimates. Please note that the American Indian data also includes Alaska Natives and African American data includes Black and African American Individuals.

Grouping populations helps to reach the population sizes needed to develop reliable statistics. For several indicators, no data is available due to small population sizes. To better analyze small groups (i.e., race and ethnicity or less common diseases), multiple years of data were combined to produce a five-year annual average.

### **Methodology Issues and Limitations**

Data for race and ethnicity raises unique reliability problems. Those who collect the data often use different methods and standards. For some systems, the data reflects self-classification by the respondents according to the race with which they most closely identify. For other systems, someone else, who may or may not know the individual personally, makes a judgment about the person's race, which may not accurately represent how the person identifies.

Recent changes in the way the federal government gathers and classifies data regarding racial and ethnic minority populations make exact comparisons over time problematic. For example, the race

question was modified in the 2000 census to allow the choice of more than one racial category. Even though groups with small population sizes and years were combined to help analyze the data, the population sizes were often still too small to provide an accurate estimate. This is an especially important caveat for American Indians, as well as Asians, Native Hawaiians and other Pacific Islanders.

To improve the health of all Nebraskans and to enable policymakers to identify future trends, target resources more effectively, and set program and policy priorities, it is critical that we keep collecting and disseminating reliable and accurate information regarding all components of health, including current health status, the determinants of health, and resources and outcomes. There were several indicators, specifically regarding the health issues affecting the state's American Indian and Asian populations, for which no data was available.

### **Disparities Visualizations**

### Socioeconomic and Health Disparities Report Card

Disparity Ratio	Meaning/Interpretation
0.0 - 1	No disparity or minority group-favorable measure
1.1 – 1.4	Little disparity
1.5 – 1.9	A disparity exists, should be monitored, and may require intervention
2 - 2.4	Disparity requires intervention
≥ 2.5	Unacceptable disparity. Immediate intervention needed

**Disparity Ratio:** This disparity ratio is calculated by dividing the rate or percentage for each population by the White population. The disparity ratios in this report card indicate how well a population group is doing compared to Whites. For each category, a particular color is used to identify the disparity level in the following report card.

Ratio Summaries (2011 2015)							
	Little Disparity	Disparity Exists	Disparity Requires Intervention	Unacceptable Disparity	Total		
African American	15	4	10	8	37		
Asian	4	3	0	1	8		
American Indian	10	10	7	12	39		
Hispanic	8	7	5	4	24		

**Ratio Summaries:** A total of 44 indicators were used to identify the disparity level in each population. Overall, American Indians reported the highest number of indicators with disparity ratio greater than one (39 indicators), followed by African Americans (37 indicators). The highest number of indicators with disparity ratio greater than 2.5 (Unacceptable Disparity) were also reported by the American Indians.

Socioeconomic Indicators	2011-2015	Ratio to Whites	Disparity Level
Percent Fem	ale Householder, No Hi	usband Present	
White	17.4		
African American	58.4	3.4	
Asian	13.8	0.8	
American Indian	37.7	2.2	
Hispanic	29.4	1.7	
Percent Liv	ving Below the Federal	Poverty Level	
White	10.9		
African American	30.9	2.8	
Asian	19.2	1.8	
American Indian	40.5	3.7	
Hispanic	25.7	2.4	
	Percent of Unemploye	ed	
White	4.1		
African American	11.2	2.7	
Asian	4.7	1.1	
American Indian	17.5	4.3	
Hispanic	8.8	2.1	
Percen	t Without High School I	Education	
White	7.9		
African American	14.7	1.9	
Asian	23.2	2.9	
American Indian	21.9	2.8	
Hispanic	46.6	5.9	
Percent	Living in renter occupie	ed Housing	
White	31.0		
African American	68.3	2.2	
Asian	52.7	1.7	
American Indian	57.9	1.9	
Hispanic	51.9	1.7	

### **Socioeconomic Indicators**

### **Health Indicators**

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level			
	Perceived Health Status: Fair or Poor (Percent)								
White	10.9			11.4					
African American	19.0	1.7		23.6	2.1				
Asian	9.1	0.8		10.3	0.9				
American Indian	22.9	2.1		26.2	2.3				
Hispanic	25.2	2.3		29.5	2.6				
		No Personal Physici	an (Percent)	_	_				
White	13.8			17.1					
African American	16.8	1.2		24.7	1.4				
Asian	15.9	1.2		23.5	1.4				
American Indian	23.5	1.7		30.3	1.8				
Hispanic	35.1	2.5		39.8	2.3				
		No Health Insurance	ce (Percent)						
White	13.0			12.6					
African American	24.4	1.9		29.7	2.4				
Asian	17.3	1.3		12.4	1.0				
American Indian	34.5	2.7		23.7	1.9				
Hispanic	46.1	3.5		46.4	3.7				
	Unab	le to See Physician Du	ue to Cost (Pe	ercent)					
White	9.1			10.9					
African American	20.4	2.2		24.3	2.2				
Asian	10.6	1.2		10.7	1.0				
American Indian	16.1	1.8		23.4	2.1				
Hispanic	20.7	2.3		24.1	2.2				
		nfant Mortality per 1,	000 Live Birt	hs	_				
White	5.7			5.8					
African American	13.8	2.4		13.4	2.3				
Asian	2.8	0.5		2.2	0.4				
American Indian	7.7	1.4		8.1	1.4				
Hispanic	5.7	1.0		5.9	1.0				
		Low Birth Weight	(Percent)	_	_				
White	6.6			6.2					
African American	13.3	2.0		12.3	2.0				
Asian	8.4	1.3		7.5	1.2				
American Indian	7.3	1.1		6.9	1.1				
Hispanic	6.6	1.0		6.6	1.1				
	Te	en Births per 1,000 Fe	males ages 1	5 19					
White	63.5			46.4					

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
African American	173.2	2.7		106.1	2.3	
Asian	32.1	0.5		36.9	0.8	
American Indian	204.5	3.2		144.6	3.1	
Hispanic	150.0	2.4		120.2	2.6	
		Inadequate Prenatal	Care (Percent	:)		
White	11.0			12.0		
African American	22.6	2.1		24.3	2.0	
Asian	16.2	1.5		20.5	1.7	
American Indian	28.8	2.6		32.3	2.7	
Hispanic	22.3	2.0		25.7	2.1	
	Preval	ence of Coronary Hea	art Disease (P	ercent)		
White	3.8			3.5		
African American	2.5	0.7		4.3	1.2	
Asian	3.9	1.0		3.0	0.9	
American Indian	5.9	1.6		6.0	1.7	
Hispanic	3.6	0.9		3.4	1.0	
	Heart	Disease Mortality pe	r <b>100,000 P</b> op	ulation		
White	160.4			147.4		
African American	215.7	1.3		177.9	1.2	
Asian	72.4	0.5		60.0	0.4	
American Indian	140.3	0.9		163.1	1.1	
Hispanic	100.7	0.6		69.3	0.5	
	-	Myocardial Infarcti	on (Percent)			
White	3.6			3.5		
African American	3.0	0.8		4.6	1.3	
Asian	3.5	1.0		3.5	1.0	
American Indian	7.6	2.1		7.6	2.2	
Hispanic	4.3	1.2		4.0	1.1	
	Myocardial	Infarction or Coronar	y Heart Disea	ise (Perce	nt)	- <b>T</b>
White	5.3			5.4		
African American	4.4	0.8		6.6	1.2	
Asian	6.3	1.2		4.9	0.9	
American Indian	9.9	1.9		9.6	1.8	
Hispanic	5.6	1.1		5.8	1.1	
		Prevalence of Strol	ke (Percent)			
White	2.2			2.2		
African American	3.8	1.7		4.5	2.0	
Asian	3.7	1.7		0.5	0.2	
American Indian	3.9	1.8		4.0	1.8	
Hispanic	2.3	1.0 oke Mortality per 10		2.0	0.9	

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
White	40.8			34.8		
African American	66.9	1.6		46.3	1.3	
Asian	30.3	0.7		29.6	0.9	
American Indian	45.3	1.1		37.7	1.1	
Hispanic	24.8	0.6		29.4	0.8	
		Prevalence of Diabe	tes (Percent)			
White	6.7			7.6		
African American	12.7	1.9		13.7	1.8	
Asian	8.6	1.3		7.8	1.0	
American Indian	13.0	1.9		15.8	2.1	
Hispanic	13.8	2.1		12.7	1.7	
Diabe	tes Mortality	y per 100,000 Populat	tion (Diabetes	s Underlyi	ng Cause)	
White	21.0			21.2		
African American	62.0	3.0		50.5	2.4	
Asian	22.7	1.1		21.0	1.0	
American Indian	98.9	4.7		53.4	2.5	
Hispanic	31.6	1.5		29.3	1.4	
	Chronic Lu	ing Disease Mortality	per 100,000	Populatio	n	
White	42.8			46.5		
African American	33.1	0.8		47.7	1.0	
Asian	17.9	0.4		16.0	0.3	
American Indian	67.4	1.6		61.7	1.3	
Hispanic	9.9	0.2		12.4	0.3	
	HIV,	AIDS Mortality per 1	00,000 Popul	ation		
White	0.8			0.7		
African American	7.0	8.8		3.6	5.1	
Asian	0.0	0		0.5	0.7	
American Indian	5.4	6.8		5.6	8.0	
Hispanic	2.2	2.8		0.4	0.6	
	Sexually	Transmitted Diseases	per 100,00 P	opulation		
White	256.5			218.8		
African American	3,988.4	15.5		2,615.8	12.0	
Asian	213.5	0.8		196.1	0.9	
American Indian	1,056.5	4.1		1,154.5	5.3	
Hispanic	534.7	2.1		371.0	1.7	
	Chlai	mydia Incidence per :	100,000 Popu	lation		
White	185.9			184.1		
African American	2,531.9	13.6		1,860.6	10.1	
Asian	166.2	0.9		173.6	0.9	
American Indian	821.8	4.4		925.4	5.0	
Hispanic	433.3	2.3		328	1.8	

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
	Gono	orrhea Incidence per 1	00,000 Popu	lation		
White	29.7			30.3		
African American	1,073.1	36.1		716.3	23.6	
Asian	19.4	0.7		19.6	0.6	
American Indian	140.1	4.7		206.3	6.8	
Hispanic	43.1	1.5		36.0	1.2	
	Ca	ncer Mortality per 100	),000 Popula	tion	_	
White	170.2			160.6		
African American	235.9	1.4		200.6	1.2	
Asian	100.3	0.6		114.2	0.7	
American Indian	165.2	1.0		167.4	1.0	
Hispanic	105.2	0.6		97.1	0.6	
	Breast	Cancer Mortality per	100,000 Pop	ulation		
White	11.2			11.0		
African American	16.9	1.5		15.7	1.4	
Asian	7.3	0.7		4.2	0.4	
American Indian	8.8	0.8		18.6	1.7	
Hispanic	9.7	0.9		5.0	0.5	
	Prostat	e Cancer Mortality pe	r 100,000 Po	pulation	_	
White	9.0			8.1		
African American	14.8	1.6		14.6	1.8	
Asian	2.1	0.2		3.6	0.4	
American Indian	3.6	0.4		7.1	0.9	
Hispanic	11.6	1.3		5.8	0.7	
	Unintenti	onal Injury Mortality	per 100,000 l	Populatio	n	
White	35.9			36.8		
African American	32.1	0.9		35.3	1.0	
Asian	22.8	0.6		8.0	0.2	
American Indian	44.5	1.2		44.1	1.2	
Hispanic	28.4	0.8		28.5	0.8	

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
	Motor Veh	icle Accident Mortalit	y per 100,000	) Populatio	on	
White	13.7			12.4		
African American	11.5	0.8		11.5	0.9	
Asian	5.3	0.4		1.4	0.1	
American Indian	15.3	1.1		17.6	1.4	
Hispanic	12.8	0.9		12.0	1.0	
		Suicide per 100,000	Population			-
White	10.6			12.3		
African American	4.8	0.5		6.0	0.5	
Asian	3.5	0.3		4.7	0.4	
American Indian	11.3	1.1		8.8	0.7	
Hispanic	4.4	0.4		4.6	0.4	
		Homicide per 100,00	00 Population			
White	2.1			2.2		
African American	25.3	12.0		28.8	13.1	
Asian	1.3	0.6		1.3	0.6	
American Indian	11.8	5.6		10.1	4.6	
Hispanic	4.9	2.3		3.8	1.7	
		Heavy Drinking	(Percent)			
White	4.8			7.2		
African American	3.5	0.7		6.0	0.8	
Asian	2.3	0.5		3.7	0.5	
American Indian	9.5	2.0		6.7	0.9	
Hispanic	2.5	0.5		4.1	0.6	
		Binge Drinking	Percent)			-
White	20.1			23.4		
African American	14.3	0.7		15.7	0.7	
Asian	7.9	0.4		9.1	0.4	
American Indian	16.2	0.8		21.9	0.9	
Hispanic	11.2	0.6		15.2	0.6	
	Alcoho	Related Mortality pe	er 100,000 Po	pulation		
White	28.1			31.0		
African American	41.2	1.5		46.1	1.5	
Asian	15.5	0.6		15.6	0.5	
American Indian	78.3	2.8		86.9	2.8	
Hispanic	29.4	1.0		29.6	1.0	
		Current Cigarette Smo	oking (Percen	t)		
White	18.1			19.0		
African American	23.7	1.3		24.2	1.3	
Asian	10.7	0.6		11.8	0.6	
American Indian	43.7	2.4		37.9	2.0	

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
Hispanic	16.8	0.9		15.0	0.8	
	Dru	g Induced Death per 1	00,000 Popul	ation		
White	6.5			7.7		
African American	9.5	1.5		9.8	1.3	
Asian	0.4	0.1		0.3	0.0	
American Indian	10.1	1.6		16.5	2.1	
Hispanic	2.0	0.3		2.8	0.4	
		Physical Inactivity	v (Percent)			
White	21.6			21.7		
African American	35.2	1.6		29.4	1.4	
Asian	21.5	1.0		23.6	1.1	
American Indian	28.3	1.3		30.8	1.4	
Hispanic	35.4	1.6		33.8	1.6	
	Over	weight Body Mass In	ndex: 25+ (Pe	rcent)		
White	63.5			65.1		
African American	67.5	1.1		70.1	1.1	
Asian	42.5	0.7		45.1	0.7	
American Indian	77.6	1.2		74.6	1.1	
Hispanic	71.1	1.1		72.9	1.1	
	0	bese Body Mass Inde	ex: 30+ (Perce	ent)		
White	26.7			29.1		
African American	39.0	1.5		36.5	1.3	
Asian	10.3	0.4		13.9	0.5	
American Indian	41.7	1.6		43.3	1.5	
Hispanic	32.0	1.2		33.0	1.1	
		Mentally Unwe	ll (Days)			
White	10.1			8.8		
African American	13.1	1.3		10.7	1.2	
Asian	8.5	0.8		5.6	0.6	
American Indian	16.8	1.7		15.6	1.7	
Hispanic	9.1	0.9		8.1	0.9	
		Physically Unwe	ell (Days)			
White	2.8			2.9		
African American	4.1	1.5		4.1	1.4	
Asian	3.5	1.3		2.5	0.9	
American Indian	4.4	1.6		4.6	1.6	
Hispanic	3.4	1.2		3.9	1.3	
		Depressive Disorde	er (Percent)			
White	15.8			18.1		
African American	13.0	0.8		14.2	0.8	

Health Indicators	2006- 2010	Ratio to Whites	Disparity Level	2011- 2015	Ratio to Whites	Disparity Level
Asian	1.2	0.1		8.3	0.5	
American Indian	39.4	2.5		25.6	1.4	
Hispanic	13.2	0.8		14.8	0.8	

# African American Health In Nebraska

### **Compared to Non-Hispanic Whites**



More likely to perceive their health as fair or poor



Less likely to see physician due to cost.



More likely to have no health coverage



More likely to have no personal physician

**2.0x** More likely to be diagnosed with a stroke

**2.4** Higher mortality rate due to diabetes

**13.1x** More likely to die from homicide

# Vomen's Health

\_\_\_\_\_

**2.3x** Higher infant mortality rate **2x** 

More likely to have a baby with a low birth weight .....

**2.3x** Higher teen birth rate

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015



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# American Indian Health in Nebraska

### **Compared to Non-Hispanic Whites**



More likely to perceive their health as fair or poor



Less likely to see physician due to cost



More likely to be unable to see a doctor due to cost



More likely to have no personal physician

- **2.1x** More likely to be diagnosed with diabetes
- **2.2x** More likely to be diagnosed with myocardial infarction

**4.6x** More likely to die from homicide

Vomen's Health

**1.4x** Higher infant mortality rate **1.9x** 

More likely to use tobacco during pregnancy .....

**3.1x** Higher teen birth rate

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015



OCO Life. Great Mission.

# Asian Health in Nebraska

### Compared to Non-Hispanic Whites



More likely to have no personal physician

**4.6**X More likely to feel physical symptoms, such as headache or upset stomach, as a result of treatment based on race

**3.7x** More likely to feel emotionally upset, as a result of treatment based on race

**1.7x** More likely to have inadequate prenatal care

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015

**1.2x** 

More likely to have

baby born with low

birth weight



2.6x

Lower infant

mortality rate

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# Hispanic Health in Nebraska

### **Compared to Non-Hispanic Whites**



Higher homicide mortality rate



More likely to be diagnosed with diabetes

- **2.6x** More likely to perceive their health as fair or poor
- **3.7X** More likely to have no health care coverage
- **2.3x** More likely to have no personal physician

2.2x

More likely to be unable to see a doctor due to cost

Vomen's Health

**2.6x** Higher teen birth rate **2.1**x

More likely to receive inadequate prenatal care

**1.3x** 

Babies less likely to be fed only breast milk at hospital

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015



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### **Demographics**

The racial composition of the United States has changed dramatically throughout time, with minorities accounting for 38% of the total population in 2015.<sup>4</sup> The United States Census Bureau predicts that this percentage will rise to over 50% by 2044. This trend can also be seen in Nebraska.

During the 20<sup>th</sup> century, Nebraska's population saw significant changes. From 1910-1920, Nebraska's African American population doubled to over 10,000.<sup>5</sup> In 1972, Nebraska was the first state to create an agency chiefly responsible for the advocacy of the Hispanic population. During that time, an estimated 30,000 Mexican Americans, the primary heritage of Hispanics in Nebraska, resided in the state.<sup>6</sup>

At the beginning of this century, minority populations accounted for approximately 12% of the U.S. population and 10% of the Nebraska population.<sup>7</sup> In total, Nebraska's minority population grew by almost 30% between 2000 and 2007. By 2050, minority groups are expected to make up approximately half of the total population in the United States, and those population projections are expected in Nebraska as well.

<sup>&</sup>lt;sup>4</sup> U.S. Census Bureau. (2015). United States. Retrieved from www.census.gov/quickfacts/table/PST045216/00

<sup>&</sup>lt;sup>5</sup> Danver, S. (2013) Encyclopedia of politics of the American west. Washington, DC: CQ Press

<sup>&</sup>lt;sup>6</sup> Davis, R. (2008). Service not power: the early years of the Nebraska commission on Mexican-Americans, 1971-1975. Nebraska History 89: 67-83.

<sup>&</sup>lt;sup>7</sup> Hobbs, F. and Stoops, N. (2002). Demographic trends in the 20<sup>th</sup> century: Census 2000 special report.

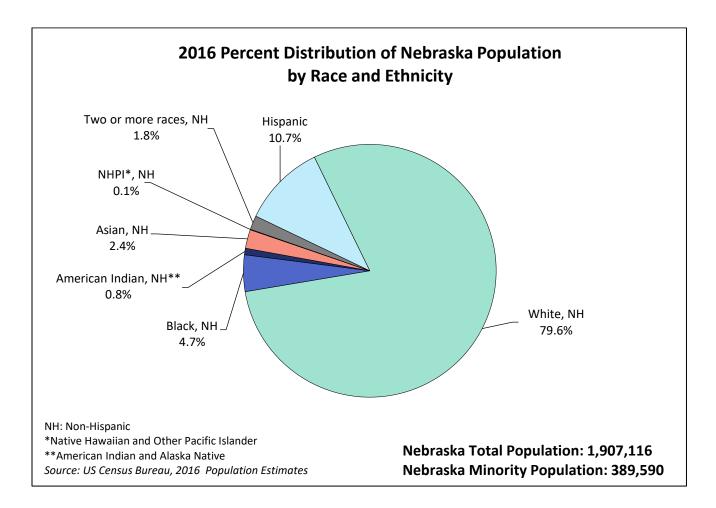
### **Distribution of Nebraska Population**

According to the U.S. Census Bureau, the 2016 Nebraska population was estimated at 1,907,116. Approximately 89% of the population was White alone. Five percent of the population was Black or African American alone, 1.4% of the population was American Indian alone, and 2.5% of the population was Asian alone. Approximately 11% of the population was Hispanic or Latino. Hispanics may be of any race and are included in other race categories.

Number	Percent
1,907,116	
1,694,976	88.9
1,732,385	90.8
94,620	5.0
115,041	6.0
27,318	1.4
40,914	2.1
47,282	2.5
58,045	3.0
203,320	10.7
	1,907,116         1,694,976         1,732,385         94,620         115,041         27,318         40,914         47,282         58,045

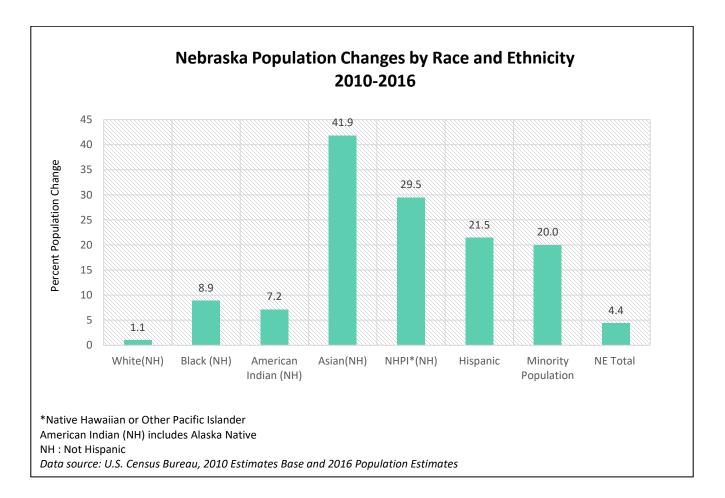
#### Percent Distribution of Nebraska Population

As of 2016, the Hispanic population was the largest minority population in Nebraska at 10.7%, followed by the Non-Hispanic Black population at 4.7% and the Non-Hispanic Asian population at 2.4%. Non-Hispanic Whites were the largest population at 79.6%.



### **Nebraska Population Changes**

The overall Nebraska population increased by 4.4% from 2010-2016. Nebraska's minority population increased to 20% from 2010-2016, which was 4.5 times higher than the Nebraska's total population change. The Asian population saw the largest percent change in population at 41.9%, followed by the Native Hawaiian and Pacific Islander population at 29.5% and the Hispanic population at 21.5%.



### Nebraska Population Characteristics by Age and Gender

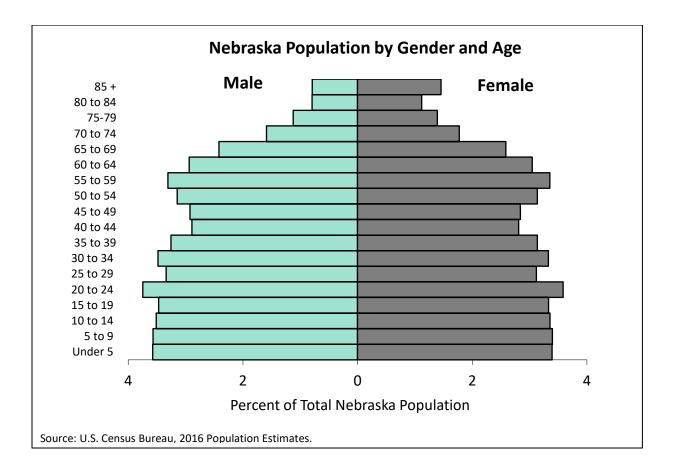
Approximately one-fourth of Nebraska's total population was made up of individuals under the age of 18. Approximately 60% of the population was between 18 and 64 years of age, and 15% of the population was age 65 or older. Minority populations often reported higher percentages of individuals under the age of 18 and notably lower percentages of individuals age 65 and older.

#### Nebraska Total Population Characteristics by Age and Gender

Ago Group	Male Po	pulation	Female Population		Total Population	
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	25.5	242,423	24.1	230,902	24.8	473,325
Under 5	7.2	68,124	6.8	64,685	7.0	132,809
5 to 13	12.9	122,174	12.2	116,209	12.5	238,383
14 to 17	5.5	52,125	5.2	50,008	5.4	102,133
18 to 64	61.0	580,294	59.3	566,753	60.1	1,147,047
18 to 24	10.3	98,290	9.9	94,428	10.1	192,718
25 to 44	26.0	247,182	24.7	236,292	25.4	483,474
45 to 64	24.7	234,822	24.7	236,033	24.7	470,855
65 and over	13.5	127,954	16.6	158,790	15.0	286,744
85 and over	1.6	15,053	2.9	27,769	2.2	42,822
16 and over	77.2	734,392	78.5	750,361	77.9	1,484,753
18 and over	74.5	708,248	75.9	725,543	75.2	1,433,791
15 to 44	40.5	384,753	38.5	368,163	39.5	752,916

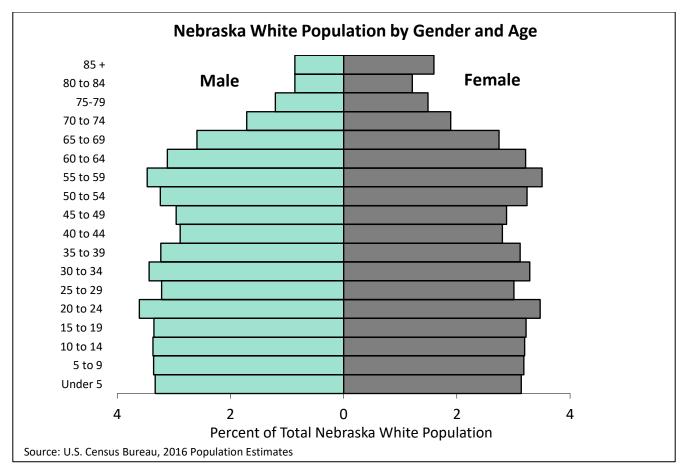
#### Nebraska Population Characteristics by Age and Gender

The following chart shows the age distribution among all Nebraskans. The percentage of male and female individuals within each age group was similar, with the exception of among those age 75 and older. Among those 85 and older, there were approximately 1.8 times more female Nebraskans. The largest proportion of Nebraskans were those ages 20-24 and those ages 55-59.



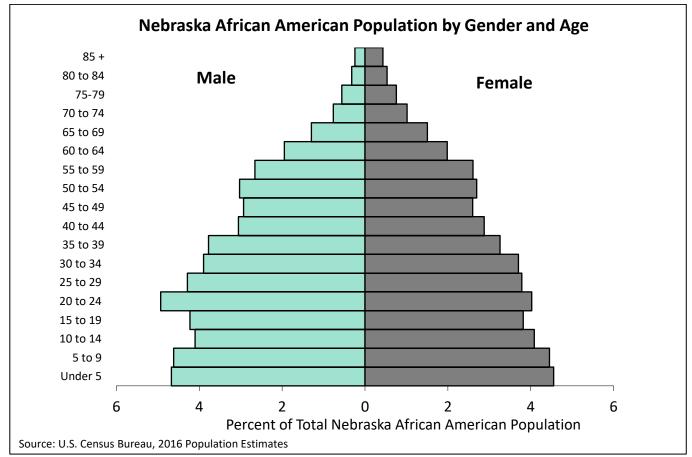
### White Population Characteristics by Age and Gender

Male Po		pulation	Female Population		Total Po	pulation
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	24.2	204,094	22.7	193,376	23.4	397,470
Under 5	6.7	56,402	6.3	53,187	6.5	109,589
5 to 13	12.2	103,003	11.4	97,423	11.8	200,426
14 to 17	5.3	44,689	5.0	42,766	5.2	87,455
18 to 64	61.3	517,335	59.5	506,118	60.4	1,023,453
18 to 24	10.0	84,284	9.6	81,450	9.8	165,734
25 to 44	25.6	216,434	24.3	207,061	25.0	423,495
45 to 64	25.7	216,617	25.6	217,607	25.6	434,224
65 and over	14.5	122,576	17.8	151,477	16.2	274,053
85 and over	1.7	14,615	3.2	27,048	2.5	41,663
16 and over	78.5	662,380	79.8	678,811	79.1	1,341,191
18 and over	75.8	639,911	77.3	657,595	76.6	1,297,506
15 to 44	39.6	334,395	37.7	320,526	38.6	654,921



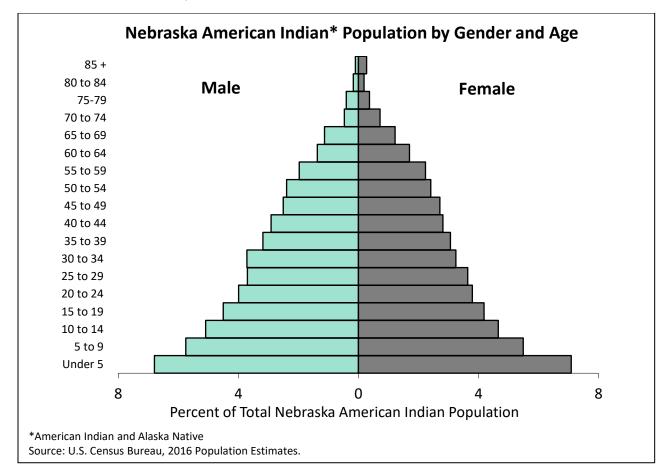
### African American Population Characteristics by Age and Gender

	Male Po	pulation	Female P	opulation	Total Population	
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	30.9	15,023	31.6	14,572	31.3	29,595
Under 5	9.1	4,422	9.3	4,308	9.2	8,730
5 to 13	15.5	7,505	16.0	7,349	15.7	14,854
14 to 17	6.4	3,096	6.3	2,915	6.4	6,011
18 to 64	62.9	30,511	59.7	27,486	61.3	57,997
18 to 24	13.0	6,312	11.4	5,239	12.2	11,551
25 to 44	29.3	14,205	28.0	12,889	28.6	27,094
45 to 64	20.6	9,994	20.3	9,358	20.5	19,352
65 and over	6.2	3,011	8.7	4,017	7.4	7,028
85 and over	0.5	231	0.9	411	0.7	642
16 and over	72.2	35,043	71.5	32,953	71.9	67,996
18 and over	69.1	33,522	68.4	31,503	68.7	65,025
15 to 44	47.1	22,868	44.1	20,314	45.6	43,182



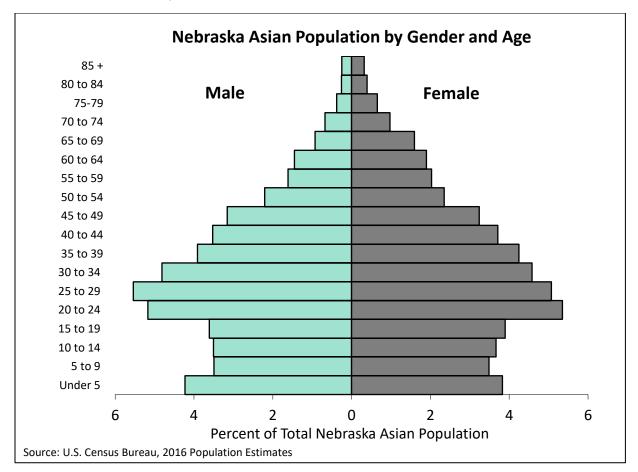
#### American Indian Population Characteristics by Age and Gender

	Male Po	pulation	Female P	opulation	Total Population	
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	40.9	5,601	39.9	5,435	40.4	11,036
Under 5	13.6	1,857	14.2	1,938	13.9	3,795
5 to 13	19.6	2,690	18.6	2,538	19.1	5,228
14 to 17	7.7	1,054	7.0	959	7.4	2,013
18 to 64	54.6	7,480	54.5	7,425	54.6	14,905
18 to 24	11.2	1,540	10.7	1,457	11.0	2,997
25 to 44	26.9	3,689	25.6	3,491	26.3	7,180
45 to 64	16.4	2,251	18.2	2,477	17.3	4,728
65 and over	4.5	620	5.6	757	5.0	1,377
85 and over	0.2	28	0.5	74	0.4	102
16 and over	62.9	8,618	63.5	8,649	63.2	17,267
18 and over	59.1	8,100	60.1	8,182	59.6	16,282
15 to 44	43.9	6,010	41.7	5,672	42.8	11,682



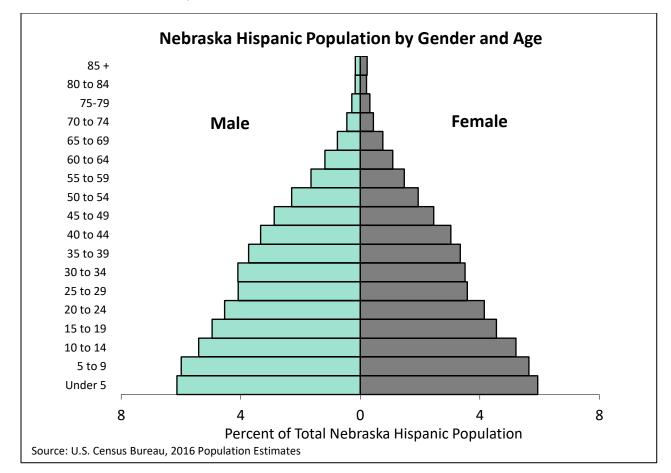
#### Asian Population Characteristics by Age and Gender

Ma		pulation	ulation Female Popu		opulation Total Population	
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	27.2	6,254	25.7	6,225	26.4	12,479
Under 5	8.7	1,999	7.5	1,809	8.1	3,808
5 to 13	13.0	3,002	12.5	3,037	12.8	6,039
14 to 17	5.4	1,253	5.7	1,379	5.6	2,632
18 to 64	67.7	15,603	66.7	16,162	67.2	31,765
18 to 24	13.9	3,206	13.8	3,338	13.8	6,544
25 to 44	36.5	8,412	34.3	8,324	35.4	16,736
45 to 64	17.3	3,985	18.6	4,500	17.9	8,485
65 and over	5.1	1,177	7.7	1,861	6.4	3,038
85 and over	0.5	118	0.6	152	0.6	270
16 and over	75.6	17,410	77.2	18,726	76.4	36,136
18 and over	72.8	16,780	74.3	18,023	73.6	34,803
15 to 44	54.5	12,565	52.4	12,696	53.4	25,261



### **Hispanic Population Characteristics by Age and Gender**

	Male Po	pulation	Female Population		Total Population	
Age Group	Percent	Total	Percent	Total	Percent	Total
Under 18	39.4	41,752	40.9	39,836	40.1	81,588
Under 5	11.8	12,478	12.4	12,077	12.1	24,555
5 to 13	19.9	21,057	20.6	20,094	20.2	41,151
14 to 17	7.8	8,217	7.9	7,665	7.8	15,882
18 to 64	57.1	60,503	55.0	53,528	56.1	114,031
18 to 24	12.5	13,211	12.3	12,003	12.4	25,214
25 to 44	29.3	31,012	28.1	27,385	28.7	58,397
45 to 64	15.4	16,280	14.5	14,140	15.0	30,420
65 and over	3.5	3,730	4.1	3,971	3.8	7,701
85 and over	0.3	340	0.5	471	0.4	811
16 and over	64.4	68,234	62.9	61,210	63.7	129,444
18 and over	60.6	64,233	59.1	57,499	59.9	121,732
15 to 44	47.5	50,322	46.3	45,080	46.9	95,402



### Nebraska Minority Population by County

In 2016, Thurston County (64.2%), Colfax County (50.7%), and Dakota County (50.6%) reported the largest percentages of minority populations. Douglas County (30.1%), Lancaster County (18.3%), and Sarpy County (18.5%) reported the highest total number of minority individuals.

County	Total 2016 Population	2016 Minority Population	Percent Minority Population
Thurston County	7,141	4,583	64.2%
Colfax County	10,746	5,445	50.7%
Dakota County	20,302	10,279	50.6%
Dawson County	23,765	9,592	40.4%
, Hall County	61,477	20,081	32.7%
, Douglas County	555,358	166,933	30.1%
Saline County	14,227	4,270	30.0%
Scotts Bluff County	36,409	10,122	27.8%
Platte County	33,028	6,893	20.9%
Madison County	35,036	6,962	19.9%
Johnson County	5,214	1,020	19.6%
Sheridan County	5,231	977	18.7%
Sarpy County	178,503	32,945	18.5%
Box Butte County	11,185	2,056	18.4%
Lancaster County	310,440	56,859	18.3%
Morrill County	4,865	881	18.1%
Dodge County	36,655	5,666	15.5%
Dawes County	8,907	1,321	14.8%
Dixon County	5,738	846	14.7%
Chase County	3,913	557	14.2%
Knox County	8,484	1,174	13.8%
Kimball County	3,675	503	13.7%
Adams County	31,663	4,283	13.5%
Buffalo County	49,215	6,360	12.9%
Cherry County	5,825	691	11.9%
Lincoln County	35,501	4,211	11.9%
Cuming County	8,956	1,021	11.4%
Dundy County	1,810	201	11.1%
Clay County	6,137	668	10.9%
Otoe County	15,941	1,732	10.9%
Cheyenne County	10,044	1,014	10.1%
Wayne County	9,395	924	9.8%
Keith County	8,092	794	9.8%
York County	13,738	1,233	9.0%
-			

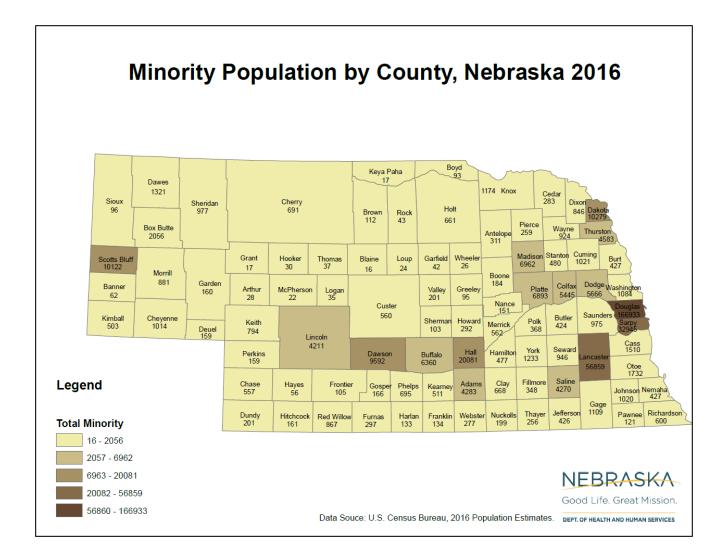
Population         Population         Population           Devel County         1,861         159         8.5%           Garden County         1,907         160         8.4%           Gosper County         2,025         166         8.2%           Red Willow County         10,770         867         8.1%           Stanton County         5,971         480         8.0%           Kearney County         6,558         511         7.8%           Stoux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Pichardson County         7,999         600         7.5%           Metrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           But County         10,230         661         6.5%           Holt County         10,230         661         6.3%           Filmore County         5,623         348         6.2%           Nemaha County         4,763         297         6.2%           Filmore County         7,166         426         5.9%           Cass County         7,110         946 <th>County</th> <th>Total 2016</th> <th>2016 Minority</th> <th>Percent Minority</th>	County	Total 2016	2016 Minority	Percent Minority
Garden County         1,907         160         8.4%           Gosper County         2,025         166         8.2%           Red Willow County         10,770         867         8.1%           Stanton County         5,571         480         8.0%           Kearney County         6,558         511         7.8%           Webster County         3,567         277         7.8%           Sioux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Metrick County         7,834         562         7.2%           Polk County         5,535         427         6.5%           Holt County         10,230         661         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         4,66         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         1,510		Population	Population	Population
Gosper County         2,025         166         8.2%           Red Willow County         10,770         867         8.1%           Stanton County         5,971         480         8.0%           Kearney County         6,558         511         7.8%           Webster County         3,567         277         7.8%           Sioux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Perkins County         2,831         161         5.7%           Perkins County         2,998				
Red Willow County         10,770         867         8.1%           Stanton County         5,971         480         8.0%           Kearney County         6,558         511         7.8%           Webster County         3,567         277         7.8%           Sioux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         7,166         28         6.0%           Jefferson County         7,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,838 <td></td> <td></td> <td></td> <td></td>				
Stanton County         5,971         480         8.0%           Kearney County         6,558         511         7.8%           Webster County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.3%           Furnas County         5,623         348         6.2%           Nemaha County         7,166         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,996	· · ·			
Kearney County         6,558         511         7.8%           Webster County         3,567         277         7.8%           Sioux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Phelps County         9,187         695         7.6%           Merrick County         7,999         600         7.5%           Merrick County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Perkins County         2,898         159         5.5%           Vashington County         2,927         1,084         5.4%           Butler County         7,996	· · · ·			
Webster County         3,567         277         7.8%           Sloux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         9,157         477         5.2%           Gage County         10,827 <td< td=""><td>Stanton County</td><td>5,971</td><td>480</td><td>8.0%</td></td<>	Stanton County	5,971	480	8.0%
Sioux County         1,259         96         7.6%           Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Vashington County         9,157         477         5.2%           Custer County         10,827	Kearney County	6,558	511	7.8%
Phelps County         9,187         695         7.6%           Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         7,166         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Seward County         1,7,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         9,157         477         5.2%           Gage County         10,827         560         5.2%           Gage County         5,079	Webster County	3,567	277	7.8%
Richardson County         7,999         600         7.5%           Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         7,166         426         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Vashington County         2,0227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         7,408	Sioux County	1,259	96	7.6%
Merrick County         7,834         562         7.2%           Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Nemaha County         5,623         348         6.2%           Nemaha County         5,633         1427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Washington County         21,608         1,109         5.1%           Thomas County         727         37         5.1%           Thayer County         5,343	Phelps County	9,187	695	7.6%
Polk County         5,203         368         7.1%           Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Memaha County         6,971         427         6.1%           Arthur County         7,166         426         5.9%           Cass County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Geward County         7,110         946         5.5%           Perkins County         2,831         161         5.7%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thayer County         5,343	Richardson County	7,999	600	7.5%
Burt County         6,535         427         6.5%           Holt County         10,230         661         6.5%           Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         9,157         477         5.2%           Gage County         10,827         560         5.2%           Gage County         10,827         560         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,259         199         4.7%           Saunders County         2,993	Merrick County	7,834	562	7.2%
Holt County10,2306616.5%Hayes County890566.3%Furnas County4,7632976.2%Fillmore County5,6233486.2%Nemaha County6,9714276.1%Arthur County466286.0%Jefferson County7,1664265.9%Cass County25,6301,5105.9%Hitchcock County2,8311615.7%Seward County17,1109465.5%Perkins County2,8981595.5%Washington County20,2271,0845.4%Butler County7,9964245.3%Hamilton County9,1574775.2%Gage County10,8275605.2%Gage County727375.1%Thayer County6,3433114.9%Valley County1,975934.7%Nuckolls County4,2591994.7%Saunders County2,6981214.5%Howard County6,4072924.6%Pawnee County2,6981214.5%Logan County789354.4%Hooker County6833004.4%	Polk County	5,203	368	7.1%
Hayes County         890         56         6.3%           Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Kitchcock County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Gage County         10,827         560         5.2%           Gage County         727         37         5.1%           Thomas County         5,079         256         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,259	Burt County	6,535	427	6.5%
Furnas County         4,763         297         6.2%           Fillmore County         5,623         348         6.2%           Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         7,996         424         5.3%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thayer County         5,079         256         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,200         201         4.8%           Boyd County         1,975 <td>Holt County</td> <td>10,230</td> <td>661</td> <td>6.5%</td>	Holt County	10,230	661	6.5%
Fillmore County5,6233486.2%Nemaha County6,9714276.1%Arthur County466286.0%Jefferson County7,1664265.9%Cass County25,6301,5105.9%Cass County2,8311615.7%Seward County17,1109465.5%Perkins County2,8981595.5%Washington County20,2271,0845.4%Butler County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County1,975934.7%Saunders County2,6981214.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Logan County789354.4%	Hayes County	890	56	6.3%
Nemaha County         6,971         427         6.1%           Arthur County         466         28         6.0%           Jefferson County         7,166         426         5.9%           Cass County         25,630         1,510         5.9%           Cass County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thomas County         727         37         5.1%           Thayer County         6,343         311         4.9%           Valley County         4,200         201         4.8%           Boyd County         1,975         93         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         2,698	Furnas County	4,763	297	6.2%
Arthur County466286.0%Jefferson County7,1664265.9%Cass County25,6301,5105.9%Hitchcock County2,8311615.7%Seward County17,1109465.5%Perkins County2,8981595.5%Washington County20,2271,0845.4%Butler County7,9964245.3%Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County6,4072924.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Logan County789354.4%	Fillmore County	5,623	348	6.2%
Jefferson County7,1664265.9%Cass County25,6301,5105.9%Hitchcock County2,8311615.7%Seward County17,1109465.5%Perkins County2,8981595.5%Washington County20,2271,0845.4%Butler County7,9964245.3%Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County1,975934.7%Nuckolls County2,9939754.6%Howard County6,4072924.6%Pawnee County2,9941344.5%Logan County789354.4%	Nemaha County	6,971	427	6.1%
Cass County         25,630         1,510         5.9%           Hitchcock County         2,831         161         5.7%           Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thomas County         5,079         256         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,259         199         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         6,407         292         4.6%           Howard County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%	Arthur County	466	28	6.0%
Hitchcock County2,8311615.7%Seward County17,1109465.5%Perkins County2,8981595.5%Washington County20,2271,0845.4%Butler County7,9964245.3%Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County20,9939754.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Jefferson County	7,166	426	5.9%
Seward County         17,110         946         5.5%           Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thomas County         727         37         5.1%           Thayer County         5,079         256         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,200         201         4.8%           Boyd County         1,975         93         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%	Cass County	25,630	1,510	5.9%
Perkins County         2,898         159         5.5%           Washington County         20,227         1,084         5.4%           Butler County         7,996         424         5.3%           Hamilton County         9,157         477         5.2%           Custer County         10,827         560         5.2%           Gage County         21,608         1,109         5.1%           Thomas County         727         37         5.1%           Thayer County         5,079         256         5.0%           Antelope County         6,343         311         4.9%           Valley County         4,200         201         4.8%           Boyd County         1,975         93         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         6,407         292         4.6%           Howard County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%	Hitchcock County	2,831	161	5.7%
Washington County20,2271,0845.4%Butler County7,9964245.3%Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County20,9939754.6%Howard County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Seward County	17,110	946	5.5%
Butler County7,9964245.3%Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County6,4072924.6%Howard County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Perkins County	2,898	159	5.5%
Hamilton County9,1574775.2%Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County6,4072924.6%Howard County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Washington County	20,227	1,084	5.4%
Custer County10,8275605.2%Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County20,9939754.6%Howard County2,6981214.5%Franklin County2,9941344.5%Logan County683304.4%	Butler County	7,996	424	5.3%
Gage County21,6081,1095.1%Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County20,9939754.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Franklin County2,9941344.5%Hooker County683304.4%	Hamilton County	9,157	477	5.2%
Thomas County727375.1%Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County20,9939754.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Custer County	10,827	560	5.2%
Thayer County5,0792565.0%Antelope County6,3433114.9%Valley County4,2002014.8%Boyd County1,975934.7%Nuckolls County4,2591994.7%Saunders County20,9939754.6%Howard County6,4072924.6%Pawnee County2,6981214.5%Franklin County789354.4%Hooker County683304.4%	Gage County	21,608	1,109	5.1%
Antelope County       6,343       311       4.9%         Valley County       4,200       201       4.8%         Boyd County       1,975       93       4.7%         Nuckolls County       4,259       199       4.7%         Saunders County       20,993       975       4.6%         Howard County       6,407       292       4.6%         Pawnee County       2,698       121       4.5%         Franklin County       2,994       134       4.5%         Hooker County       683       30       4.4%	Thomas County	727	37	5.1%
Valley County         4,200         201         4.8%           Boyd County         1,975         93         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         20,993         975         4.6%           Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Thayer County	5,079	256	5.0%
Boyd County         1,975         93         4.7%           Nuckolls County         4,259         199         4.7%           Saunders County         20,993         975         4.6%           Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Antelope County	6,343	311	4.9%
Nuckolls County         4,259         199         4.7%           Saunders County         20,993         975         4.6%           Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Valley County	4,200	201	4.8%
Saunders County         20,993         975         4.6%           Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Boyd County		93	4.7%
Saunders County         20,993         975         4.6%           Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Nuckolls County	4,259	199	4.7%
Howard County         6,407         292         4.6%           Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%		20,993	975	4.6%
Pawnee County         2,698         121         4.5%           Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%	Howard County		292	4.6%
Franklin County         2,994         134         4.5%           Logan County         789         35         4.4%           Hooker County         683         30         4.4%		2,698	121	4.5%
Logan County         789         35         4.4%           Hooker County         683         30         4.4%			134	4.5%
Hooker County         683         30         4.4%			35	4.4%
		683	30	4.4%

County	Total 2016 Population	2016 Minority Population	Percent Minority Population
Nance County	3,563	151	4.2%
Frontier County	2,647	105	4.0%
Greeley County	2,401	95	4.0%
Loup County	615	24	3.9%
Harlan County	3,452	133	3.9%
Brown County	2,980	112	3.8%
Pierce County	7,142	259	3.6%
Boone County	5,332	184	3.5%
Sherman County	3,011	103	3.4%
Blaine County	470	16	3.4%
Cedar County	8,597	283	3.3%
Wheeler County	804	26	3.2%
Rock County	1,404	43	3.1%
Grant County	665	17	2.6%
Keya Paha County	792	17	2.1%
Garfield County	1,994	42	2.1%

Source: U.S Census Bureau, 2016 Population Estimates

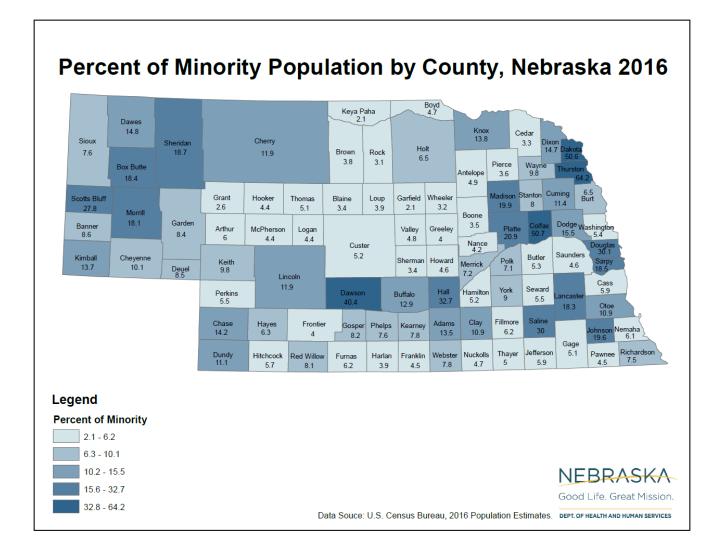
### **Nebraska Minority Population Map**

As of 2016, Douglas County (166,933), Lancaster County (56,859), and Sarpy County (32,945) had the largest minority populations in Nebraska. Hall County (20,081), Dakota County (10,279), and Scotts Bluff County (10,122) all had minority populations of over 10,000. Counties with a minority population of over 5,000 include Dawson, Buffalo, Madison, Platte, Colfax, and Dodge.



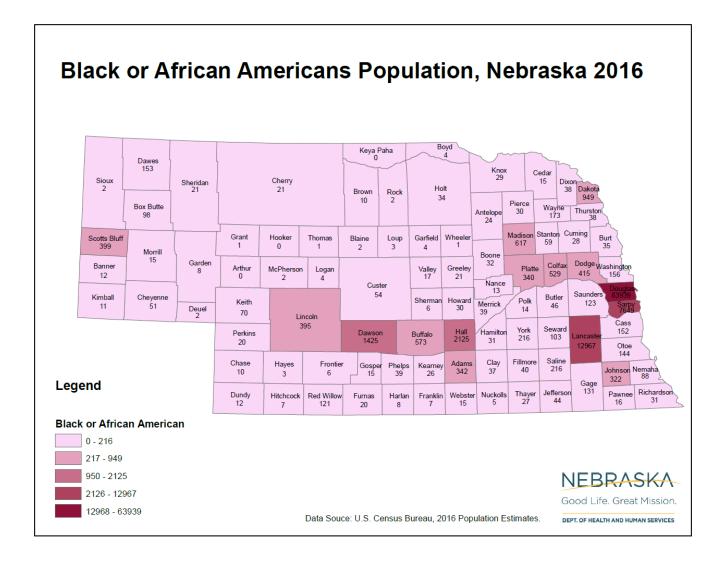
### **Nebraska Percent of Minority Population Map**

Thurston County (64.2%), Colfax County (50.7%), and Dakota County (50.6%) all had minority populations of over 50%. Nebraska counties where minorities made up over one-fourth of the population included Scotts Bluff, Dawson, Hall, Saline, and Douglas. While Sarpy and Lancaster counties had two of the top three largest minority populations, the percent of minority population was only approximately 18%.



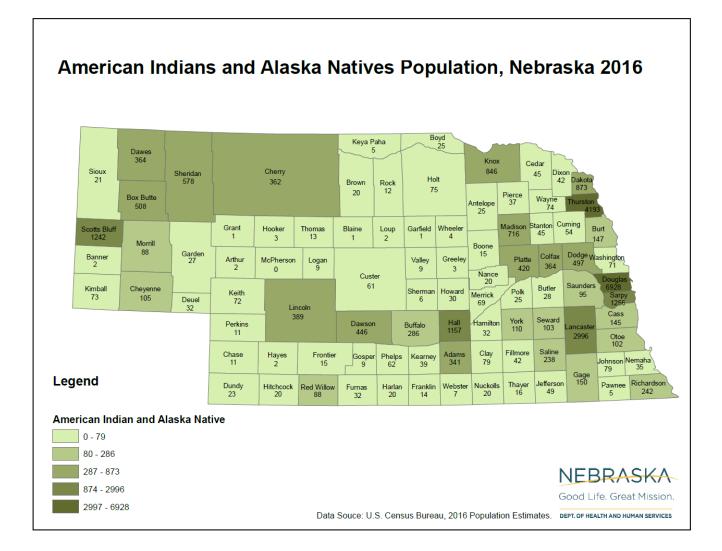
### **African American Population by County Map**

Douglas County (63,939) reported by far the largest African American population. Other counties with an African American population of over 5,000 included Lancaster County (12,967) and Sarpy County (7,649). Hall County (2,125) and Dawson County (1,425) had African American populations of over 1,000.



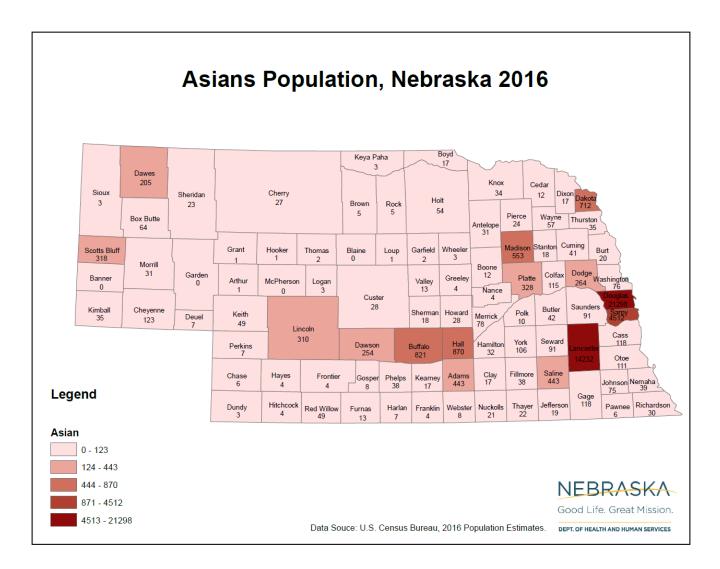
### **American Indian Population by County Map**

Douglas County (6,928) and Thurston County (4,193) had the highest American Indian populations in 2016. Lancaster County (2,996), Sarpy County (1,256), Hall County (1,157), and Scotts Bluff County (1,242) also had American Indian populations of over 1,000. Nebraska counties with an American Indian population of over 500 included Box Butte, Sheridan, Knox, Madison, and Dakota.



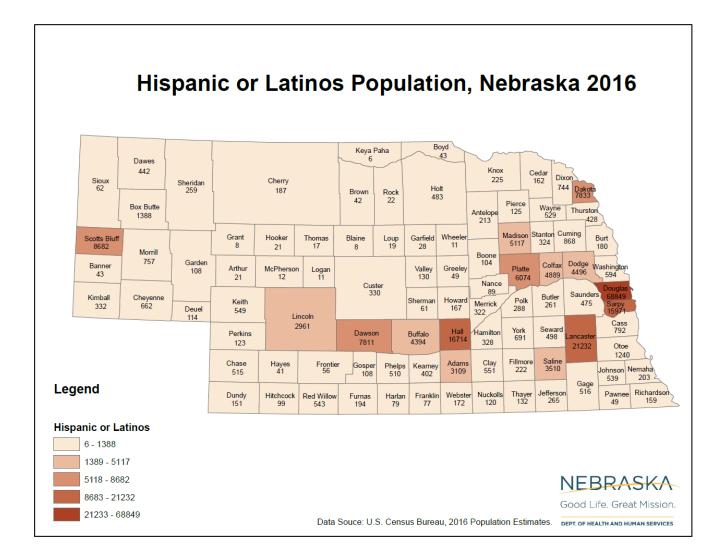
### Asian Population by County Map

Douglas County (21,298) and Lancaster County (14,232) had the highest Asian populations in Nebraska. Sarpy County (4,512) also had a relatively high Asian population. Nebraska counties with an Asian population of more than 500 included Hall, Buffalo, Dakota, and Madison.



### **Hispanic Population by County Map**

Douglas County (68,849) had the highest Hispanic population in Nebraska as of 2016. Lancaster County (21,232), Hall County (16,714), and Sarpy County (15,971) also had high Hispanic populations. Other Nebraska counties with a Hispanic population of over 5,000 included Dakota, Madison, Platte, Dawson, and Scotts Bluff.



## **Nebraska County Population Change**

From April 2010 to April 2016, Banner County (15.7%), Sarpy County (12.7%), Thomas County (10.7%), Lancaster County (8.5%), and Douglas County (7.3%) saw the largest percent increase in county population. Rock County (-9.0%) and Dundy County (-8.8%) saw the largest percent decrease in the county population.

Nebraska Counties	April 1, 2010	July 1, 2016	Number	Percent
	Estimate	Estimate	Change	Change
Adams County	31,367	31,684	317	1.0
Antelope County	6,685	6,329	-356	-5.3
Arthur County	460	469	9	2.0
Banner County	690	798	108	15.7
Blaine County	478	484	6	1.3
Boone County	5,505	5,332	-173	-3.1
Box Butte County	11,308	11,194	-114	-1.0
Boyd County	2,099	1,982	-117	-5.6
Brown County	3,143	2,960	-183	-5.8
Buffalo County	46,102	49,383	3281	7.1
Burt County	6,858	6,546	-312	-4.5
Butler County	8,395	8,052	-343	-4.1
Cass County	25,241	25,767	526	2.1
Cedar County	8,852	8,671	-181	-2.0
Chase County	3,966	3,937	-29	-0.7
Cherry County	5,713	5,832	119	2.1
Cheyenne County	9,998	10,051	53	0.5
Clay County	6,539	6,163	-376	-5.8
Colfax County	10,515	10,414	-101	-1.0
Cuming County	9,139	9,016	-123	-1.3
Custer County	10,943	10,807	-136	-1.2
Dakota County	21,006	20,465	-541	-2.6
Dawes County	9,182	8,979	-203	-2.2
Dawson County	24,326	23,640	-686	-2.8
Deuel County	1,941	1,873	-68	-3.5
Dixon County	6,000	5,762	-238	-4.0
Dodge County	36,685	36,757	72	0.2
Douglas County	517,116	554,995	37879	7.3
Dundy County	2,008	1,831	-177	-8.8
Fillmore County	5,890	5,720	-170	-2.9
Franklin County	3,225	3,014	-211	-6.5
Frontier County	2,756	2,621	-135	-4.9
Furnas County	4,959	4,787	-172	-3.5
Gage County	22,311	21,799	-512	-2.3

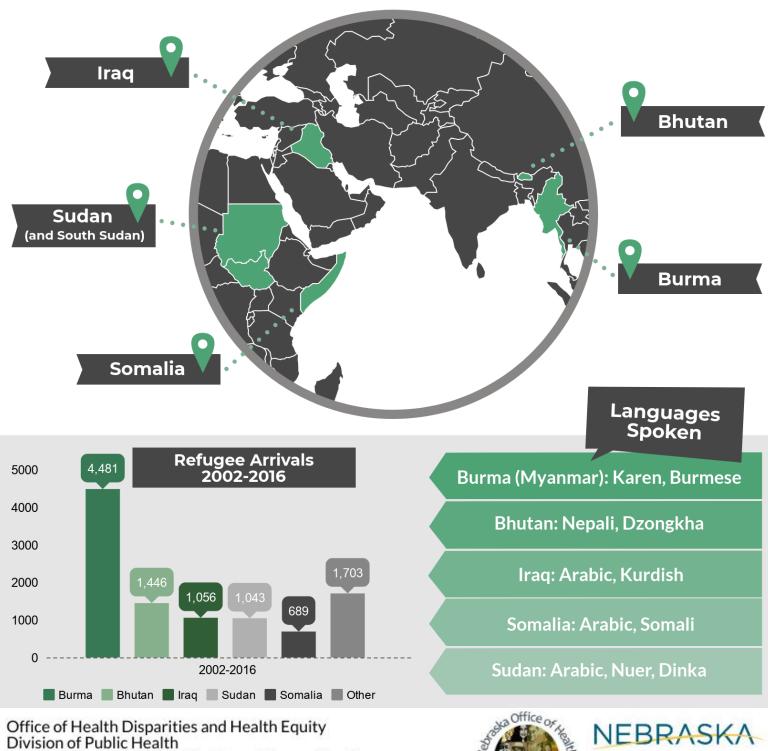
Nebraska Counties	April 1, 2010 Estimate	July 1, 2016 Estimate	Number Change	Percent Change
Garden County	2,057	1,930	-127	-6.2
Garfield County	2,049	2,011	-38	-1.9
Gosper County	2,044	1,971	-73	-3.6
Grant County	614	641	27	4.4
Greeley County	2,538	2,399	-139	-5.5
Hall County	58,607	61,705	3098	5.3
Hamilton County	9,114	9,186	72	0.8
Harlan County	3,423	3,473	50	1.5
Hayes County	960	897	-63	-6.6
Hitchcock County	2,908	2,825	-83	-2.9
Holt County	10,435	10,250	-185	-1.8
Hooker County	736	708	-28	-3.8
Howard County	6,274	6,429	155	2.5
Jefferson County	7,547	7,177	-370	-4.9
Johnson County	5,217	5,171	-370	-4.9
Kearney County	6,489	6,552	63	1.0
Keith County	8,368	8,018	-350	-4.2
	8,308	791	-33	-4.2
Keya Paha County				
Kimball County	3,821	3,679	-142	-3.7
Knox County	8,701	8,571	-130	-1.5
Lancaster County	285,407	309,637	24230	8.5
Lincoln County	36,288	35,550	-738	-2.0
Logan County	763	772	9	1.2
Loup County	628	591	-37	-5.9
McPherson County	539	493	-46	-8.5
Madison County	34,876	35,015	139	0.4
Merrick County	7,855	7,828	-27	-0.3
Morrill County	5,042	4,787	-255	-5.1
Nance County	3,735	3,576	-159	-4.3
Nemaha County	7,248	6,971	-277	-3.8
Nuckolls County	4,500	4,265	-235	-5.2
Otoe County	15,740	16,081	341	2.2
Pawnee County	2,773	2,652	-121	-4.4
Perkins County	2,970	2,898	-72	-2.4
Phelps County	9,188	9,266	78	0.8
Pierce County	7,266	7,159	-107	-1.5
Platte County	32,237	32,861	624	1.9
Polk County	5,406	5,203	-203	-3.8
Red Willow County	11,055	10,722	-333	-3.0
Richardson County	8,363	8,060	-303	-3.6
Rock County	1,528	1,390	-138	-9.0
Saline County	14,200	14,331	131	0.9
Sarpy County	158,840	179,023	20183	12.7
Saunders County	20,780	21,038	258	1.2

Nebraska Counties	April 1, 2010	July 1, 2016	Number	Percent
	Estimate	Estimate	Change	Change
Scotts Bluff County	36,970	36,422	-548	-1.5
Seward County	16,750	17,284	534	3.2
Sheridan County	5,469	5,234	-235	-4.3
Sherman County	3,152	3,054	-98	-3.1
Sioux County	1,311	1,242	-69	-5.3
Stanton County	6,129	5,944	-185	-3.0
Thayer County	5,228	5,101	-127	-2.4
Thomas County	647	716	69	10.7
Thurston County	6,940	7,127	187	2.7
Valley County	4,260	4,184	-76	-1.8
Washington County	20,234	20,603	369	1.8
Wayne County	9,595	9,365	-230	-2.4
Webster County	3,812	3,603	-209	-5.5
Wheeler County	818	776	-42	-5.1
York County	13,665	13,794	129	0.9

Source: U.S Census Bureau, 2016 Population Estimates

# Top Five Refugee Arrivals in Nebraska

From 2002-2016, Nebraska welcomed **10,418** refugees from **48** countries.



Nebraska Department of Health and Human Services Source: US Office of Refugee Resettlement, Refugee Arrival Data, 2002-2016

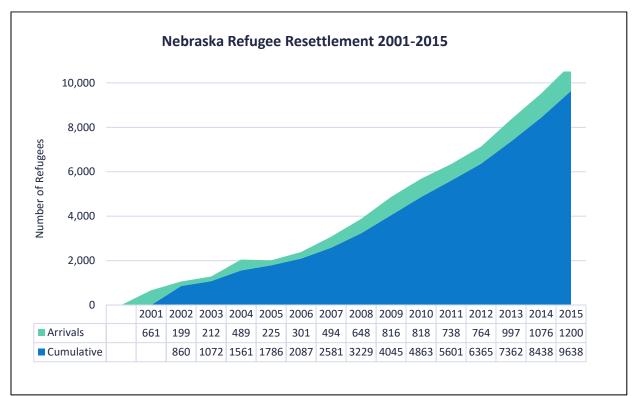




## **Refugee Population**

### **Refugee Resettlement**

The number of refugees in Nebraska has increased significantly in the past years. Due to a low unemployment rate and low cost of living, Nebraska continues to attract a relatively large number of refugees. The majority of refugees resettled in Nebraska live in Omaha and Lincoln. Numerous resettlement and social service agencies work together to assist refugees with integrating into their surrounding communities.



Source: U.S. Department of Health & Human Services, Office of Refugee Resettlement, 2000-2015

### Nebraska Refugee Arrival by Country of Origin

The table below shows the cumulative total number of refugees admitted into Nebraska between fiscal years 2007-2016. From 2007 to 2016, Nebraska received 8,992 refugees. These refugees come from various countries, such as Burma, Somalia, Burundi, Bhutan, Sudan, and Iraq.

Country of Origin	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Afghanistan	0	0	0	0	0	0	0	0	0	14	14
Angola	0	1	0	0	0	0	0	0	0	0	1
Bhutan	0	0	54	90	201	269	213	257	176	186	1,446
Botswana	0	1	0	0	0	0	0	0	0	0	1
Burma	157	277	525	528	427	393	572	501	652	415	4,447
Burundi	56	17	10	6	0	0	0	0	3	3	95
Chad	0	0	0	0	0	0	0	0	0	0	0
China	0	1	0	0	0	0	0	0	0	0	1
Congo	7	2	3	0	0	1	10	0	5	0	28
Cuba	7	10	21	5	6	3	0	6	4	0	62
Dem. Rep. Congo	0	12	7	10	0	0	0	0	9	90	128
Egypt	0	0	0	0	0	0	0	0	0	0	0
Eritrea	3	1	3	1	0	0	5	0	0	8	21
Ethiopia	9	0	9	2	0	2	1	10	0	5	38
India	0	0	0	0	0	0	0	2	1	0	3
Indonesia	0	0	0	0	0	0	1	0	0	0	1
Iran	0	3	1	5	8	4	5	31	19	16	92
Iraq	2	35	48	72	65	55	76	190	163	326	1,032
Israel	0	0	0	0	0	0	0	6	0	0	6
Kenya	0	1	0	0	0	0	0	0	0	0	1
Jordan	0	0	0	0	0	0	0	0	1	0	1
Laos	0	0	0	0	0	0	0	0	0	0	0

Country of Origin	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Lebanon	0	0	1	0	0	0	0	0	0	0	1
Liberia	11	7	5	0	2	0	0	0	0	0	25
Malaysia	0	2	0	0	0	2	0	0	0	0	4
Mauritania	10	0	0	0	0	0	0	0	0	0	10
Nepal	0	0	0	0	1	0	2	3	7	2	15
Nigeria	0	0	0	0	0	0	0	0	0	0	0
Palestine	0	0	0	0	0	0	0	0	6	0	6
Philippines	0	0	0	0	0	0	0	0	0	0	0
Republic of South Sudan	0	0	0	0	0	0	0	0	26	17	43
Russia	0	0	0	0	0	0	0	0	0	1	1
Rwanda	0	0	0	0	0	0	0	0	1	0	1
Sierra Leone	1	0	1	0	0	0	0	0	0	0	2
Somalia	34	41	30	24	7	25	35	52	88	139	475
Sri Lanka	0	0	0	1	0	0	0	0	0	0	1
Sudan	44	12	44	43	6	7	64	13	22	96	351
Syria	0	0	0	0	0	0	0	0	0	118	118
Tanzania	0	0	0	0	0	3	0	0	0	0	3
Thailand	88	191	0	3	0	0	0	0	0	0	282
Тодо	4	4	0	0	0	0	0	0	0	5	13
Uganda	0	1	0	0	0	0	0	0	0	0	1
Ukraine	0	0	0	0	9	0	13	5	17	0	44
U.S.S.R.	42	5	4	0	0	0	0	0	0	0	51
Vietnam	19	24	50	28	4	0	0	0	0	0	125
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0
Zimbabwe	0	0	0	0	2	0	0	0	0	0	2
<b>Nebraska Total</b> Source: Office of Refugee Re	494	648	816	818	738	764	997	1,076	1,200	1,441	8,992

Source: Office of Refugee Resettlement, Refugee Arrival Data, 2007 - 2016

### Nebraska Refugee Arrival: Five Year Periods

The table below shows the number of refugees admitted to Nebraska for three five-year periods. Based on the data from the U.S. Department of Homeland Security, Nebraska received 10,418 refugees between fiscal years 2002 and 2016.

Country of Origin	2002 2006	2007 2011	2012 2016	Total
Afghanistan	29	0	14	43
Angola	0	1	0	1
Bhutan	0	345	1,101	1,446
Botswana	0	1	0	1
Burma	34	1,914	2,533	4,481
Burundi	10	89	6	105
Chad	0	0	0	0
China	0	1	0	1
Congo	1	12	16	29
Cuba	42	49	13	104
Dem. Rep. Congo	5	29	99	133
Egypt	2	0	0	2
Eritrea	0	8	13	21
Ethiopia	10	20	18	48
India	0	0	3	3
Indonesia	0	0	1	1
Iran	31	17	75	123
Iraq	24	222	810	1,056
Israel	0	0	6	6
Kenya	0	1	0	1
Jordan	0	0	1	1
Laos	5	0	0	5
Lebanon	0	1	0	1
Liberia	37	25	0	62
Malaysia	0	2	2	4
Mauritania	0	10	0	10
Nepal	0	1	14	15
Nigeria	3	0	0	3
Palestine	0	0	6	6

Country of Origin	2002 2006	2007 2011	2012 2016	Total
Philippines	1	0	0	1
Republic of South Sudan	0	0	43	43
Russia	0	0	1	1
Rwanda	0	0	1	1
Sierra Leone	9	2	0	11
Somalia	214	136	339	689
Sri Lanka	0	1	0	1
Sudan	692	149	202	1,043
Syria	1	0	118	119
Tanzania	0	0	3	3
Thailand	5	282	0	287
Тодо	0	8	5	13
Uganda	2	1	0	3
Ukraine	0	9	35	44
U.S.S.R.	115	51	0	166
Vietnam	60	125	0	185
Vietnam	0	0	0	0
Yugoslavia	94	0	0	94
Zimbabwe	0	2	0	2
Nebraska Total	1,426	<b>3,514</b>	5,478	10,418

Source: Office of Refugee Resettlement, Refugee Arrival Data, 2002 - 2016

### **Top Refugee Arrivals in Nebraska: Last Fifteen Years**

The below chart shows the top refugee populations admitted into Nebraska in the last fifteen years. From 2002-2016, 43% of the total 10,418 refugees admitted into Nebraska were from Burma. The second-largest group of admitted refugees came from Bhutan at 13.9%. Approximately 10% of the total refugees admitted in the last ten years came from Iraq, and an additional 10% came from Sudan. Just under 7% of total refugees admitted to Nebraska came from Somalia.

Country of Origin	Total Arrivals (2002 2016)	Percent of Total Arrivals
Burma	4,481	43.0%
Bhutan	1,446	13.9%
Iraq	1,056	10.1%
Sudan	1,043	10.0%
Somalia	689	6.6%
Total Arrivals	10,418	

Source: Office of Refugee Resettlement, Refugee Arrival Data, 2002 - 2016

### **Top Refugee Arrivals in Nebraska: Last Ten Years**

The following chart shows the top refugee populations admitted into Nebraska in the last ten years. Almost half of all refugees admitted to Nebraska in the last ten years came from Burma at 49.5%. Refugees from Bhutan constituted approximately 16% of total arrivals in the past ten years, and refugees from Iraq constituted 11.5% of total arrivals.

Country of Origin	Total Arrivals (2007 2016)	Percent of Total Arrivals
Burma	4,447	49.5%
Bhutan	1,446	16.1%
Iraq	1,032	11.5%
Somalia	475	5.3%
Sudan	351	3.9%
Total Arrivals	8,992	

Source: Office of Refugee Resettlement, Refugee Arrival Data, 2007 - 2016

### **Top Refugee Arrivals in Nebraska: Last Five Years**

The below chart shows the top refugee populations admitted into Nebraska in the latest five year period. From 2012-2016, 46.2% of all refugees admitted to Nebraska came from Burma. Approximately 20% of all refugee arrivals came from Bhutan, and approximately 15% came from Iraq. Refugees from Somalia (6.1%) and Sudan (3.7%) also reported higher numbers of refugee arrivals in comparison to other refugee groups in Nebraska in the past five years.

Country of Origin	Total Arrivals (2012 2016)	Percent of Total Arrivals
Burma	2,533	46.2%
Bhutan	1,101	20.1%
Iraq	810	14.8%
Somalia	339	6.1%
Sudan	202	3.7%
Total Arrivals	5,478	

Source: Office of Refugee Resettlement, Refugee Arrival Data, 2012 - 2016

## Languages Spoken in Nebraska

Language(s)	Country of Origin
Afrikaans, IsiZulu, IsiXhosa	South African
Albanian	Albania
Amharic, Ethiopian	Ethiopia
Arabic, Egyptian, Lebanese,	African and Middle Eastern
Syrian	Countries
Armenian	Armenia
Bengali, Bangla	Bangladesh
Bosnian, Croatian, Serbian	Bosnia, Croatia, and Serbia
Burmese, Karen, Shan	Myanmar (Burma)
Cambodian, Khmer	Cambodia
Creole	Haiti
Czech	Czechoslovakia (the Czech Republic)
Dinka, Fur, Nuba, Nuer	Sudan
Dutch	Netherlands and Belgium
English	Most Countries
Farsi, Persian, Dari	Iran and Afghanistan
Filipino, Tagalog	Philippines
French	France and African
German	Germany
Greek	Greece
Hindi, Gujarati, Telugu, Hakha- Chin, Marathi	India
Hmong	Laos and Thailand
Indonesian	Indonesia
Italian	Italy
Japanese	Japan
Kanjobal	Guatemala
Kimun di	Burundi, Rwanda, and
Kirundi	Tanzania
Korean	Korea
Kurdish	Iraq and Kurdistan
Lao, Laotian	Laos
Latvian	Latvia
Lingala	Democratic Republic of Congo
Lorma	Liberia
Malay, Bahasa, Malaysian	Malaysia
Mandarin, Cantonese,	Chine Hene Kene and Teiwan
Taiwanese	China, Hong Kong, and Taiwan
Mongolian	Mongolia
Native American	Omaha and Ponca
Omaha-Ponca	Santee Sioux
Dakota/Lakota	Winnebago
Ho-chunk	Sac and Fox
Algonquin	lowa
Chiwere	Tribes of Nebraska
Others	

Language(s)	Country of Origin
Nepalese, Nepali, Maithili	Nepal
Pashto, Pashtu	Pakistan and Afghanistan
Polish	Poland
Portuguese	Portugal, Brazil, and Mozambique
Quechua, Aymara	Peru
Romanian, Moldavian	Romania and Moldavia
Russian	Russia and the former Soviet Union
Samoan	Samoa
Setswana	Botswana
Sinhala	Sri Lanka
Slovak	Slovakia
Somali	Somalia
Spanish	Spain, North-Central-South Americas, Islands of the Caribbean
Swahili	Uganda
Swedish	Sweden
Tajik	Tajikistan
Thai, Tai, Thaiklang	Thailand
Tongan	Tonga
Turkish	Turkey
Ukrainian	Ukraine
Urdu	Pakistan
Vietnamese, Ba Ria	Vietnam
Zaghawa	Chad

Sources: Nebraska Department of Education, Languages 2005/Sarpy County, NE – Languages for CDC 2007/Native Languages of the Americas website 1998-2009/Lincoln Public Schools – ELL Program Count for 2010-2011/Asian Community and Cultural Center

Fusion Project, Lincoln, NE – Contacted June 4, 2010/UNL International Student and Scholar Statistical Data Spring 2011 Compiled by DHHS Office of Health Disparities and Health Equity

### Languages Spoken in Nebraska: Population Proportions

Approximately 89% of the Nebraska population spoke only English. Spanish was the second most common language to be spoken at home. In Nebraska, 131,176 (7.4%) individuals spoke Spanish at home, compared to 37.6% of the nationwide population. The below chart includes all Nebraska residents ages five and older.

Language Spoken at Home	Number	Percent
Nebraska Total	1,765,526	100%
Speak only English	1,570,021	88.93%
Speak Language other than English	195,505	11.07%
Spanish or Spanish Creole	131,176	7.43%
French (Including Patios and Cajun)	3,704	0.21%
French Creole	492	0.03%
Italian	445	0.03%
Portuguese or Portuguese Creole	1,724	0.10%
German	4,628	0.26%
Other West Germanic Languages	604	0.03%
Scandinavian Languages	107	0.01%
Greek	193	0.01%
Russian	1,112	0.06%
Polish	720	0.04%
Serbo-Croatian	421	0.02%
Other Slavic Languages	1,293	0.07%
Persian	1,012	0.06%
Hindi	2,132	0.12%
Urdu	159	0.01%
Other Indic Languages	3,707	0.21%
Other Indo-European Languages	1,761	0.10%
Chinese	5,775	0.33%
Japanese	768	0.04%
Korean	971	0.05%
Mon-Khmer, Cambodian	185	0.01%
Hmong	438	0.02%
Thai	812	0.05%
Laotian	442	0.03%
Vietnamese	6,707	0.38%
Other Asian Languages	8,078	0.46%
Tagalog	1,709	0.10%
Other Pacific Island Languages	870	0.05%
Other Native North American Languages	1,190	0.07%
Hungarian	17	0.00%
Arabic	5,417	0.31%
African Languages	6,567	0.37%
Other and Unspecified Languages	169	0.01%

Source: U.S. Census Bureau, 2015 American Community Survey

# Languages Spoken in Nebraska by Ability to Speak English

Language Spoken at Home by Ability to Speak English	Estimate	Percent
Nebraska Total	1,765,526	
Speak only English	1,570,021	88.93%
Spanish or Spanish Creole	131,176	7.43%
Speak English "very well"	72,527	4.11%
Speak English less than "very well"	58,649	3.32%
French (Including Patois and Cajun)	3,704	0.21%
Speak English "very well"	3,331	0.19%
Speak English less than "very well"	373	0.02%
French Creole	492	0.03%
Speak English "very well"	492	0.03%
Speak English less than "very well"	N/A	N/A
Italian	445	0.03%
Speak English "very well"	445	0.03%
Speak English less than "very well"	N/A	N/A
Portuguese or Portuguese Creole	1,724	0.10%
Speak English "very well"	546	0.03%
Speak English less than "very well"	1,178	0.07%
German	4,628	0.26%
Speak English "very well"	4,361	0.25%
Speak English less than "very well"	267	0.02%
Other West Germanic Languages	604	0.03%
Speak English "very well"	553	0.03%
Speak English less than "very well"	51	0.00%
Scandinavian Languages	107	0.01%
Speak English "very well"	107	0.01%
Speak English less than "very well"	N/A	N/A
Greek	193	0.01%
Speak English "very well"	151	0.01%
Speak English less than "very well"	42	0.00%
Russian	1,112	0.06%
Speak English "very well"	775	0.04%
Speak English less than "very well"	337	0.02%
Polish	720	0.04%
Speak English "very well"	511	0.03%
Speak English less than "very well"	209	0.01%
Serbo-Croatian	421	0.02%
Speak English "very well"	421	0.02%
Speak English less than "very well"	N/A	N/A
Other Slavic Languages	1,293	0.07%
Speak English "very well"	995	0.06%
Speak English less than "very well"	298	0.02%

# Languages Spoken in Nebraska by Ability to Speak English (continued)

Language Spoken at Home by Ability to Speak English	Estimate	Percent
Persian	1,012	0.06%
Speak English "very well"	474	0.03%
Speak English less than "very well"	538	0.03%
Hindi	2,132	0.12%
Speak English "very well"	1,817	0.10%
Speak English less than "very well"	315	0.02%
Urdu	159	0.01%
Speak English "very well"	110	0.01%
Speak English less than "very well"	49	0.00%
Other Indic Languages	3,707	0.21%
Speak English "very well"	1,324	0.07%
Speak English less than "very well"	2,383	0.13%
Other Indo-European Languages	1,761	0.10%
Speak English "very well"	1,406	0.08%
Speak English less than "very well"	355	0.02%
Chinese	5,775	0.33%
Speak English "very well"	1,678	0.10%
Speak English less than "very well"	4,097	0.23%
Japanese	768	0.04%
Speak English "very well"	552	0.03%
Speak English less than "very well"	216	0.01%
Korean	971	0.05%
Speak English "very well"	507	0.03%
Speak English less than "very well"	464	0.03%
Mon-Khmer, Cambodian	185	0.01%
Speak English "very well"	141	0.01%
Speak English less than "very well"	44	0.00%
Hmong	438	0.02%
Speak English "very well"	257	0.01%
Speak English less than "very well"	181	0.01%
Thai	812	0.05%
Speak English "very well"	472	0.03%
Speak English less than "very well"	340	0.02%
Laotian	442	0.03%
Speak English "very well"	323	0.02%
Speak English less than "very well"	119	0.01%

# Languages Spoken in Nebraska by Ability to Speak English (continued)

Language Spoken at Home by Ability to Speak English	Estimate	Percent
Vietnamese	6,707	0.38%
Speak English "very well"	2,731	0.15%
Speak English less than "very well"	3,976	0.23%
Other Asian Languages	8,078	0.46%
Speak English "very well"	3,337	0.19%
Speak English less than "very well"	4,741	0.27%
Tagalog	1,709	0.10%
Speak English "very well"	1,228	0.07%
Speak English less than "very well"	481	0.03%
Other Pacific Island Languages	870	0.05%
Speak English "very well"	497	0.03%
Speak English less than "very well"	373	0.02%
Other Native North American Languages	1,190	0.07%
Speak English "very well"	1,033	0.06%
Speak English less than "very well"	157	0.01%
Hungarian	17	0.00%
Speak English "very well"	17	0.00%
Speak English less than "very well"	N/A	N/A
Arabic	5,417	0.31%
Speak English "very well"	3,682	0.21%
Speak English less than "very well"	1,735	0.10%
African Languages	6,567	0.37%
Speak English "very well"	3,108	0.18%
Speak English less than "very well"	3,459	0.20%
Other and Unspecified Languages	169	0.01%
Speak English "very well"	169	0.01%
Speak English less than "very well"	N/A	N/A

Source: U.S. Census Bureau, 2015 American Community Survey

### Language Spoken at Home by Ability to Speak English and Age Group

, Bes 9 17			
Language Spoken at Home	Estimate	Percent	
Ages 5-17	339,966	100%	
Speak only English	295,256	86.80%	
Speak a language other than English	44,710	13.20%	
Speak English "very well"	32,928	9.70%	
Speak English less than "very well"	11,782	3.50%	
Speak Spanish	34,131	10.00%	
Speak English "very well"	26,587	7.80%	
Speak English less than "very well"	7,544	2.20%	

### Ages 5-17

### Ages 18-64

Language Spoken at Home	Estimate	Percent
Ages 18-64	1,146,869	100%
Speak only English	1,008,960	88.00%
Speak a language other than English	137,909	12.00%
Speak English "very well"	69,495	6.10%
Speak English less than "very well"	68,414	6.00%
Speak Spanish	91,138	7.90%
Speak English "very well"	43,446	3.80%
Speak English less than "very well"	47,692	4.20%

### Age 65 and older

Language Spoken at Home	Estimate	Percent
65 and older	278,691	100%
Speak only English	265,805	95.40%
Speak a language other than English	12,886	4.60%
Speak English "very well"	7,655	2.70%
Speak English less than "very well"	5,231	1.90%
Speak Spanish	5,907	2.10%
Speak English "very well"	2,494	0.90%
Speak English less than "very well"	3,413	1.20%

# Social Determinants of Health

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 (SDOH). These social determinants are often created by the conditions in which people live and work and can be divided into five broad groups: economic stability, education, social and community context, health and health care, and neighborhood and built environment.<sup>8</sup> Each of these categories includes a number of SDOH indicators. For example, economic stability determinants can include such indicators as poverty and employment, while education can include graduation and enrollment in higher education.

Certain marginalized groups often have less access to the conditions that support good health. This interplay between race and the SDOH is important to consider. 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 those circumstances.

There are disparities solely between SDOH levels as well as disparities between race and ethnicity. These factors are intertwined, but also have distinct roles. The U.S. Census Bureau, non-profit foundations, and research institutions, along with numerous government bodies, have documented multiple complex linkages between factors unique to racial and ethnic minority populations and the social determinants of health.

<sup>&</sup>lt;sup>8</sup> Healthy People (2010). Social Determinants of Health. Retrieved from www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

# Social Determinants of Health



# Employment

African Americans were less likely to be unemployed at 11.2% of the population, compared to Whites at 4.1%.

X

### Household Income



American Indians reported the lowest median household income at approximately \$25,700, compared to Whites at \$55,100. Poverty

American Indians were most likely to be living in poverty at 40.5% of the population, compared to Whites at 10.9%.



### Education

Hispanics (10.1%) were less likely to have more than a Bachelor's degree, compared to Whites at approximately 30%.

# How do social indicators affect health?

The conditions where individuals live, work and learn can have a large and lasting effect on health. For example, poverty can limit an individual's access to healthy food options, and education and stable housing have long been linked to better health. Understanding these social determinants of health and how they affect certain populations is important to improving health outcomes for all groups.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: American Community Survey 2006-2015





DEPT. OF HEALTH AND HUMAN SERVICES

### **Household Income**

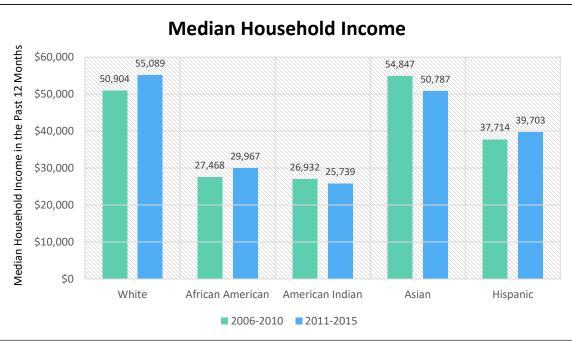
Health outcomes are strongly correlated with income. Individuals with lower income levels are more likely to see higher mortality rates, the prevalence of acute or chronic diseases, and poorer mental health. The household income is calculated as the income of the householder and all other individuals 15 years old and over in the household in the past 12 months. The below chart demonstrates the median household income in Nebraska from 2006-2010 and from 2011-2015.

#### **Key Disparities**

- Among minority groups in Nebraska, Asians earned the greatest median income from 2011-2015 at \$50,787, and American Indians earned the lowest median income at \$25,739.
- From 2011-2015, Hispanics earned approximately \$15,000 less than did Whites annually, while African Americans earned approximately \$25,000 less than did Whites annually.

### Comparisons: 2006-2010 and 2011-2015

- From 2006-2010 to 2011-2015, African Americans saw an increase in median household income of approximately \$2,500, while Hispanics saw an increase of approximately \$2,000.
- Between the two five-year periods, Asians saw a decrease in median household income by approximately \$4,000, while American Indians saw a decrease by approximately \$1,200.



Source: American Community Survey, 2006 - 2015

### Unemployment

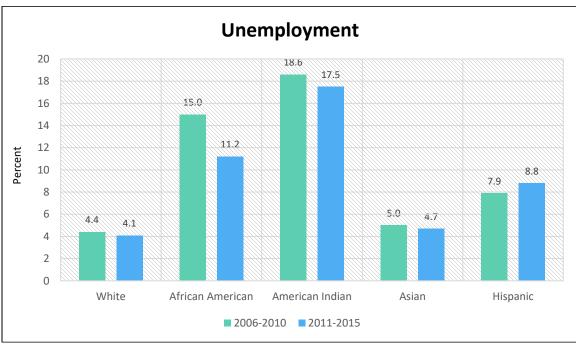
Unemployment referred to individuals who were able to work and had actively searched for a job in the past four weeks, but did not have a job. Please note, the information presented below is for those who were 16 and older and does not include the Armed Forces.

### **Key Disparities**

- From 2011-2015, American Indians reported the highest percentage of unemployed individuals at 17.5%, a percentage four times greater than that of Whites at 4.1%.
- Among minority groups, Asians reported the lowest percentage of unemployed individuals at 4.7%, followed by Hispanics at 8.8%.

### Comparisons: 2006-2010 and 2011-2015

- From 2006-2010 to 2011-2015, American Indians saw a decrease in the percent of unemployed individuals from 18.6% to 17.5%.
- The Hispanic population was the only group to report an increase in the percentage of unemployed individuals from 7.9% (2006-2010) to 8.8% (2011-2015).



Source: American Community Survey, 2006 - 2015

# **Uninsured Individuals**

### **Uninsured Individuals by County**

The chart below represents Nebraskans under 65 years of age who did not have any form of healthcare coverage in 2015. The data was obtained from the US Census Bureaus' Small Area Health Insurance Estimates (SAHIE) Program. In July 2005, SAHIE started producing estimates on the number of people without health insurance coverage for all ages in each state and county. Based on the table, there was a large variation in terms of population size and percentages of uninsured individuals across the counties of Nebraska. Hayes County reported the highest percentage (20.6%) of individuals who had no health coverage in 2015, followed by Thurston County (17.3%) and Colfax County (17.2%). Washington County (5.7%) and Sarpy County (5.8%) reported the lowest percentages of individuals without health insurance.

County Name	Population	Number of Uninsured	Percentage of Uninsured
Nebraska	1,576,178	148,165	9.4%
Adams County	24,948	2,417	9.7%
Antelope County	4,917	511	10.4%
Arthur County	356	56	15.7%
Banner County	539	67	12.4%
Blaine County	372	48	12.9%
Boone County	4,161	394	9.5%
Box Butte County	9,409	848	9%
Boyd County	1,412	160	11.3%
Brown County	2,223	290	13%
Buffalo County	40,614	3,817	9.4%
Burt County	4,974	474	9.5%
Butler County	6,370	571	9%
Cass County	21,236	1,426	6.7%
Cedar County	6,697	609	9.1%
Chase County	3,126	457	14.6%
Cherry County	4,554	544	11.9%
Cheyenne County	8,483	572	6.7%
Clay County	5,029	603	12%
Colfax County	9,003	1,551	17.2%
Cuming County	7,107	810	11.4%
Custer County	8,430	912	10.8%
Dakota County	17,630	2,851	16.2%
Dawes County	6,554	768	11.7%
Dawson County	19,760	3,126	15.8%
Deuel County	1,448	172	11.9%
Dixon County	4,589	563	12.3%

County Name	Population	Number of Uninsured	Percentage of Uninsured
Dodge County	28,777	2,998	10.4%
Douglas County	474,655	44,666	9.4%
Dundy County	1,357	191	14.1%
Fillmore County	4,200	344	8.2%
Franklin County	2,190	220	10%
Frontier County	1,937	199	10.3%
Furnas County	3,681	398	10.8%
Gage County	17,215	1,463	8.5%
Garden County	1,359	154	11.3%
Garfield County	1,456	171	11.7%
Gosper County	1,548	134	8.7%
Grant County	517	54	10.4%
Greeley County	1,818	305	16.8%
Hall County	51,825	7,269	14%
Hamilton County	7,485	560	7.5%
Harlan County	2,578	257	10%
Hayes County	700	144	20.6%
Hitchcock County	2,164	224	10.4%
Holt County	8,052	826	10.3%
Hooker County	511	45	8.8%
Howard County	5,048	444	8.8%
Jefferson County	5,534	503	9.1%
Johnson County	3,281	363	11.1%
Kearney County	5,296	416	7.9%
Keith County	6,121	571	9.3%
Keya Paha County	572	80	14%
Kimball County	2,805	335	11.9%
Knox County	6,434	855	13.3%
Lancaster County	254,626	21,682	8.5%
Lincoln County	28,903	2,633	9.1%
Logan County	645	87	13.5%
Loup County	436	54	12.4%
McPherson County	384	28	7.3%
Madison County	28,763	3,326	11.6%
Merrick County	6,213	640	10.3%
Morrill County	3,911	473	12.1%
Nance County	2,799	293	10.5%
Nemaha County	5,271	428	8.1%
Nuckolls County	3,163	294	9.3%
Otoe County	12,727	1,089	8.6%
Pawnee County	1,953	233	11.9%
Perkins County	2,306	264	11.4%

County Name	Population	Number of Uninsured	Percentage of Uninsured
Phelps County	7,355	615	8.4%
Pierce County	5,879	430	7.3%
Platte County	27,164	2,882	10.6%
Polk County	4,087	374	9.2%
Red Willow County	8,444	740	8.8%
Richardson County	6,094	708	11.6%
Rock County	1,069	170	15.9%
Saline County	11,186	1,453	13%
Sarpy County	157,321	9,082	5.8%
Saunders County	17,132	1,221	7.1%
Scotts Bluff County	29,036	3,424	11.8%
Seward County	13,105	842	6.4%
Sheridan County	3,943	536	13.6%
Sherman County	2,253	253	11.2%
Sioux County	981	106	10.8%
Stanton County	4,997	356	7.1%
Thayer County	3,846	378	9.8%
Thomas County	538	53	9.9%
Thurston County	6,034	1,046	17.3%
Valley County	3,127	340	10.9%
Washington County	16,593	943	5.7%
Wayne County	7,009	671	9.6%
Webster County	2,717	283	10.4%
Wheeler County	576	74	12.8%
York County	10,535	855	8.1%

Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE) Program, 2015

### **Poverty**

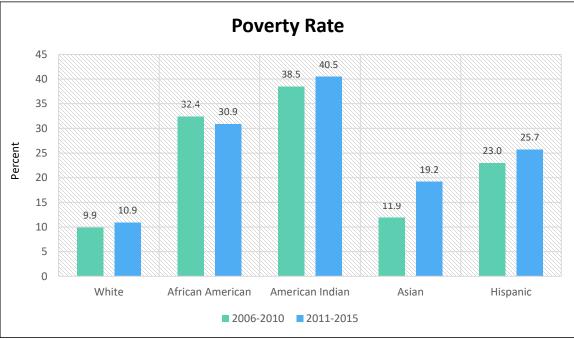
Poverty affects most aspects of life, from the affordability of health insurance to the quality of food selection. Poverty is much more prevalent among minority populations. The chart below illustrates those who were below 100% of the federal poverty level.

### **Key Disparities**

- From 2011-2015, American Indians reported the highest percentage of individuals living in poverty at 40.5%. African Americans also reported a high poverty rate at 30.9%.
- Just over one-fourth of Hispanics and under one-fifth of Asians reported being below the federal poverty level, compared to only approximately one-tenth of Whites from 2011-2015.

### Comparisons: 2006-2010 and 2011-2015

- The proportion of individuals below the federal poverty level increased from 2006-2010 to 2011-2015 in all groups, except within the African American population.
- The Asian population saw the largest increase in the poverty rate from 11.9% in 2006-2010 to 19.2% in 2011-2015.



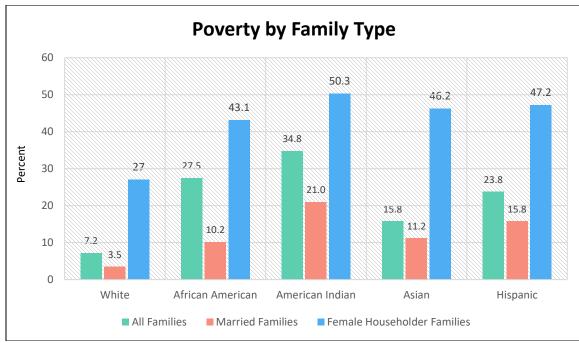
Source: American Community Survey, 2006 - 2015

# **Poverty Rate by Family Type**

The chart below illustrates those who were below 100% of the federal poverty level by family type. A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage or adoption.

#### **Key Disparities**

- When considering all family types, American Indians (34.8%) reported the highest percentage of those in poverty, which was almost five times the percentage of Whites at 7.2%. African Americans (27.5%) were almost four times more likely to be living in poverty than Whites.
- Female householder families of all populations were the most likely to experience poverty. Just over half of American Indian female householder families reported being in poverty, followed by 47.2% of Hispanic female householder families and 46.2% of Asian female householder families.



• Twenty-one percent of American Indian married families experienced poverty, followed by 15.8% of Hispanic married families and 11.2% of Asian married families.

Source: American Community Survey, 2011 - 2015

## **Poverty by County**

### **Income Under the Poverty Level**

The below chart represents Nebraskans of all ages with an income at the poverty level or below in 2015. The data was obtained from the U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program. The poverty universe is made up of persons for whom the Census Bureau can determine poverty status (either in poverty or not in poverty). SAIPE produces single-year estimates of income and poverty for all U.S. states and counties as well as estimates of school-age children in poverty for approximately 13,000 school districts. Thurston County experienced the highest percentage (25.6%) of individuals with an income at the poverty level or below, followed by Dawes County at 17.8%. Sarpy County and Washington County reported the lowest percentages of individuals with an income at the poverty level.

County Name	Poverty Universe	Poverty Count	Percentage in Poverty
Nebraska	1,842,687	224,696	12.2%
Adams County	30,142	3,814	12.7%
Antelope County	6,337	774	12.2%
Arthur County	456	60	13.2%
Banner County	788	94	11.9%
Blaine County	487	81	16.6%
Boone County	5,209	478	9.2%
Box Butte County	11,139	1,295	11.6%
Boyd County	1,956	239	12.2%
Brown County	2,904	365	12.6%
Buffalo County	46,679	6,089	13.0%
Burt County	6,441	744	11.6%
Butler County	7,946	647	8.1%
Cass County	25,108	1,783	7.1%
Cedar County	8,410	787	9.4%
Chase County	3,880	319	8.2%
Cherry County	5,764	675	11.7%
Cheyenne County	10,046	907	9.0%
Clay County	6,203	632	10.2%
Colfax County	10,373	1,128	10.9%
Cuming County	8,963	886	9.9%
Custer County	10,637	1,229	11.6%
Dakota County	20,456	2,980	14.6%
Dawes County	8,152	1,453	17.8%
Dawson County	23,551	2,976	12.6%
Deuel County	1,899	211	11.1%
Dixon County	5,683	527	9.3%

Dodge County	35,415	4,103	11.6%
Douglas County	537,725	77,869	14.5%
Dundy County	1,779	234	13.2%
Fillmore County	5,417	532	9.8%
, Franklin County	2,956	393	13.3%
, Frontier County	2,493	313	12.6%
Furnas County	4,760	637	13.4%
Gage County	21,571	2,210	10.2%
Garden County	1,880	279	14.8%
Garfield County	1,974	234	11.9%
Gosper County	1,927	175	9.1%
Grant County	641	59	9.2%
Greeley County	2,368	290	12.2%
Hall County	60,498	8,182	13.5%
Hamilton County	9,034	661	7.3%
Harlan County	3,396	409	12.0%
Hayes County	930	137	14.7%
Hitchcock County	2,849	402	14.1%
Holt County	10,149	1,207	11.9%
Hooker County	705	57	8.1%
Howard County	6,319	660	10.4%
Jefferson County	7,142	882	12.3%
Johnson County	4,137	546	13.2%
Kearney County	6,468	559	8.6%
Keith County	8,003	872	10.9%
Keya Paha County	803	121	15.1%
Kimball County	3,628	460	12.7%
Knox County	8,307	1,141	13.7%
Lancaster County	291,429	39,383	13.5%
Lincoln County	35,021	4,294	12.3%
Logan County	772	69	8.9%
Loup County	583	89	15.3%
McPherson County	473	57	12.1%
Madison County	33,950	4,675	13.8%
Merrick County	7,628	796	10.4%
Morrill County	4,766	645	13.5%
Nance County	3,483	459	13.2%
Nemaha County	6,526	853	13.1%
Nuckolls County	4,265	531	12.5%
Otoe County	15,602	1,648	10.6%
Pawnee County	2,613	345	13.2%
Perkins County	2,902	294	10.1%
Phelps County	9,041	936	10.1%

Pierce County	7,078	664	9.4%
•			8.3%
Platte County	32,299	2,670	
Polk County	5,090	401	7.9%
Red Willow County	10,463	1,237	11.8%
Richardson County	7,909	1,026	13.0%
Rock County	1,345	191	14.2%
Saline County	13,222	1,328	10.0%
Sarpy County	174,165	10,095	5.8%
Saunders County	20,638	1,813	8.8%
Scotts Bluff County	35,419	5,364	15.1%
Seward County	15,787	1,191	7.5%
Sheridan County	5,125	732	14.3%
Sherman County	3,028	379	12.5%
Sioux County	1,259	176	14.0%
Stanton County	5,919	504	8.5%
Thayer County	5,022	513	10.2%
Thomas County	681	86	12.6%
Thurston County	6,974	1,785	25.6%
Valley County	4,110	501	12.2%
Washington County	19,695	1,328	6.7%
Wayne County	8,284	992	12.0%
Webster County	3,501	452	12.9%
Wheeler County	747	85	11.4%
York County	12,987	1,316	10.1%

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program, 2015

## **Marital Status**

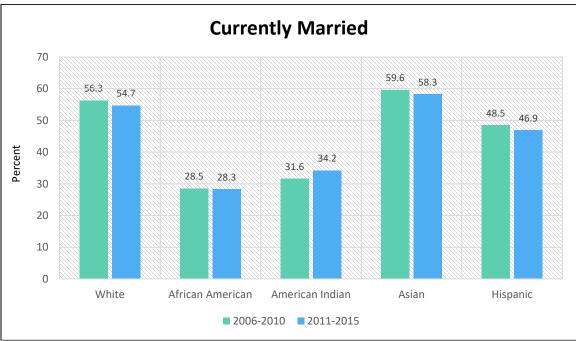
Evidence has shown that, in general, married individuals are in better health than those who are single. Additionally, the children of married parents tend to be healthier.<sup>9</sup> The chart below represents the percentage of married individuals by race. Married, but separated individuals were not included in the calculations.

#### **Key Disparities**

- From 2011-2015, African Americans had the lowest proportion of married individuals at 28.3%. This was almost half the percentage of married White individuals at 54.7%. American Indians also reported a lower percentage of married individuals at 34.2%.
- The Asian populated reported the highest proportion of married individuals at 58.3% from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

• Between 2006-2010 and 2011-2015, the percentage of married individuals slightly decreased in most populations. However, the American Indian population reported an increase of 2.6 percentage points.



Source: American Community Survey, 2006 - 2015

<sup>&</sup>lt;sup>9</sup> Gallagher, M. & Waite, L. (2000) The case for marriage: why married people are happier, healthier, and better off financially. New York, NY: Broadway Books.

## **Household Tenure**

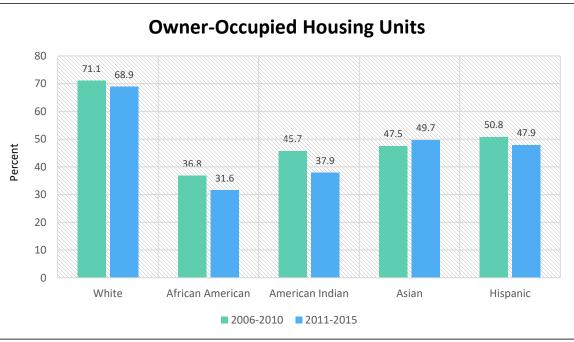
Homeownership has been positively linked to physical and mental health. Studies have also found that the children of homeowners are more likely to perform better at school and have fewer behavioral problems.<sup>10</sup> The chart below represents the percentage of owner-occupied homes, which includes housing units where the owner or co-owner lives in the unit, regardless of whether or not the mortgage is fully paid.

#### **Key Disparities**

- From 2011-2015, African Americans were the least likely to live in owner-occupied homes at 31.6%. This was approximately half the proportion of Whites living in owner-occupied homes at 68.9%.
- American Indians were also less likely to live in owner-occupied homes at 37.9% from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

- From 2006-2010 to 2011-2015, the proportion of American Indians living in owner-occupied homes decreased by almost eight percentage points. The proportion of African Americans living in owner-occupied homes decreased slightly less by five percentage points.
- The percentage of Asians living in owner-occupied homes saw a slight increase of 2.2 percentage points from 47.5% to 49.7%.



Source: American Community Survey, 2006 - 2015

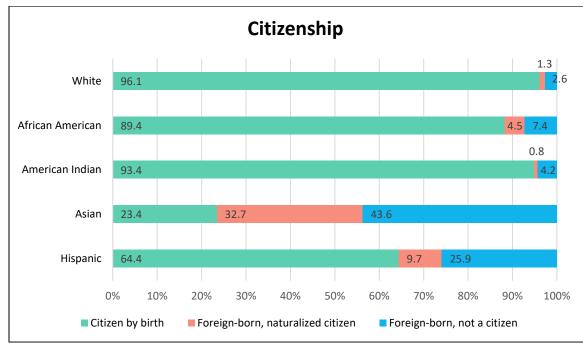
<sup>&</sup>lt;sup>10</sup> Dietz, R. (2003). *The social consequences of homeownership*. Columbus, OH: Homeownership Alliance.

# Citizenship

Immigrants often face barriers to receiving healthcare, such as language barriers and being unfamiliar with the complex healthcare system. The chart below shows the proportion of Nebraskans who are citizens by birth, foreign-born individuals who were naturalized, and foreign-born individuals who are currently not citizens.

#### **Key Disparities**

- The majority of the Asian population (43.6%) living in Nebraska reported being born in a foreign country and not holding a United States citizenship. Approximately one-fifth of the Hispanic population (25.9%) reported the same, followed by 7.4% of the African American population.
- Approximately one-third (32.7%) of the Asian population reported citizenship through naturalization, followed by 9.7% of the Hispanic population and 4.5% of the African American population.



• Nebraska Asians reported the lowest percentage of citizens by birth at 23.4%, followed by Hispanics at 64.4%.

Source: American Community Survey, 2011 - 2015

## **Education**

Education is positively associated with health. Individuals with higher educational attainment live longer and are generally healthier than those with fewer years of schooling.

## **Educational Attainment by Race**

#### **Key Racial Disparities**

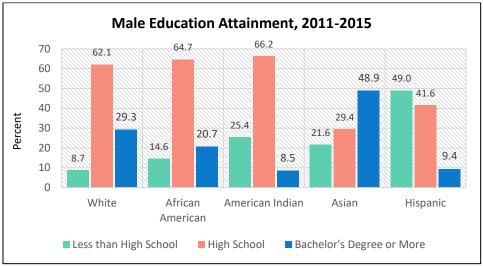
- In Nebraska, Asians (44.5%) reported the highest proportion of individuals with a bachelor's degree or more.
- Hispanics (10.1%) and American Indians (9.8%) were the least likely to have completed a bachelor's degree.
  - Education Attainment, 2011-2015 80 68.4 70 64.6 62.1 60 46.6 50 44.5 Percent 43.3 40 32.3 29.9 30 23.2 21.9 20.7 20 14.7 9.8 10.1 7.9 10 0 White African American American Indian Asian Hispanic Less than High School High School Bachelor's Degree or More
- Almost half of the Hispanic population (46.6%) had less than high school education.

Source: American Community Survey, 2011 - 2015

## **Educational Attainment by Gender and Race**

#### **Key Disparities in Males**

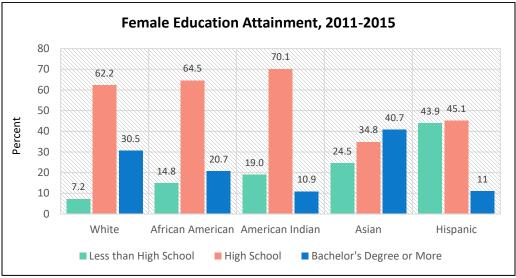
- In Nebraska, Asian males had the highest proportion (48.9%) of bachelor's degree attainment among minority groups.
- The majority of American Indian males (66.2%) and African American males (64.7%) reported having graduated high school but did not have a bachelor's degree.
- Hispanic males were the most likely to have less than a high school education (49.0%) with the majority of those surveyed fall into this group.



Source: American Community Survey, 2011 - 2015

#### **Key Disparities in Females**

- Asian females experienced the highest proportion (40.7%) of bachelor's degree attainment in Nebraska.
- American Indian females (70.1%) and African American females (64.5%) reported the highest proportions of those who completed high school but did not have a bachelor's degree.
- Hispanic females (43.9%) were the most likely to report having less than high school education.



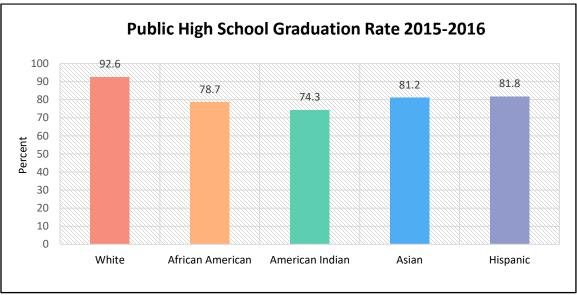
Source: American Community Survey, 2011 – 2015

## **Public High School Graduation Rate by Race**

According to the Nebraska Department of Education, the public school graduation rate has steadily improved since 2011, and the overall high school graduate rate for the 2015-2016 school year was 89.3%.<sup>11</sup>

#### **Key Racial Disparities**

- Just under three-fourths of American Indian students (74.3%) completed high school, compared to 92.6% of White students. African American students also reported a lower percentage of individuals completing high school at 78.7%.
- Asian and Hispanic students were both more than ten percentage points less likely to graduate from high school than White students.



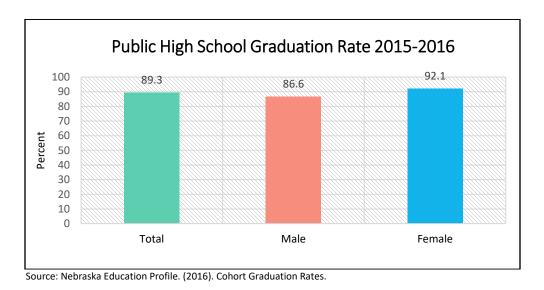
Source: Nebraska Education Profile. (2016). Cohort Graduation Rates.

<sup>&</sup>lt;sup>11</sup> Nebraska Education Profile. (2016). Cohort graduation rates. Retrieved from http://nep.education.ne.gov/State?DataYears=20152016#all-rates-tab-holder

## **Public High School Graduation Rate by Gender**

#### **Key Gender Disparities**

- The overall public high school graduation rate in Nebraska was 89.3% for the 2015-2016 school year.
- Nebraska males were 5.5 percentage points less likely to graduate high school than Nebraska females.



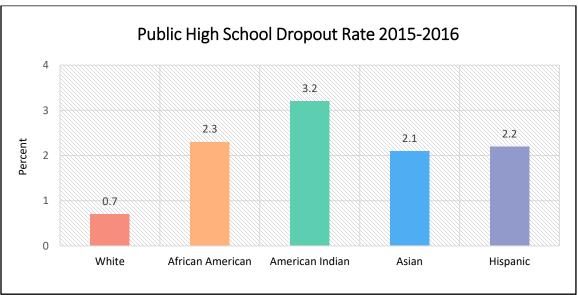
## **High School Dropout Rates by Race**

The chart below shows the number of students who left high school during the 2015-2016 school year, without earning a high school diploma or its equivalent. The number of dropouts does not include students who transferred to another public school, students who were expelled or suspended, or students who were unable to attend school due to a verifiable illness.

#### **Key Racial Disparities**

• American Indian students had the highest dropout rate at 3.2% of students, a rate of 4.6 times that of White students at 0.7%.





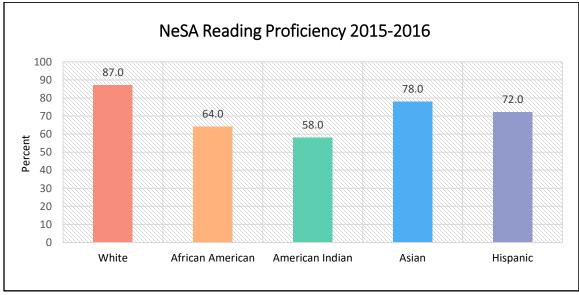
Source: Nebraska Education Profile. (2016). Dropout Rates.

## **Nebraska State Accountability Test Results**

Nebraska students are assessed on an annual basis using the Nebraska State Accountability (NeSA) Tests. The reading, mathematics, science, and writing tests are all taken in grades 8 and 11 and at specified grades from grades 3-7. These tests evaluate if Nebraska students are reaching standards of proficiency and demonstrate the effectiveness of the curriculum. The scores for reading, mathematics, and science range from 0-200. Students with a score of 85 or higher are considered to meet the standards. The writing test is scored on a scale of 0-70, and students who receive a 40 or above meet the standard.<sup>12</sup>

#### **Reading Proficiency by Race**

- Only 58% of American Indian students were proficient in reading, compared to 87% of White students. African American students also had lower proficiency rates in reading at 64%.
- While 78% of Asian students and 72% of Hispanic students were proficient in reading, the rate of proficiency was still notably less than that of White students (87%).

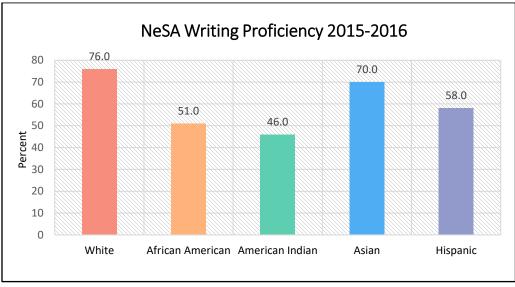


Source: Nebraska Education Profile. (2016). NeSA Reading.

<sup>&</sup>lt;sup>12</sup> Nebraska Department of Education. (2016). Nebraska state accountability. Retrieved from www.education.ne.gov/nesainitial

#### Writing Proficiency by Race

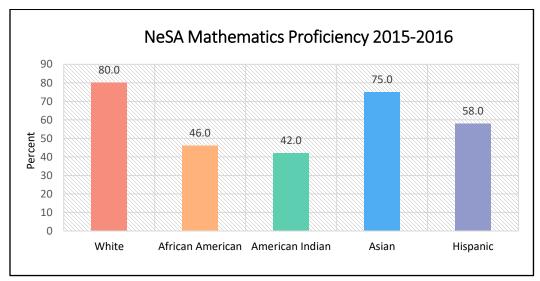
- Less than half of American Indian students (46%) and just over half of African American students (51%) were proficient in writing.
- White students were the most likely to be proficient in writing at 76%, followed by Asian students at 70% and Hispanic students at 58%.



Source: Nebraska Education Profile. (2016). NeSA Writing.

#### **Mathematics Proficiency by Race**

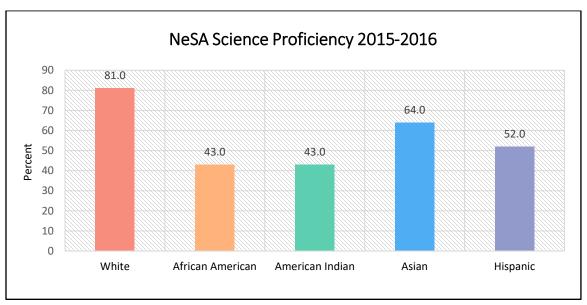
- White students (80%) were almost twice more likely than the American Indian students (42%) to reach the standards of mathematic proficiency.
- African American students (46.0%) were the second least likely to be proficient in mathematics, followed by Hispanic students (58.0%).
- Three-fourths of Asian students (75%) were proficient in mathematics, only five percentage points less than the proportion of White students to be proficient in mathematics (80%).



Source: Nebraska Education Profile. (2016). NeSA Mathematics.

#### **Science Proficiency by Race**

- Both African American students and American Indian students had a science proficiency rate of 43%. This was 1.9 times lower than the proficiency rate of White students (81%) in science.
- Asian students (64%) and Hispanic students (52%) also had lower percentages of students proficient in science, compared to White students (81%).



Source: Nebraska Education Profile. (2016). NeSA Science.

# Access to Health Care

Access to high-quality health care is the foundation for eliminating health disparities and increasing quality of life. Fortunately, many health problems that were once untreatable now have better outcomes or are even preventable due to advances in technology and treatment.<sup>13</sup>

To realize the benefits of these advances, patients must not only be able to gain entry to the health care system, but also have access to a location where such services are provided. Another obstacle for many includes finding culturally and linguistically appropriate services where patients feel secure and can develop relationships based on trust and communication.<sup>14</sup>

In recent years, major changes in the structure of the U.S. health care system, increasing costs, and government program reforms have adversely affected health care consumers, particularly vulnerable and at-risk populations.<sup>15</sup> Additional barriers to healthcare among minorities can include lack of transportation, lack of knowledge of where to obtain care or when to seek care, language, and cultural barriers, and discrimination. These barriers make it difficult to gain access to even the most basic health services, resulting in disproportionate increases in the incidence of disease, disability, and early death.

<sup>&</sup>lt;sup>13</sup> Nebraska Department of Health and Human Services. (2007). Nebraska 2010 health goals and objectives: A midcourse review.

<sup>&</sup>lt;sup>14</sup> Agency for Health Care Research and Quality. (2008). National health care disparities report 2007. Rockville, MD.

<sup>&</sup>lt;sup>15</sup> Nebraska Department of Health and Human Services. (2007). Nebraska 2010 health goals and objectives: A midcourse review.

# Access to Health Care



3.7x

## **No Health Insurance**

Almost half (46.4%) of Hispanics did not have health care coverage, compared to 12.6% of Whites.

# No Personal Physician



Approximately two-fifths (39.8%) of the Hispanic population reported not having a personal physician, compared to 17.1% of Whites.

#### Unable to See a Doctor Due to Cost



Almost one-fourth of African Americans, American Indians, and Hispanics reported being unable to see a physician due to cost, compared to only 11% of Whites.

ccess to Health Care by Gender

Females (14%) were more likely to be unable to see a physician due to cost, compared to males at 10.5%.

Over one-fourth of the male population (25.8%) reported not having a personal physician, compared to only 13% of females.



Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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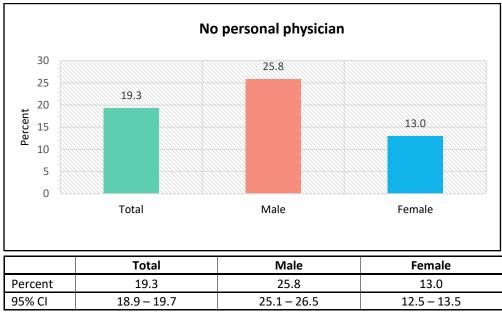
## **No Personal Physician**

Including various specialties in the medical profession, primary care physicians provide a combination of direct care and, as necessary, counsel the patient in the appropriate use of specialists and advanced treatment options. Individuals with a medical home are more likely to have routine medical visits and health screenings.<sup>16</sup>

### **No Personal Physician by Gender**

#### **Key Gender Disparities**

- In Nebraska, 19.3% of adults reported having no personal physician.
- Adult males (25.8%) were almost twice more likely than the adult females (13.0%) to report having no personal physician.

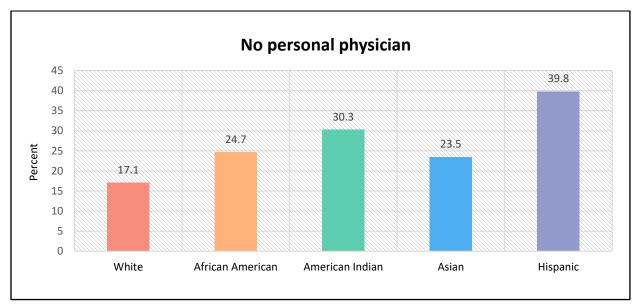


<sup>&</sup>lt;sup>16</sup> National Institutes of Health. (2015). Choosing a primary care provider. Retrieved from https://medlineplus.gov/ency/article/001939.htm

## **No Personal Physician by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- The Hispanic population experienced the highest percentage (39.8%) of individuals who did not have a personal physician. Hispanics were twice as likely as Whites (17.1%) to report not having a personal physician.
- African Americans (24.7%) and Asians (23.5%) reported similar proportions of individuals with no personal physician.



	White	African American	American Indian	Asian	Hispanic
Percent	17.1	24.7	30.3	23.5	39.8
95% CI	16.7 – 17.6	22.1 – 27.5	25.8 - 35.3	20.0 - 27.3	37.7 – 42.0

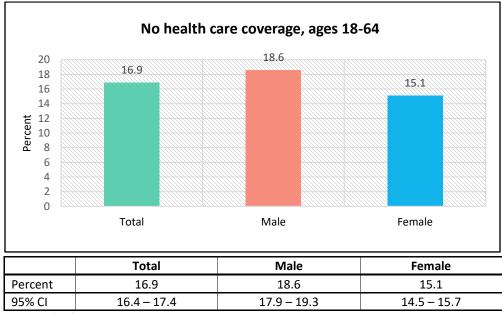
## **No Health Insurance**

Lack of a health care plan or inadequate insurance coverage prevents many people from getting needed care because they are financially unable to pay for services without the help of insurance. Individuals with health insurance are generally more likely to have a primary care provider and to have received appropriate preventative care, such as early prenatal care, immunizations, or health screenings.

### No Health Care Coverage by Gender

#### **Key Gender Disparities**

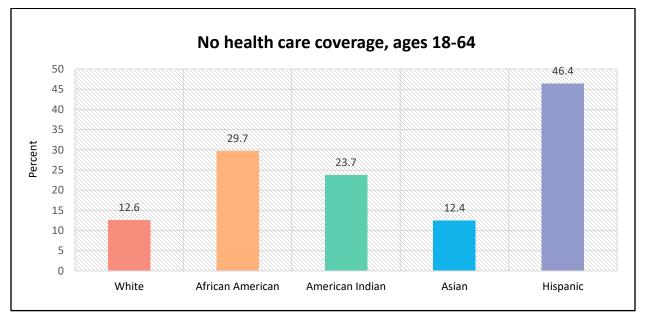
- In Nebraska, almost 17% of individuals between the ages of 18 and 64 reported that they did not have health care coverage.
- Approximately 19% of adult males reported not having any kind of health care coverage, compared to 15% of adult females.



## No Health Care Coverage by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

- The proportion of Hispanics with no health care coverage (46.4%) was almost four times that of Whites (12.6%).
- Asians saw the lowest percentage (12.4%) of individuals without health care coverage among all minority groups.



	White	African American	American Indian	Asian	Hispanic
Percent	12.6	29.7	23.7	12.4	46.4
95% CI	12.2 – 13.1	26.5 - 33.1	18.6 – 29.7	9.6 - 15.9	44.1 - 48.8

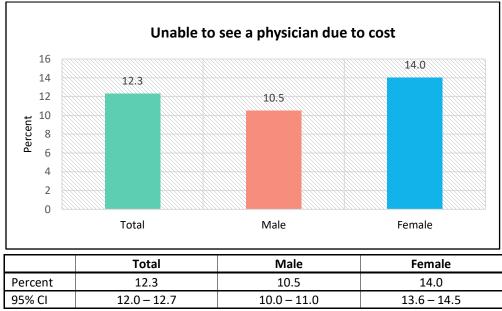
## Unable to See a Physician Due to Cost

For people with no insurance and limited financial resources, the decision of whether or not to see a doctor is often a financial choice rather than a medical one. Even when health benefits are available, they may not be sufficient to ensure access to needed health care services. Persons with health insurance may still be confronted with significant financial hardships in paying for or obtaining health services or products.

## Unable to See a Physician Due to Cost by Gender

#### **Key Gender Disparities**

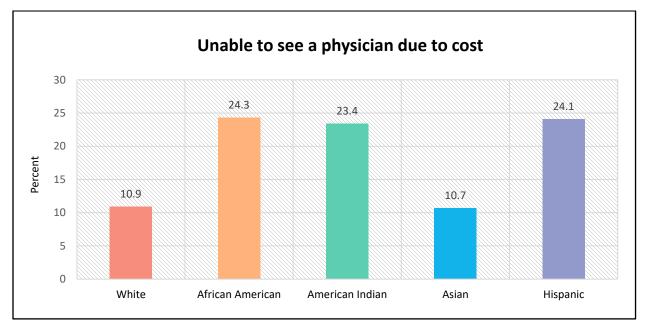
- In Nebraska, 12.3% of adults reported being unable to see a doctor due to cost in the past year.
- Of adult females, 14% were unable to see a doctor due to cost, compared to only 10.5% of adult males.



## Unable to See a Physician Due to Cost by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

- The African American population reported the highest percentage (24.3%) of individuals unable to see a doctor due to cost in the past year, compared to 10.9% of Whites.
- The percentages of African Americans (24.3%), Hispanics (24.1%), and American Indians (23.4%) who could not see a doctor due to cost were more than double the percentage of Whites (10.9%).



	White	African American	American Indian	Asian	Hispanic
Percent	10.9	24.3	23.4	10.7	24.1
95% CI	10.5 – 11.2	21.8 – 27.1	19.1 – 28.2	8.0 - 14.2	22.2 – 26.1

# **Hospital Discharge Data**

Hospital discharge data includes patient information and reasons for hospital visits. The data assists in identifying public health issues by age, race, economic status, and hospital registration conditions. This information is useful for disease surveillance, chronic disease prevention and control programs, public health reporting, as well as community and hospital assessment.

Although this information can be useful for various purposes, certain causes of hospital discharge are not well defined, making it somewhat more difficult to accurately classify the primary reason an individual was hospitalized. However, the overall findings from the Nebraska hospital discharge data identified several notable disparities among minorities. Nebraska's minority populations were especially more likely to be in the hospital for chronic diseases.

Hospital discharge data in Nebraska contained very limited race and ethnicity information for individual patients. Approximately 93% of the race and ethnic values were missing in the initial data. The Nebraska Joint Public Data Center and OHDHE embarked on a project to use multiple public health data sources to update race and ethnicity information in the Nebraska hospital discharge data from 2005 to 2011 for approximately 1.5 million records. Datasets that were used for linkage included the cancer registry, trauma registry, birth (including mother and father's race and ethnicity) and death records, and driver's licenses.

At the end of the data linkage project, the completed race variables increased from 7% to 90%. Census Tracts were then used to assign race values to the remaining 10% of missing variables, based on the racial composition of each Census Tract. In essence, 100% of race and ethnicity variables were completed for the hospital discharge data.

This chapter discussed the hospital discharge data in Nebraska from 2005-2011. All diagnoses, names and codes are based on diagnosis code ICD-9-CM.

# Hospital Discharge Data

# Circulatory System Diseases

Circulatory system diseases were the most common cause for hospitalization among African Americans (17.9%).

# Injuries or Poisons

Injuries and poisons were a leading cause of hospitalization among Asians at 13.2%, compared to Whites at 10.6%.

# Digestive System Diseases

Within the Hispanic population, digestive system diseases were the top cause of hospital admittance at 15.5%, compared to only 12.6% among Whites. \*Digestive system diseases diagnostic group includes Peptic ulcer, Appendicitis, Hernia, Diverticula of intestine, Cholelithiasis (gallstones), chronic liver disease & cirrhosis.



## What is Hospital Discharge Data?

Hospital discharge data includes individual information and reasons for hospital visits. The data assists in identifying public health problems by age, race, economic status, and hospital registration conditions. This information is useful for disease surveillance, chronic disease prevention and control programs, public health reporting, as well as community and hospital assessment.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska Hospital Discharge Data 2005-2011





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# **Hospital Discharge by Race**

## **Hospital Discharge Causes for Whites**

Heart disease (14.6%) and respiratory diseases (13.9%) were the top causes of hospital admittance among Whites. Digestive system diseases (12.6%), injuries or poisons (10.6%), and musculoskeletal diseases (10.4%) were also among the top five causes of hospital admittance for Whites.

	Tot	al	Ferr	ale	Ma	le
Diagnostic Group (ICD 9 CM Code)	N		Ν	%	Ν	%
Infectious & parasitic diseases (001-139)	894	0.1%	465	0.1%	429	0.1%
HIV/AIDS (042, V08)	0	0.0%	0	0.0%	0	0.0%
Septicemia (038)	13,033	1.7%	6,595	1.6%	6,438	1.9%
Neoplasms (140-239)	49,654	6.6%	27,725	6.7%	21,929	6.4%
Malignant neoplasms (140-209.36, 209.70-209.75, 209.79, 230- 234)	39,657	5.3%	19,653	4.8%	20,004	5.9%
Colon/rectum (153-154, 197.5, 209.1)	4,035	0.5%	2,161	0.5%	1,874	0.6%
Pancreas (157)	1,082	0.1%	521	0.1%	561	0.2%
Lung and bronchus (162, 176.4, 197.0, 197.3, 209.21)	5,340	0.7%	2,552	0.6%	2,788	0.8%
Breast (174-175, 198.81)	2,811	0.4%	2,809	0.7%	2	0.0%
Prostate (185)	3,983	0.5%	0	0.0%	3,983	1.2%
Benign neoplasms (209.4-209.6, 210-229)	8,198	1.1%	6,785	1.7%	1,413	0.4%
Endocrine, nutritional, metabolic, immunologic disorders (240- 279)	32,493	4.3%	19,266	4.7%	13,227	3.9%
Diabetes mellitus (249-250)	30	0.0%	13	0.0%	17	0.0%
Volume depletion, dehydration (276.5)	9,468	1.3%	5,713	1.4%	3,755	1.1%
Anemias & diseases of blood and blood-forming organs (280- 289)	9,176	1.2%	5,293	1.3%	3,883	1.1%
Mental disorders (290-319)	53,838	7.2%	28,879	7.0%	24,959	7.3%
Psychotic conditions ex/ alc. & drug psychoses (290,293-299)	39,232	5.2%	22,235	5.4%	16,997	5.0%
Alcohol & drug abuse (291-292, 303-305)	3,486	0.5%	1,078	0.3%	2,408	0.7%
Diseases of the nervous system & sense organs (320-389)	16,282	2.2%	9,378	2.3%	6,904	2.0%
Central nervous system (320-336, 340-349)	10,232	1.4%	5,786	1.4%	4,446	1.3%
Diseases of the circulatory system (390-459)	159,055	21.1%	74,269	18.1%	84,786	24.8%
Diseases of the heart (391-392.0, 393-398, 402, 404,410-416, 420-429)	110,085	14.6%	49,514	12.1%	60,571	17.7%
Ischemic heart disease (410-414)	18,446	2.5%	7,397	1.8%	11,049	3.2%
Congestive heart failure (428.0, 428.2-428.4)	26,151	3.5%	13,039	3.2%	13,112	3.8%
Cerebrovascular disease (430-438)	24,808	3.3%	12,848	3.1%	11,960	3.5%
Diseases of arteries, arterioles, capillaries (441-448)	4,507	0.6%	1,635	0.4%	2,872	0.8%
Diseases of the respiratory system (460-519)	104,774	13.9%	53,906	13.1%	50,868	14.9%
Pneumonia & influenza (480-487)	46,107	6.1%	23,473	5.7%	22,634	6.6%
Pneumonia (480-486)	46,107	6.1%	23,473	5.7%	22,634	6.6%
Chronic obstructive pulmonary disease (490-496)	26,924	3.6%	14,867	3.6%	12,057	3.5%
All bronchitis (466.0, 490-491)	3,079	0.4%	1,949	0.5%	1,130	0.3%

	Tot	al	Fem	nale	Ma	ale
Diagnostic Group (ICD 9 CM Code)	Ν		Ν	%	Ν	%
Asthma (493)	6,583	0.9%	4,091	1.0%	2,492	0.7%
Diseases of the digestive system (520-579)	94,853	12.6%	53,021	12.9%	41,832	12.2%
Peptic ulcer (531-534)	4,440	0.6%	2,350	0.6%	2,090	0.6%
Appendicitis (540-543)	6,640	0.9%	3,084	0.8%	3,556	1.0%
Hernia, intestinal obstruction (550-553, 560)	16,325	2.2%	9,005	2.2%	7,320	2.1%
Diverticula of intestine (562)	8,579	1.1%	4,880	1.2%	3,699	1.1%
Chronic liver disease & cirrhosis (571)	1,583	0.2%	655	0.2%	928	0.3%
Cholelithiasis (gallstones) (574)	8,943	1.2%	5,373	1.3%	3,570	1.0%
Diseases of the genitourinary system(580-629)	55,764	7.4%	38,471	9.4%	17,293	5.1%
Renal failure, nephritis (580-589)	9,859	1.3%	4,919	1.2%	4,940	1.5%
Kidney stone (592)	5,572	0.7%	2,668	0.7%	2,904	0.9%
Diseases of the skin & subcutaneous tissue (680-709)	17,767	2.4%	8,957	2.2%	8,810	2.6%
Cellulitis (681-682)	14,295	1.9%	7,128	1.7%	7,167	2.1%
Diseases of the musculoskeletal system (710-739)	78,184	10.4%	46,352	11.3%	31,832	9.3%
Osteoarthritis (715)	38,821	5.2%	24,149	5.9%	14,672	4.3%
Intervertebral disc disorders (722)	11,093	1.5%	5,783	1.4%	5,310	1.6%
Injury & poisoning(800-999)	80,008	10.6%	45,090	11.0%	34,918	10.2%
Injuries (800-959)	46,558	6.2%	26,962	6.6%	19,596	5.7%
Poisoning (960-989)	5,426	0.7%	3,361	0.8%	2,065	0.6%

Source: Nebraska Hospital Discharge Data 2005-2011

## **Hospital Discharge Causes for African Americans**

The most common reason for hospitalization among African Americans was mental health disorders at 14.3%, followed by injuries or poisons at 12.2%. Heart disease (12.0%), digestive system diseases (11.6%), and respiratory diseases (10.5%) were also among the top five most common reasons for hospitalization.

\*Please note that the mental disorders diagnostic group include "psychotic conditions" and "alcohol and drug abuse."

	Tot	al	Ferr	nale	Ma	le
Diagnostic Group (ICD 9 CM Code)	N		N	%	N	%
Infectious & parasitic diseases (001-139)	2,299	2.8%	82	0.2%	2,217	5.8%
HIV/AIDS (042, V08)	0	0.0%	0	0.0%	0	0.0%
Septicemia (038)	1,207	1.5%	640	1.5%	567	1.5%
Neoplasms (140-239)	2,951	3.6%	1,939	4.5%	1,012	2.6%
Malignant neoplasms (140-209.36, 209.70-209.75, 209.79, 230- 234)	1,820	2.2%	956	2.2%	864	2.3%
Colon/rectum (153-154, 197.5, 209.1)	166	0.2%	88	0.2%	78	0.2%
Pancreas (157)	68	0.1%	43	0.1%	25	0.1%
Lung and bronchus (162, 176.4, 197.0, 197.3, 209.21)	225	0.3%	111	0.3%	114	0.3%
Breast (174-175, 198.81)	146	0.2%	146	0.3%	0	0.0%
Prostate (185)	161	0.2%	0	0.0%	161	0.4%
Benign neoplasms (209.4-209.6, 210-229)	1,012	1.2%	907	2.1%	105	0.3%
Endocrine, nutritional, metabolic, immunologic disorders (240- 279)	4,526	5.5%	2,633	6.1%	1,893	4.9%
Diabetes mellitus (249-250)	3	0.0%	1	0.0%	2	0.0%
Volume depletion, dehydration (276.5)	771	0.9%	480	1.1%	291	0.8%
Anemias & diseases of blood and blood-forming organs (280- 289)	1,834	2.2%	919	2.1%	915	2.4%
Mental disorders (290-319)	11,717	14.3%	5,634	13.0%	6,083	15.8%
Psychotic conditions ex/ alc. & drug psychoses (290,293-299)	8,960	11.0%	4,595	10.6%	4,365	11.4%
Alcohol & drug abuse (291-292, 303-305)	842	1.0%	212	0.5%	630	1.6%
Diseases of the nervous system & sense organs (320-389)	1,883	2.3%	1,070	2.5%	813	2.1%
Central nervous system (320-336, 340-349)	1,284	1.6%	711	1.6%	573	1.5%
Diseases of the circulatory system (390-459)	14,620	17.9%	7,211	16.6%	7,409	19.3%
Diseases of the heart (391-392.0, 393-398, 402, 404,410-416, 420-429)	9,770	12.0%	4,598	10.6%	5,172	13.5%
Ischemic heart disease (410-414)	1,779	2.2%	716	1.7%	1,063	2.8%
Congestive heart failure (428.0, 428.2-428.4)	2,101	2.6%	1,092	2.5%	1,009	2.6%
Cerebrovascular disease (430-438)	2,099	2.6%	1,117	2.6%	982	2.6%
Diseases of arteries, arterioles, capillaries (441-448)	397	0.5%	184	0.4%	213	0.6%
Diseases of the respiratory system (460-519)	8,551	10.5%	4,823	11.1%	3,728	9.7%
Pneumonia & influenza (480-487)	3,094	3.8%	1,744	4.0%	1,350	3.5%
Pneumonia (480-486)	3,094	3.8%	1,744	4.0%	1,350	3.5%
Chronic obstructive pulmonary disease (490-496)	2,888	3.5%	1,798	4.2%	1,090	2.8%

	Tot	tal	Ferr	ale	Ma	ale
Diagnostic Group (ICD 9 CM Code)	Ν		Ν	%	Ν	%
Asthma (493)	1,254	1.5%	844	2.0%	410	1.1%
Diseases of the digestive system (520-579)	9,483	11.6%	5,296	12.2%	4,187	10.9%
Peptic ulcer (531-534)	348	0.4%	179	0.4%	169	0.4%
Appendicitis (540-543)	524	0.6%	211	0.5%	313	0.8%
Hernia, intestinal obstruction (550-553, 560)	1,408	1.7%	811	1.9%	597	1.6%
Diverticula of intestine (562)	688	0.8%	389	0.9%	299	0.8%
Chronic liver disease & cirrhosis (571)	206	0.3%	95	0.2%	111	0.3%
Cholelithiasis (gallstones) (574)	778	1.0%	506	1.2%	272	0.7%
Diseases of the genitourinary system(580-629)	5,440	6.7%	3,899	9.0%	1,541	4.0%
Renal failure, nephritis (580-589)	1,263	1.5%	649	1.5%	614	1.6%
Kidney stone (592)	388	0.5%	200	0.5%	188	0.5%
Diseases of the skin & subcutaneous tissue (680-709)	1,971	2.4%	1,019	2.4%	952	2.5%
Cellulitis (681-682)	1,571	1.9%	824	1.9%	747	1.9%
Diseases of the musculoskeletal system (710-739)	6,560	8.0%	3,998	9.2%	2,562	6.7%
Osteoarthritis (715)	3,073	3.8%	2,063	4.8%	1,010	2.6%
Intervertebral disc disorders (722)	830	1.0%	461	1.1%	369	1.0%
Injury & poisoning(800-999)	9,941	12.2%	4,829	11.1%	5,112	13.3%
Injuries (800-959)	5,173	6.3%	2,200	5.1%	2,973	7.7%
Poisoning (960-989)	1,239	1.5%	631	1.5%	608	1.6%

Source: Nebraska Hospital Discharge Data 2005-2011

## **Hospital Discharge Causes for American Indians**

The most common cause for hospital admittance among American Indians was mental health disorders at 17.4%, followed by respiratory diseases at 15.1%. Digestive system diseases (13.7%), injuries and poisons (11.5%), and heart disease (9.0%) were also among the top five causes for hospital admittance.

\*Please note that the mental disorders diagnostic group include "psychotic conditions" and "alcohol and drug abuse."

	Tot	al	Ferr	ale	Ma	le
Diagnostic Group (ICD 9 CM Code)	N		Ν	%	N	%
Infectious & parasitic diseases (001-139)	3	0.1%	3	0.1%	0	0.0%
HIV/AIDS (042, V08)	0	0.0%	0	0.0%	0	0.0%
Septicemia (038)	81	1.7%	42	1.6%	39	1.8%
Neoplasms (140-239)	151	3.3%	85	3.3%	66	3.2%
Malignant neoplasms (140-209.36, 209.70-209.75, 209.79, 230- 234)	107	2.3%	50	2.0%	57	2.7%
Colon/rectum (153-154, 197.5, 209.1)	6	0.1%	2	0.1%	4	0.2%
Pancreas (157)	3	0.1%	0	0.0%	3	0.1%
Lung and bronchus (162, 176.4, 197.0, 197.3, 209.21)	12	0.3%	8	0.3%	4	0.2%
Breast (174-175, 198.81)	4	0.1%	4	0.2%	0	0.0%
Prostate (185)	3	0.1%	0	0.0%	3	0.1%
Benign neoplasms (209.4-209.6, 210-229)	36	0.8%	30	1.2%	6	0.3%
Endocrine, nutritional, metabolic, immunologic disorders (240- 279)	335	7.2%	160	6.2%	175	8.4%
Diabetes mellitus (249-250)	1	0.0%	1	0.0%	0	0.0%
Volume depletion, dehydration (276.5)	54	1.2%	38	1.5%	16	0.8%
Anemias & diseases of blood and blood-forming organs (280- 289)	51	1.1%	35	1.4%	16	0.8%
Mental disorders (290-319)	808	17.4%	459	17.9%	349	16.8%
Psychotic conditions ex/ alc. & drug psychoses (290,293-299)	523	11.2%	305	11.9%	218	10.5%
Alcohol & drug abuse (291-292, 303-305)	75	1.6%	21	0.8%	54	2.6%
Diseases of the nervous system & sense organs (320-389)	95	2.0%	47	1.8%	48	2.3%
Central nervous system (320-336, 340-349)	55	1.2%	24	0.9%	31	1.5%
Diseases of the circulatory system (390-459)	593	12.8%	286	11.1%	307	14.8%
Diseases of the heart (391-392.0, 393-398, 402, 404,410-416, 420-429)	417	9.0%	200	7.8%	217	10.4%
Ischemic heart disease (410-414)	71	1.5%	30	1.2%	41	2.0%
Congestive heart failure (428.0, 428.2-428.4)	129	2.8%	67	2.6%	62	3.0%
Cerebrovascular disease (430-438)	74	1.6%	34	1.3%	40	1.9%
Diseases of arteries, arterioles, capillaries (441-448)	17	0.4%	6	0.2%	11	0.5%
Diseases of the respiratory system (460-519)	704	15.1%	404	15.7%	300	14.4%
Pneumonia & influenza (480-487)	277	6.0%	159	6.2%	118	5.7%
Pneumonia (480-486)	277	6.0%	159	6.2%	118	5.7%
Chronic obstructive pulmonary disease (490-496)	196	4.2%	122	4.8%	74	3.6%
All bronchitis (466.0, 490-491)	20	0.4%	14	0.5%	6	0.3%
Asthma (493)	81	1.7%	64	2.5%	17	0.8%

	Tot	al	Ferr	nale	Ma	le
Diagnostic Group (ICD 9 CM Code)	Ν		Ν	%	Ν	%
Diseases of the digestive system (520-579)	636	13.7%	338	13.2%	298	14.3%
Peptic ulcer (531-534)	14	0.3%	6	0.2%	8	0.4%
Appendicitis (540-543)	47	1.0%	21	0.8%	26	1.3%
Hernia, intestinal obstruction (550-553, 560)	66	1.4%	32	1.3%	34	1.6%
Diverticula of intestine (562)	18	0.4%	11	0.4%	7	0.3%
Chronic liver disease & cirrhosis (571)	46	1.0%	24	0.9%	22	1.1%
Cholelithiasis (gallstones) (574)	56	1.2%	42	1.6%	14	0.7%
Diseases of the genitourinary system(580-629)	296	6.4%	204	7.9%	92	4.4%
Renal failure, nephritis (580-589)	59	1.3%	31	1.2%	28	1.4%
Kidney stone (592)	20	0.4%	11	0.4%	9	0.4%
Diseases of the skin & subcutaneous tissue (680-709)	191	4.1%	93	3.6%	98	4.7%
Cellulitis (681-682)	156	3.4%	76	3.0%	80	3.8%
Diseases of the musculoskeletal system (710-739)	255	5.5%	157	6.1%	98	4.7%
Osteoarthritis (715)	77	1.7%	57	2.2%	20	1.0%
Intervertebral disc disorders (722)	37	0.8%	20	0.8%	17	0.8%
Injury & poisoning(800-999)	533	11.5%	299	11.6%	234	11.2%
Injuries (800-959)	247	5.3%	120	4.7%	127	6.1%
Poisoning (960-989)	77	1.7%	47	1.8%	30	1.4%

Source: Nebraska Hospital Discharge Data 2005-2011

## **Hospital Discharge Causes for Asians**

Digestive system diseases (13.8%) were the top cause of hospital admittance among Asians, followed closely by injuries or poisons (13.2%). Respiratory diseases (12.3%), mental health disorders (11.8%), and heart disease (11.7%) were also among the top five causes of hospital admittance for Asians.

\*Please note that the mental disorders diagnostic group include "psychotic conditions" and "alcohol and drug abuse."

	Tot	al	Fem	ale	Ma	le
Diagnostic Group (ICD 9 CM Code)	N		N	%	N	%
Infectious & parasitic diseases (001-139)	14	0.2%	6	0.1%	8	0.2%
HIV/AIDS (042, V08)	0	0.0%	0	0.0%	0	0.0%
Septicemia (038)	150	1.6%	80	1.5%	70	1.7%
Neoplasms (140-239)	494	5.2%	306	5.8%	188	4.4%
Malignant neoplasms (140-209.36, 209.70-209.75, 209.79, 230- 234)	332	3.5%	160	3.1%	172	4.1%
Colon/rectum (153-154, 197.5, 209.1)	35	0.4%	13	0.3%	22	0.5%
Pancreas (157)	9	0.1%	5	0.1%	4	0.1%
Lung and bronchus (162, 176.4, 197.0, 197.3, 209.21)	45	0.5%	18	0.3%	27	0.6%
Breast (174-175, 198.81)	20	0.2%	20	0.4%	0	0.0%
Prostate (185)	17	0.2%	0	0.0%	17	0.4%
Benign neoplasms (209.4-209.6, 210-229)	144	1.5%	131	2.5%	13	0.3%
Endocrine, nutritional, metabolic, immunologic disorders (240- 279)	500	5.3%	304	5.8%	196	4.6%
Diabetes mellitus (249-250)	1	0.0%	1	0.0%	0	0.0%
Volume depletion, dehydration (276.5)	140	1.5%	90	1.7%	50	1.2%
Anemias & diseases of blood and blood-forming organs (280- 289)	134	1.4%	81	1.5%	53	1.3%
Mental disorders (290-319)	1,120	11.8%	569	10.8%	551	13.0%
Psychotic conditions ex/ alc. & drug psychoses (290,293-299)	818	8.6%	462	8.8%	356	8.4%
Alcohol & drug abuse (291-292, 303-305)	102	1.1%	14	0.3%	88	2.1%
Diseases of the nervous system & sense organs (320-389)	196	2.1%	111	2.1%	85	2.0%
Central nervous system (320-336, 340-349)	111	1.2%	67	1.3%	44	1.0%
Diseases of the circulatory system (390-459)	1,690	17.8%	788	15.0%	902	21.3%
Diseases of the heart (391-392.0, 393-398, 402, 404,410-416, 420-429)	1,108	11.7%	479	9.1%	629	14.8%
Ischemic heart diease (410-414)	213	2.3%	82	1.6%	131	3.1%
Congestive heart failure (428.0, 428.2-428.4)	169	1.8%	86	1.6%	83	2.0%
Cerebrovascular disease (430-438)	297	3.1%	153	2.9%	144	3.4%
Diseases of arteries, arterioles, capillaries (441-448)	48	0.5%	20	0.4%	28	0.7%
Diseases of the respiratory system (460-519)	1,163	12.3%	638	12.2%	525	12.4%
Pneumonia & influenza (480-487)	474	5.0%	258	4.9%	216	5.1%
Pneumonia (480-486)	474	5.0%	258	4.9%	216	5.1%
Chronic obstructive pulmonary disease (490-496)	283	3.0%	175	3.3%	108	2.6%
All bronchitis (466.0, 490-491)	32	0.3%	24	0.5%	8	0.2%
Asthma (493)	139	1.5%	95	1.8%	44	1.0%

	Tot	al	Ferr	nale	Ma	le
Diagnostic Group (ICD 9 CM Code)	Ν		Ν	%	Ν	%
Diseases of the digestive system (520-579)	1,312	13.8%	745	14.2%	567	13.4%
Peptic ulcer (531-534)	71	0.8%	35	0.7%	36	0.9%
Appendicitis (540-543)	120	1.3%	59	1.1%	61	1.4%
Hernia, intestinal obstruction (550-553, 560)	165	1.7%	93	1.8%	72	1.7%
Diverticula of intestine (562)	69	0.7%	40	0.8%	29	0.7%
Chronic liver disease & cirrhosis (571)	28	0.3%	13	0.3%	15	0.4%
Cholelithiasis (gallstones) (574)	122	1.3%	87	1.7%	35	0.8%
Diseases of the genitourinary system(580-629)	692	7.3%	492	9.4%	200	4.7%
Renal failure, nephritis (580-589)	109	1.2%	54	1.0%	55	1.3%
Kidney stone (592)	87	0.9%	39	0.7%	48	1.1%
Diseases of the skin & subcutaneous tissue (680-709)	219	2.3%	115	2.2%	104	2.5%
Cellulitis (681-682)	184	1.9%	99	1.9%	85	2.0%
Diseases of the musculoskeletal system (710-739)	703	7.4%	436	8.3%	267	6.3%
Osteoarthritis (715)	267	2.8%	185	3.5%	82	1.9%
Intervertebral disc disorders (722)	116	1.2%	61	1.2%	55	1.3%
Injury & poisoning(800-999)	1,250	13.2%	656	12.5%	594	14.0%
Injuries (800-959)	678	7.2%	305	5.8%	373	8.8%
Poisoning (960-989)	155	1.6%	105	2.0%	50	1.2%

Source: Nebraska Hospital Discharge Data 2005-2011

## **Hospital Discharge Causes for Hispanics**

Digestive system diseases (15.5%) and respiratory diseases (14.8%) were the top causes of hospital admittance among Hispanics. Injuries or poisons (11.5%), mental health disorders (10.4%), and heart disease (8.5%) were also among the top five causes of hospital admittance for Hispanics.

\*Please note that the mental disorders diagnostic group include "psychotic conditions" and "alcohol and drug abuse."

	Total		Female		Male	
Diagnostic Group (ICD 9 CM Code)	N		N	%	N	%
Infectious & parasitic diseases (001-139)	24	0.1%	12	0.1%	12	0.1%
HIV/AIDS (042, V08)	0	0.0%	0	0.0%	0	0.0%
Septicemia (038)	424	1.7%	220	1.7%	204	1.8%
Neoplasms (140-239)	1,475	6.1%	910	6.9%	565	5.1%
Malignant neoplasms (140-209.36, 209.70-209.75, 209.79, 230- 234)	1,069	4.4%	563	4.3%	506	4.6%
Colon/rectum (153-154, 197.5, 209.1)	61	0.3%	28	0.2%	33	0.3%
Pancreas (157)	17	0.1%	5	0.0%	12	0.1%
Lung and bronchus (162, 176.4, 197.0, 197.3, 209.21)	80	0.3%	42	0.3%	38	0.3%
Breast (174-175, 198.81)	83	0.3%	83	0.6%	0	0.0%
Prostate (185)	89	0.4%	0	0.0%	89	0.8%
Benign neoplasms (209.4-209.6, 210-229)	343	1.4%	298	2.3%	45	0.4%
Endocrine, nutritional, metabolic, immunologic disorders (240- 279)	1,521	6.3%	760	5.8%	761	6.9%
Diabetes mellitus (249-250)	2	0.0%	1	0.0%	1	0.0%
Volume depletion, dehydration (276.5)	445	1.8%	232	1.8%	213	1.9%
Anemias & diseases of blood and blood-forming organs (280- 289)		1.1%	162	1.2%	111	1.0%
Mental disorders (290-319)	2,526	10.4%	1,295	9.8%	1,231	11.1%
Psychotic conditions ex/ alc. & drug psychoses (290,293-299)	1,726	7.1%	938	7.1%	788	7.1%
Alcohol & drug abuse (291-292, 303-305)	180	0.7%	42	0.3%	138	1.2%
Diseases of the nervous system & sense organs (320-389)		2.6%	352	2.7%	283	2.6%
Central nervous system (320-336, 340-349)		1.6%	199	1.5%	186	1.7%
Diseases of the circulatory system (390-459)		13.5%	1,572	11.9%	1,712	15.4%
Diseases of the heart (391-392.0, 393-398, 402, 404,410-416, 420-429)	2,073	8.5%	931	7.1%	1,142	10.3%
Ischemic heart disease (410-414)	392	1.6%	149	1.1%	243	2.2%
Congestive heart failure (428.0, 428.2-428.4)	505	2.1%	252	1.9%	253	2.3%
Cerebrovascular disease (430-438)	544	2.2%	281	2.1%	263	2.4%
Diseases of arteries, arterioles, capillaries (441-448)	77	0.3%	32	0.2%	45	0.4%
Diseases of the respiratory system (460-519)		14.8%	1,813	13.7%	1,782	16.1%
Pneumonia & influenza (480-487)	1,487	6.1%	775	5.9%	712	6.4%
Pneumonia (480-486)	1,487	6.1%	775	5.9%	712	6.4%
Chronic obstructive pulmonary disease (490-496)	788	3.2%	458	3.5%	330	3.0%
All bronchitis (466.0, 490-491)	112	0.5%	65	0.5%	47	0.4%
Asthma (493)	472	1.9%	249	1.9%	223	2.0%

	Tot	Total		Female		Male	
Diagnostic Group (ICD 9 CM Code)	Ν		Ν	%	Ν	%	
Diseases of the digestive system (520-579)	3,756	15.5%	2,059	15.6%	1,697	15.3%	
Peptic ulcer (531-534)	108	0.4%	62	0.5%	46	0.4%	
Appendicitis (540-543)	509	2.1%	199	1.5%	310	2.8%	
Hernia, intestinal obstruction (550-553, 560)	426	1.8%	257	2.0%	169	1.5%	
Diverticula of intestine (562)	228	0.9%	118	0.9%	110	1.0%	
Chronic liver disease & cirrhosis (571)	156	0.6%	58	0.4%	98	0.9%	
Cholelithiasis (gallstones) (574)	485	2.0%	337	2.6%	148	1.3%	
Diseases of the genitourinary system(580-629)		8.5%	1,575	11.9%	499	4.5%	
Renal failure, nephritis (580-589)	320	1.3%	149	1.1%	171	1.5%	
Kidney stone (592)	178	0.7%	111	0.8%	67	0.6%	
Diseases of the skin & subcutaneous tissue (680-709)	718	3.0%	354	2.7%	364	3.3%	
Cellulitis (681-682)	565	2.3%	266	2.0%	299	2.7%	
Diseases of the musculoskeletal system (710-739)		6.7%	946	7.2%	693	6.2%	
Osteoarthritis (715)	520	2.1%	324	2.5%	196	1.8%	
Intervertebral disc disorders (722)	313	1.3%	170	1.3%	143	1.3%	
Injury & poisoning(800-999)		11.5%	1,396	10.6%	1,394	12.6%	
Injuries (800-959)	1,381	5.7%	579	4.4%	802	7.2%	
Poisoning (960-989)	323	1.3%	202	1.5%	121	1.1%	

Source: Nebraska Hospital Discharge Data 2005-2011

# **Inpatient Hospital Bill Payment**

## **Payment Type by Race**

The table below represents the type of payment of inpatient hospital bills used by each race. Within the White population, individuals were most likely to use Medicare (43.7%) or commercial insurance (41.2%), followed by Medicaid at 11.4%. Approximately one-third of African Americans paid their hospital bills with Medicare, and one-third paid with commercial insurance. American Indians (44.1%) were most likely to use Medicaid as payment type, while Hispanics reported a similar percentage of those using Medicaid at 39.7%. Asians were most likely to use commercial insurance at 52.9%, followed by Medicaid and Medicare at approximately 20% each.

Payment Type	Whites	African Americans	American Indians	Asians	Hispanics
Federal Program	2.2%	3.4%	3.1%	4.8%	2.4%
Medicaid	11.4%	23.3%	44.1%	19.8%	39.7%
Medicare	43.7%	33.2%	21.8%	19.2%	14.8%
Self-pay	1.6%	6.5%	3.7%	3.2%	3.7%
<b>Commercial Insurance</b>	41.2%	33.6%	27.3%	52.9%	39.4%

### **Payment Composition**

The table below represents the percentage of individuals who comprised each payment type. Of all individuals who used a federal program to pay inpatient hospital bills, over three-fourths were White. African Americans made up the second-largest group of individuals using a federal program as payment at 12.3%. Of all individuals who used Medicaid, 63.6% were White, 13.3% were African American, and 10.9% were Hispanic. Self-payers were most likely to be White at 57.3%, followed by African Americans at 24.3%. Medicare and commercial insurance payments were comprised primarily of Whites at approximately 85-90%.

Payment Type	Whites	African Americans	American Indians	Asians	Hispanics
Federal Program	76.3%	12.3%	0.8%	2.9%	4.2%
Medicaid	63.6%	13.3%	1.8%	1.9%	10.9%
Medicare	89.6%	7.0%	0.3%	0.7%	1.5%
Self-pay	57.3%	24.3%	1.0%	2.0%	6.6%
<b>Commercial Insurance</b>	84.3%	7.1%	0.4%	1.9%	4.0%

# Health Status and Mortality

At the most basic level, the health status of any population can be expressed through two concepts – life and death. The challenge is in determining how to meaningfully measure and predict these concepts in order to track, compare, and explain changes in health status over time. Predicting mortality can be complex due to the variety of factors and determinants. However, researchers have found that perceived health status, a relatively simple measure, is the strongest predictor of mortality.<sup>17</sup>

New research suggests that several health measures can affect self-reported health status. Lack of social support or leisure-time, physical activity, smoking, and high body mass index often lead to respondents having low perceived health status.<sup>18</sup> However, if individuals intend to change those negative measures in the future, they rate their health better.

Life, on the other hand, is often expressed in terms of life expectancy at birth, which indicates the number of years a newborn infant would live if predominant patterns of mortality at the time of birth were to stay the same throughout their life.<sup>19</sup> In 2013, Nebraska saw a 79.8-year life expectancy, compared to the United States at 78.8. According to one source, life expectancy is a more accurate predictor of health care expenditures than age.<sup>20</sup>

<sup>&</sup>lt;sup>17</sup> Goldstein, M., Siegel, J., and Boyer, R. (1984). Predicting changes in perceived health status. American Journal of Public Health.

<sup>&</sup>lt;sup>18</sup> Bailis, D., Segall, A., and Chipperfield, J. (2003). Two views of self-rated general health status. Social Science Medicine, 56, 203-217.

<sup>&</sup>lt;sup>19</sup> The World Bank. (2012). Life expectancy at birth, total (years). Retrieved from http://data.worldbank.org/indicator/SP.DYN.LE00.IN

<sup>&</sup>lt;sup>20</sup> Shang, B., and Goldman, D. (2008). Does age or life expectancy better predict health care expenditures? *Health Economics*, Vol. 17, No. 4; 487–501.

# Health Status and Mortality

# Perceived Health Status

Approximately 30% of the Hispanic population perceived their health as fair or poor, compared to only 11% of Whites.

American Indians also reported a relatively high percentage of those who perceived their health as fair or poor at approximately 26%.





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# Years of Potential Life Lost

Of the 533,201 total years of potential life lost among Nebraskans between 2011 and 2015, 22.3% were attributed to cancer.



Among African Americans, 14% of the years of potential life lost were attributed to homicide, which was not among the top ten causes of death for the White population.



# Leading Causes of Death



Cancer was the leading cause of death for all racial and ethnic groups.

# >> Heart Disease

Heart disease was the second leading cause of death for all populations except Hispanics.

# Unintentional Injury

Unintentional injury was the second leading cause of death for Hispanics.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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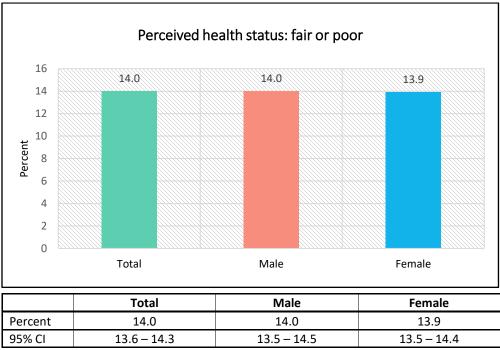
# **Perceived Health Status**

Perceived health status measures how an individual views his or her health – excellent, very good, good, fair, or poor. Individuals who are poor or uninsured are more likely to report being in fair or poor health and have higher rates of hospitalization and mortality compared to those who report excellent or good health. The perceived health status indicator is useful in making broad comparisons across populations that allow for diverse conditions.<sup>21</sup>

# **Perceived Health Status by Gender**

#### **Key Gender Disparities**

• Approximately 14% of both Nebraska males and females reported that their health status was fair or poor.



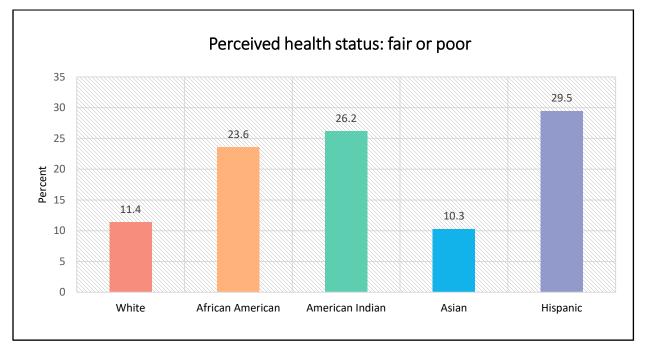
Source: Nebraska BRFSS 2011-2015

<sup>&</sup>lt;sup>21</sup> United States Office of Disease Prevention and Health Promotion. (2016). General health status. Retrieved from www.healthypeople.gov/2020/about/foundation-healthmeasures/General-Health-Status

# Perceived Health Status by Race and Ethnicity

### **Key Race and Ethnicity Disparities**

- Hispanics experienced the highest percentage (29.5%) of individuals who perceived their health status as fair or poor. This percentage was approximately 2.5 times greater than that of Whites (11.4%).
- Asians saw the lowest percentage (10.3%) of any population who perceived their health status as fair or poor.



	White	African American	American Indian	Asian	Hispanic
Percent	11.4	23.6	26.2	10.3	29.5
95% CI	11.1 – 11.7	21.3 – 26.1	22.2 – 30.6	7.4 - 14.0	27.5 - 31.6

Source: Nebraska BRFSS 2011-2015

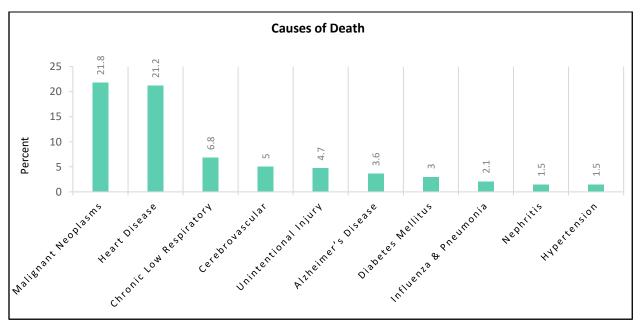
# Leading Causes of Death in Nebraska

For all racial and ethnic groups, cancer and heart disease were the most common causes of death. The only exception was within the Hispanic population, where the unintentional injury was the second leading cause of death.

#### Nebraska Total

Cancer was the leading cause of death for Nebraskans overall, accounting for 21.8% of all deaths from 2011-2015. Heart disease was the second leading cause of death for Nebraskans, accounting for 21.2% of all deaths.

Leading Causes of Death							
Cause of Death	Frequency	Percentage					
Malignant Neoplasms	17,321	21.8%					
Heart Disease	16,840	21.2%					
Chronic Low Respiratory	5,449	6.8%					
Cerebrovascular	3,980	5%					
Unintentional Injury	3,753	4.7%					
Alzheimer's Disease	2,837	3.6%					
Diabetes Mellitus	2,399	3%					
Influenza & Pneumonia	1,707	2.1%					
Hypertension	1,182	1.5%					
Nephritis	1,163	1.5%					
All Others	22,976	28.9%					



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

#### Nebraska Total: Males

For Nebraska males, cancer was the leading cause of death (23.3%), followed by heart disease (22%). Chronic lower respiratory disease and unintentional injury were the third and fourth leading causes of death for Nebraska males, respectively.

Leading Causes of Death: Males							
Cause of Death	Frequency	Percentage					
Malignant Neoplasms	9,172	23.3%					
Heart Disease	8,655	22.0%					
Chronic Low Respiratory	2,772	7.1%					
Unintentional Injury	2,284	5.8%					
Cerebrovascular	1,658	4.2%					
Diabetes Mellitus	1,233	3.1%					
Suicide	893	2.3%					
Alzheimer's Disease	878	2.2%					
Influenza & Pneumonia	761	1.9%					
Parkinson's Disease	618	1.6%					
All Others	10,385	26.4%					

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

#### Nebraska Total: Females

The leading cause of death for Nebraska females was heart disease, accounting for 20.3% of all Nebraska female deaths from 2011-2015. Cancer was the second leading cause of death for Nebraska females, accounting for 20.2% of all Nebraska female deaths.

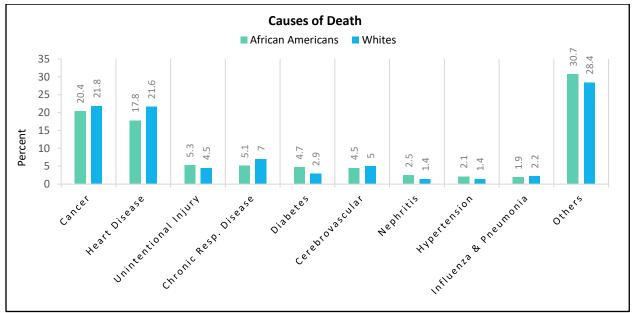
Leading Causes of Death: Females							
Cause of Death	Frequency	Percentage					
Heart Disease	8,185	20.3					
Malignant Neoplasms	8,149	20.2					
Chronic Low Respiratory	2,677	6.6					
Cerebrovascular	2,322	5.8					
Alzheimer's Disease	1,959	4.9					
Unintentional Injury	1,469	3.6					
Diabetes Mellitus	1,166	2.9					
Influenza & Pneumonia	946	2.3					
Hypertension	733	1.8					
Nephritis	596	1.5					
All Others	12,096	30					

#### **African Americans Compared to Whites**

Cancer was the leading cause of death for both African Americans and Whites, followed by heart disease. Approximately 18% of African American deaths were due to heart disease, compared to approximately 22% of White deaths. Unintentional injuries were the third leading cause of death for African Americans, while chronic respiratory diseases were the third leading cause of death for Whites.

Leading Causes of Death Total							
Cause of Death	Frequency (African Americans)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Cancer	569	20.4%	Cancer	16,210	21.8%		
Heart Disease	498	17.8%	Heart Disease	16,010	21.6%		
Unintentional Injury	147	5.3%	Chronic Respiratory Disease	5,229	7.0%		
Chronic Respiratory Disease	142	5.1%	Cerebrovascular	3,734	5.0%		
Homicide	142	5.1%	Unintentional Injury	3,345	4.5%		
Diabetes Mellitus	132	4.7%	Alzheimer's Disease	2,749	3.7%		
Cerebrovascular	125	4.5%	Diabetes Mellitus	2,131	2.9%		
Nephritis	70	2.5%	Influenza & Pneumonia	1,615	2.2%		
Hypertension	60	2.1%	Hypertension	1,073	1.4%		
Influenza & Pneumonia	53	1.9%	Nephritis	1,071	1.4%		
All Others	858	30.7%	All Others	21,111	28.4%		
Total	2,796	100.0%	Total	74,278	100.0%		

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



#### African American Males Compared to White Males

Cancer and heart disease were the leading causes of death among both African American and White males, though Whites reported somewhat higher percentages of both.

Leading Causes of Death: Males							
Cause of Death	Frequency (African Americans)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Cancer	299	19.6%	Cancer	8,583	23.6%		
Heart Disease	279	18.3%	Heart Disease	8,173	22.5%		
Homicide	124	8.1%	Chronic Respiratory Disease	2,660	7.3%		
Unintentional Injury	91	6.0%	Unintentional Injury	2,015	5.5%		
Chronic Respiratory Disease	71	4.7%	Cerebrovascular	1,535	4.2%		
Cerebrovascular	65	4.3%	Diabetes Mellitus	1,107	3.0%		
Diabetes Mellitus	59	3.9%	Alzheimer's Disease	851	2.3%		
Nephritis	32	2.1%	Suicide	820	2.3%		
Hypertension	31	2.0%	Influenza & Pneumonia	713	2.0%		
Influenza & Pneumonia	26	1.7%	Parkinson's Disease	601	1.7%		
All Others	447	29.3%	All Others	9,292	25.6%		
Total	1,524	100.0%	Total	36,350	100.0%		

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

#### African American Females Compared to White Females

Cancer was the leading cause of death for African American females at 21.2% and the second leading cause of death for White females at 20.1%.

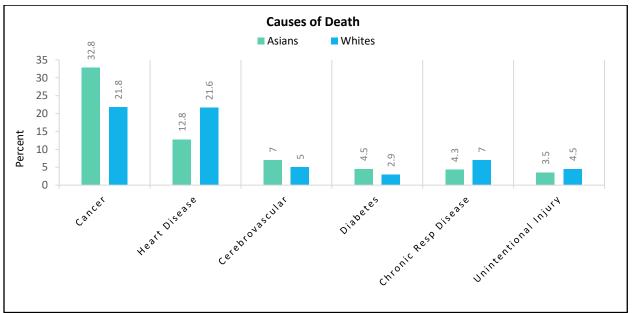
Leading Causes of Death: Females							
Cause of Death	Frequency (African Americans)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Cancer	270	21.2%	Heart Disease	7,837	20.7%		
Heart Disease	219	17.2%	Cancer	7,627	20.1%		
Diabetes Mellitus	73	5.7%	Chronic Respiratory Disease	2,569	6.8%		
Chronic Respiratory Disease	71	5.6%	Cerebrovascular	2,199	5.8%		
Cerebrovascular	60	4.7%	Alzheimer's Disease	1,898	5.0%		
Unintentional Injury	56	4.4%	Unintentional Injury	1,330	3.5%		
Alzheimer's Disease	39	3.1%	Diabetes Mellitus	1,024	2.7%		
Nephritis	38	3.0%	Influenza & Pneumonia	902	2.4%		
Hypertension	29	2.3%	Hypertension	681	1.8%		
Influenza & Pneumonia	27	2.1%	Nephritis	533	1.4%		
All Others	390	30.7%	All Others	11,328	29.9%		
Total	1,272	100.0%	Total	37,928	100.0%		

### **Asians Compared to Whites**

Approximately 33% of all deaths among Asians could be attributed to cancer, compared to only 21.8% among Whites. Heart disease was the second leading cause of death among both Asians and Whites; however, the percentage of total deaths attributed to heart disease was much lower among Asians at 12.8%.

Leading Causes of Death Total							
Cause of Death	Frequency (Asians)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Cancer	131	32.8%	Cancer	16,210	21.8%		
Heart Disease	51	12.8%	Heart Disease	16,010	21.6%		
Cerebrovascular	28	7.0%	Chronic Respiratory Disease	5,229	7.0%		
Diabetes Mellitus	18	4.5%	Cerebrovascular	3,734	5.0%		
Chronic Respiratory Disease	17	4.3%	Unintentional Injury	3,345	4.5%		
Unintentional Injury	14	3.5%	Alzheimer's Disease	2,749	3.7%		
Suicide	11	2.8%	Diabetes Mellitus	2,131	2.9%		
All Others	129	32.3%	Influenza & Pneumonia	1,615	2.2%		
Total	399	100.0%	Hypertension	1,073	1.4%		
			Nephritis	1,071	1.4%		
			All Others	21,111	28.4%		
			Total	74,278	100.0%		

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



#### **Asians Males Compared to Whites Males**

Cancer and heart disease were the leading causes of death among Asian and White males. Approximately 32% of all deaths were attributed to cancer among Asian males, compared to approximately 24% of deaths among White males.

Leading Causes of Death: Males								
Cause of Death	Frequency (Asians)	Percentage	Cause of Death	Frequency (Whites)	Percentage			
Cancer	69	31.8%	Cancer	8,583	23.6%			
Heart Disease	33	15.2%	Heart Disease	8,173	22.5%			
Chronic Respiratory Disease	11	5.1%	Chronic Respiratory Disease	2,660	7.3%			
Diabetes Mellitus	10	4.6%	Unintentional Injury	2,015	5.5%			
All Others	94	43.3%	Cerebrovascular	1,535	4.2%			
Total	217	100.0%	Diabetes Mellitus	1,107	3.0%			
			Alzheimer's Disease	851	2.3%			
			Suicide	820	2.3%			
			Influenza & Pneumonia	713	2.0%			
			Parkinson's Disease	601	1.7%			
			All Others	9,292	25.6%			
			Total	36,350	100.0%			

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

#### **Asians Females Compared to White Females**

Cancer was the leading cause of death among Asian females at approximately 34% of total deaths and the second leading cause of death among White females at approximately 21%. The second leading cause of death among Asian females was cerebrovascular, which was the fourth leading cause of death among White females.

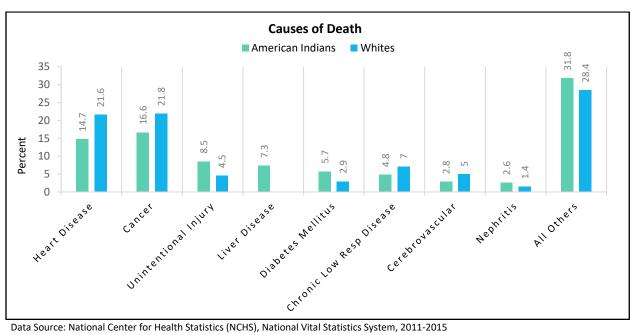
Leading Causes of Death: Females								
Cause of Death	Frequency (Asians)	Percentage	Cause of Death	Frequency (Whites)	Percentage			
Cancer	62	34.1%	Heart Disease	7,837	20.7%			
Cerebrovascular	20	11.0%	Cancer	7,627	20.1%			
Heart Disease	18	9.9%	Chronic Respiratory Disease	2,569	6.8%			
All Others	82	45.1%	Cerebrovascular	2,199	5.8%			
Total	182	100.0%	Alzheimer's Disease	1,898	5.0%			
			Unintentional Injury	1,330	3.5%			
			Diabetes Mellitus	1,024	2.7%			
			Influenza & Pneumonia	902	2.4%			
			Hypertension	681	1.8%			
			Nephritis	533	1.4%			
			All Others	11,328	29.9%			
			Total	37,928	100.0%			

#### **American Indians Compared to Whites**

Approximately 17% of American Indian deaths were attributed to cancer, compared to 22% of White deaths. Heart disease was the second leading cause of death for both American Indians and Whites. While the unintentional injury was the third leading cause of death for American Indians, it was the fifth leading cause of death for Whites.

Leading Causes of Death Total							
Cause of Death	Frequency (American Indians)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Cancer	96	16.6%	Cancer	16,210	21.8%		
Heart Disease	85	14.7%	Heart Disease	16,010	21.6%		
Unintentional Injury	49	8.5%	Chronic Respiratory Disease	5,229	7.0%		
Liver Disease	42	7.3%	Cerebrovascular	3,734	5.0%		
Diabetes Mellitus	33	5.7%	Unintentional Injury	3,345	4.5%		
Chronic Respiratory Disease	28	4.8%	Alzheimer's Disease	2,749	3.7%		
Septicemia	17	2.9%	Diabetes Mellitus	2,131	2.9%		
Cerebrovascular	16	2.8%	Influenza & Pneumonia	1,615	2.2%		
Nephritis	15	2.6%	Hypertension	1,073	1.4%		
Homicide	14	2.4%	Nephritis	1,071	1.4%		
All Others	184	31.8%	All Others	21,111	28.4%		
Total	579	100.0%	Total	74,278	100.0%		

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



#### American Indian Males Compared to White Males

Heart disease was the leading cause of death among American Indian males at 16.4% of total deaths, compared to White males at 22.5% of total deaths. Cancer was the second leading cause of death for American Indian males and the first leading cause of death for White males.

Leading Causes of Death: Males							
Cause of Death	Frequency (American Indians)	Percentage	Cause of Death	Frequency (Whites)	Percentage		
Heart Disease	47	16.4%	Cancer	8,583	23.6%		
Cancer	44	15.3%	Heart Disease	8,173	22.5%		
Unintentional Injury	29	10.1%	Chronic Low Respiratory Disease	2,660	7.3%		
Liver Disease	22	7.7%	Unintentional Injury	2,015	5.5%		
Diabetes Mellitus	16	5.6%	Cerebrovascular	1,535	4.2%		
Chronic Respiratory Disease	12	4.2%	Diabetes Mellitus	1,107	3.0%		
Homicide	12	4.2%	Alzheimer's Disease	851	2.3%		
All Others	105	36.6%	Suicide	820	2.3%		
Total	287	100.0%	Influenza & Pneumonia	713	2.0%		
			Parkinson's Disease	601	1.7%		
			All Others	9,292	25.6%		
			Total	36,350	100.0%		

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

#### **American Indian Females Compared to White Females**

Approximately 18% of American Indian female deaths were attributed to cancer, compared to approximately 20% of White female deaths. Heart disease was the second leading cause of death for American Indian females (13%) and the first leading cause of death for White females (21%).

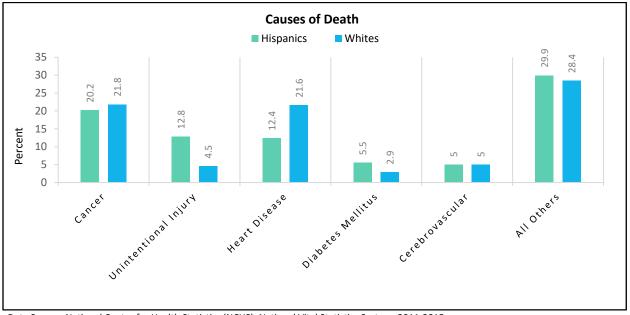
Leading Causes of Death: Females									
Cause of Death	Frequency (American Indians)	Percentage	Cause of Death	Frequency (Whites)	Percentage				
Cancer	52	17.8%	Heart Disease	7,837	20.7%				
Heart Disease	38	13.0%	Cancer	7,627	20.1%				
Liver Disease	20	6.8%	Chronic Respiratory Disease	2,569	6.8%				
Unintentional Injury	20	6.8%	Cerebrovascular	2,199	5.8%				
Diabetes Mellitus	17	5.8%	Alzheimer's Disease	1,898	5.0%				
Chronic Respiratory Disease	16	5.5%	Unintentional Injury	1,330	3.5%				
Nephritis	12	4.1%	Diabetes Mellitus	1,024	2.7%				
Septicemia	12	4.1%	Influenza & Pneumonia	902	2.4%				
Cerebrovascular	10	3.4%	Hypertension	681	1.8%				
All Others	95	32.5%	Nephritis	533	1.4%				
Total	292	100.0%	All Others	11,328	29.9%				
			Total	37,928	100.0%				

#### **Hispanics Compared to Whites**

Cancer was the leading cause of death among both Hispanics (20.2%) and Whites (21.8%). Approximately 13% of all Hispanic deaths were attributed to unintentional injury, making it the second leading cause of death. Unintentional injury was the fifth leading cause of death among Whites.

	Lea	ading Cause	s of Death Total		
Cause of Death	Frequency (Hispanics)	Percentage	Cause of Death	Frequency (Whites)	Percentage
Cancer	311	20.2%	Cancer	16,210	21.8%
Unintentional Injury	196	12.8%	Heart Disease	16,010	21.6%
Heart Disease	190	12.4%	Chronic Respiratory Disease	5,229	7.0%
Diabetes Mellitus	85	5.5%	Cerebrovascular	3,734	5.0%
Cerebrovascular	77	5.0%	Unintentional Injury	3,345	4.5%
Perinatal Period	60	3.9%	Alzheimer's Disease	2,749	3.7%
Liver Disease	44	2.9%	Diabetes Mellitus	2,131	2.9%
Congenital Anomalies	39	2.5%	Influenza & Pneumonia	1,615	2.2%
Suicide	39	2.5%	Hypertension	1,073	1.4%
Homicide	36	2.3%	Nephritis	1,071	1.4%
All Others	459	29.9%	All Others	21,111	28.4%
Total	1,536	100.0%	Total	74,278	100.0%

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



### **Hispanic Males Compared to White Males**

Cancer was the leading cause of death among both Hispanic males and White males. Unintentional injury was the second leading cause of death among Hispanic males at 15% and the fourth leading cause of death among White males at 5.5%.

Leading Causes of Death: Males									
Cause of Death	Frequency (Hispanics)	Percentage	Cause of Death	Frequency (Whites)	Percentage				
Cancer	176	19.1%	Cancer	8,583	23.6%				
Unintentional Injury	140	15.2%	Heart Disease	8,173	22.5%				
Heart Disease	120	13.0%	Chronic Respiratory Disease	2,660	7.3%				
Cerebrovascular	44	4.8%	Unintentional Injury	2,015	5.5%				
Diabetes Mellitus	41	4.4%	Cerebrovascular	1,535	4.2%				
Perinatal Period	41	4.4%	Diabetes Mellitus	1,107	3.0%				
Suicide	32	3.5%	Alzheimer's Disease	851	2.3%				
Homicide	29	3.1%	Suicide	820	2.3%				
Liver Disease	27	2.9%	Influenza & Pneumonia	713	2.0%				
Congenital Anomalies	22	2.4%	Parkinson's Disease	601	1.7%				
All Others	250	27.1%	All Others	9,292	25.6%				
Total	922	100.0%	Total	36,350	100.0%				

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

#### **Hispanic Females Compared to White Females**

Cancer and heart disease were the top two leading causes of death among Hispanic females and White females. Hispanic females reported a notably smaller proportion of deaths due to heart disease at 11.4%, compared to White females at 20.7%.

Leading Causes of Death: Females											
Cause of Death	Frequency (Hispanics)	Percentage	Cause of Death	Frequency (Whites)	Percentage						
Cancer	135	22.0%	Heart Disease	7,837	20.7%						
Heart Disease	70	11.4%	Cancer	7,627	20.1%						
Unintentional Injury	56	9.1%	Chronic Respiratory Disease	2,569	6.8%						
Diabetes Mellitus	44	7.2%	Cerebrovascular	2,199	5.8%						
Cerebrovascular	33	5.4%	Alzheimer's Disease	1,898	5.0%						
Perinatal Period	19	3.1%	Unintentional Injury	1,330	3.5%						
Congenital Anomalies	17	2.8%	Diabetes Mellitus	1,024	2.7%						
Liver Disease	17	2.8%	Influenza a& Pneumonia	902	2.4%						
Chronic Respiratory Disease	15	2.4%	Hypertension	681	1.8%						
Alzheimer's Disease	13	2.1%	Nephritis	533	1.4%						
All Others	195	31.8%	All Others	11,328	29.9%						
Total	614	100.0%	Total	37,928	100.0%						

# Leading Causes of Death by Age Group

## Nebraska Total

For all Nebraskans, unintentional injury was the leading cause of death for individuals ages 1-44. Cancer was the leading cause of death for individuals ages 45-64 and the overall leading cause of death when considering all ages. For individuals age 65 and older, heart disease was the leading cause of death.

				N	lebraska	Total by <i>i</i>	Age Grou	р			
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 388	Unintentional Injury 78	Unintentional Injury 51	Unintentional Injury 80	Unintentional Injury 798	Unintentional Injury 682	Unintentional Injury 695	Malignant Neoplasms 2,516	Malignant Neoplasms 5,905	Heart Disease 28,644	Malignant Neoplasms 
2	SIDS 181	Congenital Anomalies 35	Malignant Neoplasms 37	Malignant Neoplasms 28	Suicide 334	Suicide 316	Malignant Neoplasms 322	Heart Disease 755	Heart Disease 1,575	Malignant Neoplasms 12,582	Heart Disease 16,840
3	Short Gestation 147	Malignant Neoplasms 27	Congenital Anomalies 22	Suicide 21	Homicide 176	Homicide 176	Heart Disease 212	Unintentional Injury 448	Chronic Low. Respiratory Disease 514	Chronic Low. Respiratory Disease 4,756	Chronic Low. Respiratory Disease 5,449
4	Maternal Pregnancy Comp. 144	Homicide 25	Chronic Low. Respiratory Disease 	Homicide 10	Malignant Neoplasms 92	Malignant Neoplasms 92	Suicide 177	Suicide 217	Unintentional Injury 439	Cerebro- vascular 3,527	Cerebro- vascular 3,980
5	Placenta Cord Membranes 83	Heart Disease 11	Homicide 	Cerebro- vascular 	Heart Disease 40	Heart Disease 152	Diabetes Mellitus 51	Liver Disease 215	Diabetes Mellitus 334	Alzheimer's Disease 2,806	Unintentional Injury 3,753
6	Unintentional Injury 49	Influenza & Pneumonia 	Influenza & Pneumonia 	Chronic Low. Respiratory Disease 	Congenital Anomalies 24	Liver Disease 33	Cerebro- vascular 47	Diabetes Mellitus 150	Cerebro- vascular 266	Diabetes Mellitus 1,848	Alzheimer's Disease 2,837
7	Atelectasis 35	Septicemia 	Six Tied 	Congenital Anomalies 	Influenza & Pneumonia 21	Complicated Pregnancy 13	Homicide 47	Chronic Low. Respiratory Disease 145	Liver Disease 245	Unintentional Injury 1,670	Diabetes Mellitus 2,399
8	Bacterial Sepsis 27	Six Tied 	Six Tied 	Six Tied 	Chronic Low. Respiratory Disease 	Congenital Anomalies 11	Liver Disease 47	Cerebro- vascular 119	Suicide 184	Influenza & Pneumonia 1,485	Influenza & Pneumonia 1,707
9	Respiratory Distress 26	Six Tied 	Six Tied 	Six Tied 	Complicated Pregnancy 	Influenza & Pneumonia 11	Influenza & Pneumonia 20	Influenza & Pneumonia 53	Influenza & Pneumonia 115	Nephritis 1,045	Nephritis 1,182
10	Circulatory System Disease 24	Six Tied 	Six Tied 	Six Tied 	Diabetes Mellitus 	Two Tied 10	HIV 17	Two Tied 45	Hypertension 98	Hypertension 1,023	Hypertension 1,163

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2006-2015

Note: (---) indicates less than 10 cases

## Whites

Unintentional injury was the leading cause of death among Whites ages 1-44, and cancer was the leading cause of death among Whites ages 45-64. Of those 65 years and older, heart disease was the leading cause of death, followed by cancer.

					White	s by Age	Group				
	<1	14	59	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 
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

### **African Americans**

Homicide accounted for 188 deaths among African Americans and was the leading cause of death among individuals ages 15-34. Cancer was the leading cause of death among individuals ages 45 and older and was the leading cause of death for all age groups combined.

				Af	rican Am	ericans by	/ Age Gro	up			
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	SIDS 39	Unintentional Injury 13	Unintentional Injury 	Unintentional Injury 	Homicide 102	Homicide 86	Heart Disease 54	Malignant Neoplasms 152	Malignant Neoplasms 282	Malignant Neoplasms 650	Malignant Neoplasms 1,139
2	Congenital Anomalies 34	Congenital Anomalies 	Malignant Neoplasms 	Chronic Low. Respiratory Disease	Unintentional Injury 29	Unintentional Injury 49	Unintentional Injury 38	Heart Disease 134	Heart Disease 203	Heart Disease 570	Heart Disease 994
3	Maternal Pregnancy Comp. 26	Homicide 	Chronic Low. Respiratory Disease 	Homicide 	Suicide 21	Heart Disease 21	Homicide 34	Unintentional Injury 50	Cerebro- vascular 57	Diabetes Mellitus 177	Cerebro- vascular 280
4	Short Gestation 23	Malignant Neoplasms 	Homicide 	Malignant Neoplasms 	Malignant Neoplasms 	Suicide 15	Malignant Neoplasms 26	Cerebro- vascular 44	Chronic Low. Respiratory Disease 54	Cerebro- vascular 163	Diabetes Mellitus 277
5	Placenta Cord Membranes 10	Anemias 	Influenza & Pneumonia 	Congenital Anomalies 	Heart Disease 	Malignant Neoplasms 10	Diabetes Mellitus 15	Diabetes Mellitus 30	Diabetes Mellitus 53	Chronic Low. Respiratory Disease 145	Unintentional Injury 263
6	Respiratory Distress 	Cerebro- vascular 	Pneumonitis 	Heart Disease 	Chronic Low. Respiratory Disease	Anemias 	HIV 14	Chronic Low. Respiratory Disease 25	Unintentional Injury <b>30</b>	Nephritis 100	Homicide 261
7	Unintentional Injury 	Heart Disease 		Cerebro- vascular 	Influenza & Pneumonia 	Chronic Low. Respiratory Disease 	Cerebro- vascular 	Homicide 19	Nephritis 25	Alzheimer's Disease 95	Chronic Low. Respiratory Disease 243
8	Homicide 	Perinatal Period 		Influenza & Pneumonia 	Cerebro- vascular	Cerebro- vascular 		Septicemia 16	Septicemia 24	Hypertension 68	Nephritis 143
9	Influenza & Pneumonia 	Meningitis 			Complicated Pregnancy 	HIV 		HIV 15	Hypertension 22	Influenza & Pneumonia 40	Hypertension 102
10	Septicemia				Congenital Anomalies 	Nephritis 		Liver Disease 15	Liver Disease 22	Septicemia 38	Perinatal Period 100

### **American Indians**

Unintentional injury was the leading cause of death among American Indians ages 10-44 in Nebraska. Among American Indians ages 45-54, heart disease was the leading cause of death, and among American Indians ages 55 and older, cancer was the leading cause of death. Among all age groups combined, cancer was the leading cause of death.

				Α	merican I	ndians by	Age Grou	up			
	<1	14	59	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

## Asians

Unintentional injury was the leading cause of death for Asians ages 15-24. Cancer was the leading cause of death among Asians ages 25 years of age and older.

					Asian	s by Age (	Group				
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 	Congenital Anomalies 			Unintentional Injury 	Malignant Neoplasms 	Malignant Neoplasms 15	Malignant Neoplasms 33	Malignant Neoplasms 51	Malignant Neoplasms 108	Malignant Neoplasms 214
2	Maternal Pregnancy Comp. 				Suicide 	Unintentional Injury 	Suicide 	Heart Disease 10	Cerebro- vascular 10	Heart Disease 68	Heart Disease 88
3	Short Gestation 				Homicide 	Homicide 	Unintentional Injury 	Unintentional Injury 	Heart Disease 	Cerebro- vascular 35	Cerebro- vascular 48
4	Intrauterine Hypoxia 				Influenza & Pneumonia 	Suicide 	Complicated Pregnancy 	Cerebro- vascular 	Unintentional Injury 	Diabetes Mellitus 25	Unintentional Injury 36
5	Malignant Neoplasms 				Malignant Neoplasms 	Heart Disease 	Cerebro- vascular 	Chronic Low. Respiratory Disease 	Chronic Low. Respiratory Disease 	Chronic Low. Respiratory Disease 23	Chronic Low. Respiratory Disease 28
6	Placenta Cord Membranes 				Septicemia	Influenza & Pneumonia 	HIV 		Diabetes Mellitus 	Alzheimer's Disease 14	Diabetes Mellitus 27
7	Unintentional Injury 					Liver Disease 	Influenza & Pneumonia 		Septicemia	Hypertension 	Suicide 18
8						Tuberculosis 			Suicide 	Unintentional Injury 	Alzheimer's Disease 
9									Viral Hepatitis 	Parkinson's Disease 	Nephritis 11
10											Hypertension 10

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2006-2015

Note: (---) indicates less than 10 cases

# Hispanics

Unintentional injury was the leading cause of death among Hispanics ages 1-44, and cancer was the leading cause of death for Hispanics ages 45 and older.

					Hispan	ics by Age	Group				
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 65	Unintentional Injury 17	Unintentional Injury 	Unintentional Injury 14	Unintentional Injury 110	Unintentional Injury 68	Unintentional Injury 53	Malignant Neoplasms 95	Malignant Neoplasms 116	Malignant Neoplasms 280	Malignant Neoplasms 555
2	Short Gestation 25	Malignant Neoplasms 	Congenital Anomalies 	Malignant Neoplasms 	Homicide 29	Homicide 22	Malignant Neoplasms 35	Heart Disease 46	Heart Disease 66	Heart Disease 233	Heart Disease 378
3	Maternal Pregnancy Comp. 23	Homicide 	Malignant Neoplasms 	Nephritis 	Suicide 19	Suicide 18	Heart Disease 20	Unintentional Injury 43	Diabetes Mellitus 31	Diabetes Mellitus 92	Unintentional Injury 371
4	Placenta Cord Membranes 14	Congenital Anomalies 	Meningitis 	Anemias 	Malignant Neoplasms 	Malignant Neoplasms 14	Homicide 12	Liver Disease 24	Unintentional Injury 25	Cerebro- vascular 79	Diabetes Mellitus 144
5	SIDS 13	Heart Disease 		Septicemia	Complicated Pregnancy 	Cerebro- vascular 	Cerebro- vascular 	Cerebro- vascular 21	Cerebro- vascular 20	Chronic Low. Respiratory Disease 40	Cerebro- vascular 134
6	Unintentional Injury 	Benign Neoplasms 		Suicide 	Cerebro- vascular 	Liver Disease 	Liver Disease 	Suicide 13	Liver Disease 19	Alzheimer's Disease 36	Perinatal Period 107
7	Atelectasis	Chronic Low. Respiratory Disease 			Congenital Anomalies 	HIV 	HIV 	Diabetes Mellitus 12	Benign Neoplasms 	Nephritis 31	Congenital Anomalies 79
8		Perinatal Period 			HIV 		Suicide 	Homicide 	Septicemia	Influenza & Pneumonia 29	Homicide 76
9					Heart Disease 		Diabetes Mellitus 	Viral Hepatitis 	Suicide 	Unintentional Injury 29	Liver Disease 74
10							Influenza & Pneumonia 		Viral Hepatitis 	Hypertension 23	Suicide 66

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 and Gender

### White Males by Age Group

Unintentional injury was the leading cause of death among White males ages 1-44, and cancer was the leading cause of death among White males ages 45-64. Among White males age 65 and older, heart disease was the leading cause of death.

					White M	ales by A	ge Group				
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 144	Unintentional Injury 30	Unintentional Injury 24	Unintentional Injury 36	Unintentional Injury 446	Unintentional Injury 398	Unintentional Injury 373	Malignant Neoplasms 1,119	Malignant Neoplasms 3,023	Heart Disease 12,754	Malignant Neoplasms 
2	SIDS 75	Congenital Anomalies 13	Malignant Neoplasms 16	Malignant Neoplasms 13	Suicide 226	Suicide 232	Heart Disease 303	Heart Disease 1,005	Heart Disease 1,889	Malignant Neoplasms 12,471	Heart Disease 16,060
3	Short Gestation 52	Malignant Neoplasms 11	Congenital Anomalies 	Suicide 13	Malignant Neoplasms 45	Malignant Neoplasms 82	Suicide 240	Unintentional Injury 536	Unintentional Injury 469	Chronic Low. Respiratory Disease 4,471	Chronic Low. Respiratory Disease 5,036
4	Maternal Pregnancy Comp. 37	Homicide 	Heart Disease 	Homicide 	Homicide 26	Heart Disease 77	Malignant Neoplasms 235	Suicide 313	Chronic Low. Respiratory Disease 429	Cerebro- vascular 2,759	Unintentional Injury 3,825
5	Placenta Cord Membranes 34	Influenza & Pneumonia 	Homicide 	Chronic Low. Respiratory Disease 	Heart Disease 22	Homicide 34	Diabetes Mellitus 46	Liver Disease 224	Diabetes Mellitus 303	Alzheimer's Disease 1,610	Cerebro- vascular 3,825
6	Respiratory Distress 16	Cerebro- vascular 	Diabetes Mellitus 	Cerebro- vascular 	Congenital Anomalies 10	Liver Disease 18	Cerebro- vascular 44	Diabetes Mellitus 142	Liver Disease 259	Diabetes Mellitus 1,572	Diabetes Mellitus 2,080
7	Unintentional Injury 15	Heart Disease	Perinatal Period 	Heart Disease 	Influenza & Pneumonia 	Congenital Anomalies 13	Liver Disease 41	Cerebro- vascular 111	Cerebro- vascular 241	Unintentional Injury 1,498	Alzheimer's Disease 1,631
8	Bacterial Sepsis 14		Septicemia	Congenital Anomalies 	Cerebro- vascular 	Diabetes Mellitus 12	Homicide 28	Chronic Low. Respiratory Disease 110	Suicide 241	Influenza & Pneumonia 1,195	Suicide 1,529
9	Atelectasis 13				Chronic Low. Respiratory Disease 	Influenza & Pneumonia 12	HIV 25	Viral Hepatitis 55	Influenza & Pneumonia 90	Parkinson's Disease 1,031	Influenza & Pneumonia 1,367
10	Intrauterine Hypoxia 12				Diabetes Mellitus 	Chronic Low. Respiratory Disease 	Septicemia 15	HIV 42	Nephritis 87	Nephritis 1,019	Nephritis 1,138

### White Females by Age Group

Unintentional injury was the leading cause of death among White females ages 1-4 and 10-34. Among White females ages 5-9, cancer was the leading cause of death. Cancer was also the leading cause of death for White females ages 35-64. Heart disease was the leading cause of death among White females age 65 and older and was the leading cause of death overall for White females.

				١	White Fer	nales by <i>l</i>	Age Grou	o			
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 129	Unintentional Injury 18	Malignant Neoplasms 14	Unintentional Injury 22	Unintentional Injury 188	Unintentional Injury 143	Malignant Neoplasms 297	Malignant Neoplasms 1,102	Malignant Neoplasms 2,385	Heart Disease 14,941	Heart Disease 16,214
2	SIDS 45	Congenital Anomalies 12	Unintentional Injury 12	Malignant Neoplasms 10	Suicide 50	Malignant Neoplasms 66	Unintentional Injury 210	Heart Disease 369	Heart Disease 712	Malignant Neoplasms 11,375	Malignant Neoplasms 15,288
3	Short Gestation 43	Malignant Neoplasms 	Congenital Anomalies 	Suicide 	Malignant Neoplasms 31	Suicide 44	Heart Disease 124	Unintentional Injury 238	Chronic Low. Respiratory Disease 398	Cerebro- vascular 4,439	Chronic Low. Respiratory Disease 4,878
4	Maternal Pregnancy Comp. 25	Homicide 	Influenza & Pneumonia 	Congenital Anomalies 	Congenital Anomalies 11	Heart Disease 43	Suicide 67	Chronic Low. Respiratory Disease 123	Unintentional Injury 203	Chronic Low. Respiratory Disease 4,333	Cerebro- vascular 4,753
5	Placenta Cord Membranes 23	Heart Disease 	Homicide 	Homicide 	Heart Disease 10	Homicide 20	Liver Disease 34	Liver Disease 115	Diabetes Mellitus 190	Alzheimer's Disease 3,768	Alzheimer's Disease 3,810
6	Unintentional Injury 18	Cerebro- vascular 	Cerebro- vascular 	Heart Disease 	Influenza & Pneumonia 	Complicated Pregnancy 16	Cerebro- vascular 31	Suicide 94	Cerebro- vascular 176	Diabetes Mellitus 1,748	Unintentional Injury 2,621
7	Circulatory System Disease 11	Chronic Low. Respiratory Disease 	Meningitis 	Meningitis 	Homicide 	Influenza & Pneumonia 10	Diabetes Mellitus 29	Cerebro- vascular 93	Liver Disease 101	Influenza & Pneumonia 1,594	Diabetes Mellitus 2,063
8	Bacterial Sepsis 	Influenza & Pneumonia 		Perinatal Period 	Complicated Pregnancy 	Cerebro- vascular 	Influenza & Pneumonia 21	Diabetes Mellitus 89	Septicemia 72	Unintentional Injury 1,569	Influenza & Pneumonia 1,753
9	Respiratory Distress 	Septicemia		Pneumonitis 		Liver Disease 	Homicide 19	Influenza & Pneumonia 49	Suicide 70	Hypertension 1,156	Hypertension 1,213
10							Chronic Low. Respiratory Disease 17	Septicemia 27	Nephritis 66	Nephritis 1,063	Nephritis 1,156

## African American Males by Age Group

Homicide was the leading cause of death among African American males from ages 10-44, and heart disease was the leading cause of death among African American males ages 45-54. Among African American males age 55 and older, cancer was the leading cause of death. Cancer was also the overall leading cause of death among African American males.

	African American Males by Age Group											
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages	
1	SIDS 24	Unintentional Injury 	Chronic Low. Respiratory Disease 	Homicide 	Homicide 90	Homicide 80	Homicide 30	Heart Disease 92	Malignant Neoplasms 153	Malignant Neoplasms 336	Malignant Neoplasms 586	
2	Congenital Anomalies 17	Congenital Anomalies 	Malignant Neoplasms 	Unintentional Injury 	Unintentional Injury 21	Unintentional Injury 37	Heart Disease 29	Malignant Neoplasms 73	Heart Disease 126	Heart Disease 269	Heart Disease 534	
3	Short Gestation 14	Cerebro- vascular 	Unintentional Injury 	Chronic Low. Respiratory Disease 	Suicide 18	Heart Disease 16	Unintentional Injury 26	Unintentional Injury 25	Cerebro- vascular 33	Chronic Low. Respiratory Disease 77	Homicide 226	
4	Maternal Pregnancy Comp. 13	Anemias 	Influenza & Pneumonia 	Influenza & Pneumonia 	Malignant Neoplasms 	Suicide 11	HIV 11	Cerebro- vascular 20	Chronic Low. Respiratory Disease 29	Cerebro- vascular 68	Unintentional Injury 160	
5	Placenta Cord Membranes 	Homicide 	Pneumonitis 		Influenza & Pneumonia 	Malignant Neoplasms 	Diabetes Mellitus 	Diabetes Mellitus 19	Diabetes Mellitus 20	Diabetes Mellitus 66	Cerebro- vascular 131	
6	Respiratory Distress 	Malignant Neoplasms 			Chronic Low. Respiratory Disease	Cerebro- vascular 	Malignant Neoplasms 	Homicide 13	Unintentional Injury 30	Nephritis 40	Chronic Low. Respiratory Disease 126	
7	Chronic Respiratory Disease 	Meningitis 			Congenital Anomalies 	Diabetes Mellitus 	Cerebro- vascular 	Chronic Low. Respiratory Disease 12	Hypertension 15	Alzheimer's Disease 30	Diabetes Mellitus 116	
8	Influenza & Pneumonia 	Perinatal Period 			Heart Disease 		Liver Disease 	HIV 	Liver Disease 14	Hypertension 28	Nephritis 62	
9	Unintentional Injury 						Suicide 		Nephritis 14	Influenza & Pneumonia 19	Perinatal Period 61	
10									Septicemia 13	Septicemia 16	Hypertension 53	

#### African American Females by Age Group

Among African American females ages 15-24, homicide was the leading cause of death, and among African American females ages 25-34, unintentional injury was the leading cause of death. Cancer was the leading cause of death among African American females, age 45 and older. Cancer was also the leading cause of death overall for African American females.

	African American Females by Age Group											
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages	
1	Congenital Anomalies 17	Congenital Anomalies 	Unintentional Injury 	Chronic Low. Respiratory Disease 	Homicide 12	Unintentional Injury 12	Heart Disease 25	Malignant Neoplasms 79	Malignant Neoplasms 129	Malignant Neoplasms 314	Malignant Neoplasms 553	
2	SIDS 15	Unintentional Injury 	Homicide 	Malignant Neoplasms 	Unintentional Injury 	Homicide 	Malignant Neoplasms 19	Heart Disease 42	Heart Disease 77	Heart Disease 301	Heart Disease 460	
3	Maternal Pregnancy Comp. 13	Heart Disease 	Malignant Neoplasms 	Congenital Anomalies 	Heart Disease 	Heart Disease 	Unintentional Injury 12	Unintentional Injury 25	Diabetes Mellitus 33	Diabetes Mellitus 111	Diabetes Mellitus 161	
4	Short Gestation 	Homicide 	Chronic Low. Respiratory Disease	Heart Disease 	Chronic Low. Respiratory Disease 	Suicide 	Diabetes Mellitus 	Cerebro- vascular 24	Chronic Low. Respiratory Disease 25	Cerebro- vascular 95	Cerebro- vascular 149	
5	Unintentional Injury 	Malignant Neoplasms 		Unintentional Injury 	Suicide 	Complicated Pregnancy 	Homicide 	Chronic Low. Respiratory Disease 13	Cerebro- vascular 24	Chronic Low. Respiratory Disease 68	Chronic Low. Respiratory Disease 117	
6	Respiratory Distress 	Anemias 		Cerebro- vascular 	Cerebro- vascular 	Malignant Neoplasms 	Influenza & Pneumonia 	Diabetes Mellitus 11	Diabetes Mellitus 11	Alzheimer's Disease 65	Unintentional Injury 103	
7	Septicemia	Perinatal Period 		Homicide 	Complicated Pregnancy 	Nephritis 	Cerebro- vascular 	Septicemia	Septicemia 16	Nephritis 60	Nephritis 81	
8	Congenital Anomalies 					Anemias 	HIV 	Liver Disease 	Unintentional Injury 	Hypertension 40	Alzheimer's Disease 67	
9	Homicide 					Chronic Low. Respiratory Disease 	Chronic Low. Respiratory Disease	HIV 	Influenza & Pneumonia 	Septicemia 22	Hypertension 49	
10	Placenta Cord Membranes 					HIV 	Nephritis 	Homicide 	Liver Disease 	Unintentional Injury 22	Septicemia 46	

## Asian Males by Age Group

For Asian males age 25 and older, cancer was the leading cause of death. Cancer was also the leading cause of death overall for Asian males.

	Asian Males by Age Group											
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages	
1	Congenital Anomalies 	Congenital Anomalies 			Suicide 	Malignant Neoplasms 	Malignant Neoplasms 12	Malignant Neoplasms 14	Malignant Neoplasms 29	Malignant Neoplasms 50	Malignant Neoplasms 110	
2	Maternal Pregnancy Comp. 13				Unintentional Injury 	Unintentional Injury 	Suicide 	Heart Disease 10	Cerebro- vascular 	Heart Disease 34	Heart Disease 50	
3	Intrauterine Hypoxia 				Homicide 	Homicide 	Unintentional Injury 	Unintentional Injury 	Heart Disease 	Diabetes Mellitus 15	Unintentional Injury 25	
4	Malignant Neoplasms 				Influenza & Pneumonia 	Suicide 	Cerebro- vascular 	Chronic Low. Respiratory Disease	Unintentional Injury 	Chronic Low. Respiratory Disease 13	Chronic Low. Respiratory Disease 17	
5	Short Gestation 				Malignant Neoplasms 	Heart Disease 	HIV 	Homicide 	Chronic Low. Respiratory Disease 	Cerebro- vascular 	Cerebro- vascular 15	
6	Unintentional Injury 				Septicemia	Influenza & Pneumonia 	Influenza & Pneumonia 	Liver Disease 		Alzheimer's Disease 	Diabetes Mellitus 	
7						Liver Disease 		Suicide		Nephritis 	Suicide 14	
8						Tuberculosis 		Tuberculosis 		Parkinson's Disease 	Nephritis 	
9								Viral Hepatitis 		Pneumonitis 		
10										Unintentional Injury 		

Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2006-2015

Note: (---) indicates less than 10 cases

# Asian Females by Age Group

Cancer was the leading cause of death for Asian females ages 25 and older. Cancer was also the leading cause of death overall for Asian females.

					Asian Fen	nales by A	Age Group	<b>)</b>			
	<1	14	59	10 14	15 24	25 34	35 44	45 54	55 64	65+	All Ages
1	Congenital Anomalies 				Unintentional Injury 	Malignant Neoplasms 	Malignant Neoplasms 	Malignant Neoplasms 19	Malignant Neoplasms 22	Malignant Neoplasms 58	Malignant Neoplasms 104
2	Maternal Pregnancy Comp. 13				Suicide 	Homicide 	Complicated Pregnancy 	Cerebro- vascular 	Cerebro- vascular 	Heart Disease 34	Heart Disease 38
3	Placenta Cord Membranes 					Suicide 		Chronic Low. Respiratory Disease 13	Heart Disease 	Cerebro- vascular 26	Cerebro- vascular 33
4	Short Gestation 					Unintentional Injury 		Nephritis 	Diabetes Mellitus 	Chronic Low. Respiratory Disease 10	Diabetes Mellitus 12
5									Benign Neoplasms 	Diabetes Mellitus 10	Chronic Low. Respiratory Disease 11
6									Hypertension 	Alzheimer's Disease 	Unintentional Injury 11
7									Septicemia 	Hypertension 	Alzheimer's Disease 
8									Suicide 	Unintentional Injury 	Hypertension 
9									Unintentional Injury 	Nephritis 	Congenital Anomalies 
10									Viral Hepatitis 		Nephritis 

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 because the average life expectancy in the United States is now over 75 years.<sup>22</sup> In 2007, the average age at death among Nebraska residents was 75.2 years.<sup>23</sup>

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 YPLL in the population is then divided by the size of the population under age 75. The leading cause of potential life lost is cancer, with approximately 15 years of potential life lost per 1,000 residents. Cancer is followed by accidents (9 YPLL per 1,000) and heart disease (8 YPLL per 1,000).

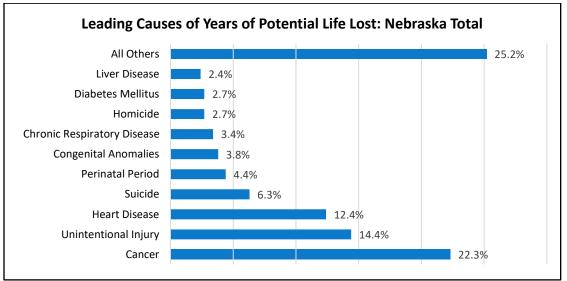
Leading causes of years of potential life lost by racial and ethnic groups for Nebraska are listed on the following pages.

<sup>&</sup>lt;sup>22</sup> National Center for Health Statistics. (2008). Health, United States, 2008. Hyattsville, Maryland.

<sup>&</sup>lt;sup>23</sup> Nebraska Department of Health and Human Services. (2009). Nebraska 2007 vital statistics report.

# Leading Causes of Years of Potential Life Lost: Nebraska Total

Among the 533,201 total years of potential life lost among Nebraskans between 2011 and 2015, 22.3% were attributed to cancer. Unintentional injury accounted for the next largest proportion of years of potential life lost (14.4%), followed by heart disease (12.4%).

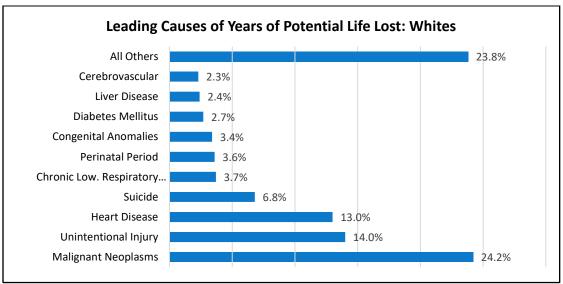


Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	533,201	100%
Cancer	119,007	22.3%
Unintentional Injury	76,531	14.4%
Heart Disease	66,267	12.4%
Suicide	33,844	6.3%
Perinatal Period	23,304	4.4%
Congenital Anomalies	20,357	3.8%
Chronic Low Respiratory Disease	18,283	3.4%
Homicide	14,447	2.7%
Diabetes Mellitus	14,144	2.7%
Liver Disease	12,839	2.4%
All Others	134,178	25.2%

# Leading Causes of Years of Potential Life Lost: Whites

Among the 438,956 total years of potential life lost among Whites in Nebraska between 2011 and 2015, approximately 24% were attributed to malignant neoplasms. Unintentional injury accounted for the next largest proportion of years of potential life lost (14%), followed by heart disease (13%).

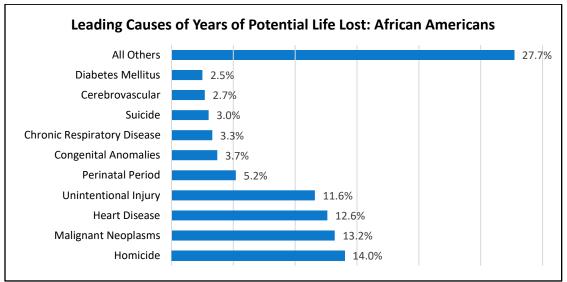


Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	438,956	100%
Malignant Neoplasms	106,039	24.2%
Unintentional Injury	61,291	14.0%
Heart Disease	57,272	13.0%
Suicide	30,067	6.8%
Chronic Respiratory Disease	16,311	3.7%
Perinatal Period	15,954	3.6%
Congenital Anomalies	15,049	3.4%
Diabetes Mellitus	11,800	2.7%
Liver Disease	10,452	2.4%
Cerebrovascular	10,033	2.3%
All Others	104,688	23.8%

# Leading Causes of Years of Potential Life Lost: African Americans

Among the 44,547 years of total life lost among African Americans between 2011 and 2015 in Nebraska, approximately 14% were attributed to homicide. Approximately 13% of the years of potential life lost were due to malignant neoplasms, and 12.6% were due to heart disease. Approximately 12% of years of potential life lost were attributed to unintentional injury.

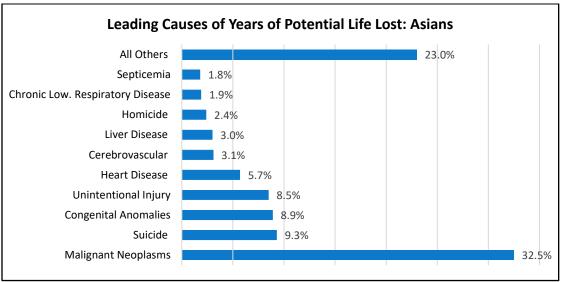


Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	44,547	100%
Homicide	6,405	14.0%
Malignant Neoplasms	5,896	13.2%
Heart Disease	5,635	12.6%
Unintentional Injury	5,156	11.6%
Perinatal Period	2,325	5.2%
Congenital Anomalies	1,634	3.7%
Chronic Respiratory Disease	1,478	3.3%
Suicide	1,347	3.0%
Cerebrovascular	1,214	2.7%
Diabetes Mellitus	1,107	2.5%
All Others	12,350	27.7%

# Leading Causes of Years of Potential Life Lost: Asians

Among the 5,083 total years of life lost among Asians between 2011 and 2015, 32.5% were attributed to malignant neoplasms. Suicide accounted for 9.3% of all years of potential life lost, and congenital anomalies accounted for 8.9%.

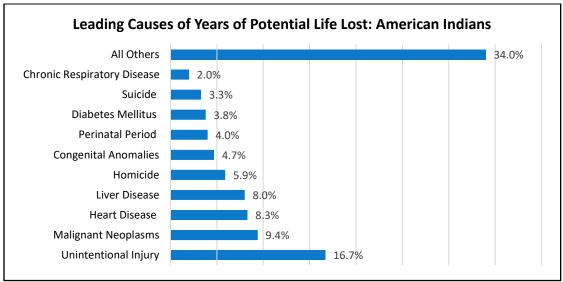


Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	5,083	100%
Malignant Neoplasms	1,654	32.5%
Suicide	471	9.3%
Congenital Anomalies	450	8.9%
Unintentional Injury	430	8.5%
Heart Disease	288	5.7%
Cerebrovascular	157	3.1%
Liver Disease	151	3.0%
Homicide	123	2.4%
Chronic Respiratory Disease	98	1.9%
Septicemia	94	1.8%
All Others	1,167	23.0%

# 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, 16.7% were attributed to unintentional injury. Malignant neoplasms accounted for 9.4% of years of potential life lost among American Indians, and heart disease accounted for 8.3%.

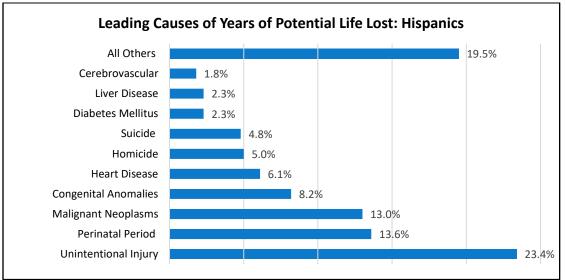


Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System, 2011-2015

Cause of Death	YPLL	Percent
All Causes	11,249	100%
Unintentional Injury	1,875	16.7%
Malignant Neoplasms	1,059	9.4%
Heart Disease	939	8.3%
Liver Disease	896	8.0%
Homicide	659	5.9%
Congenital Anomalies	525	4.7%
Perinatal Period	450	4.0%
Diabetes Mellitus	426	3.8%
Suicide	366	3.3%
Chronic Respiratory Disease	226	2.0%
All Others	3,828	34.0%

# Leading Causes of Years of Potential Life Lost: Hispanics

Among the 33,043 total years of life lost among Hispanics between 2011 and 2015 in Nebraska, 23.4% were attributed to unintentional injury. Approximately 14% of years of potential life lost were attributed to the perinatal period, and 13% were attributed to malignant neoplasms.



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

Cause of Death	YPLL	Percent
All Causes	33,043	100%
Unintentional Injury	7,737	23.4%
Perinatal Period	4,500	13.6%
Malignant Neoplasms	4,292	13.0%
Congenital Anomalies	2,699	8.2%
Heart Disease	2,018	6.1%
Homicide	1,659	5.0%
Suicide	1,593	4.8%
Diabetes Mellitus	757	2.3%
Liver Disease	744	2.3%
Cerebrovascular	606	1.8%
All Others	6,438	19.5%

# **Chronic** Disease

Chronic diseases can be controlled but not cured; they are diseases of long duration and slow progression.<sup>24</sup> In most cases, chronic disease will require a lifetime of regular treatment. Chronic diseases are usually characterized by acute episodes of illness followed by periods of time where symptoms may be reduced or absent. Some chronic illnesses cause permanent disability.<sup>25</sup>

The onset of many chronic diseases results from accumulated exposure to multiple risk factors over an extended period. Therefore, it is often difficult to determine differences in exposure to risk. Some chronic diseases, such as heart disease and certain types of cancer, could be asymptomatic for many years. Additionally, racial and ethnic disparities in mortality rates due to heart disease or cancer, for example, may result from differences in the use of health services.

Chronic diseases are the leading cause of death and disability in the United States, accounting for 70% of all deaths or 1.7 million deaths every year.<sup>26</sup> In particular, cancer, heart disease, and stroke account for more than 50% of those deaths. Worldwide, 90% of chronic disease deaths occurred in low- and middle-income countries.

Damaging health behaviors, particularly tobacco use, lack of physical activity, and poor eating habits are major contributors to the leading chronic diseases. According to the CDC, more than a third of all adults do not get the recommended amount of aerobic physical activity, and 23% of individuals reported no physical activity at all.<sup>27</sup>

<sup>&</sup>lt;sup>24</sup> World Health Organization. (2013). Chronic disease. Retrieved from http://www.who.int/topics/chronic\_diseases/en

<sup>&</sup>lt;sup>25</sup> Schueler, S., Beckett, J., and Gettings, S. (2010). Chronic disease. Retrieved from http://www.freemd.com/chronic-disease

<sup>&</sup>lt;sup>26</sup> Centers for Disease Control and Prevention. (2012). Chronic disease and health promotion.

# **Chronic Disease**



# Stroke

African Americans reported the highest proportion of individuals diagnosed with a stroke at 4.5%, compared to 2.2% of Whites.





# Myocardial Infarction

American Indians reported the highest percentage of individuals diagnosed with a heart attack at 7.6%, compared to 3.5% of Whites.

# **Diabetes**

American Indians (15.8%) were over twice as likely as Whites (7.6%) to have been diagnosed with diabetes.

# Chronic Disease Mortality Rates



American Indians reported a death rate due to diabetes 2.5 times higher than that of Whites.

African Americans reported a death rate due to heart disease 1.2 times higher than that of Whites, and a death rate due to stroke 1.3 times higher than that of Whites.

Office of Health Disparities and Health Equity **Division of Public Health** Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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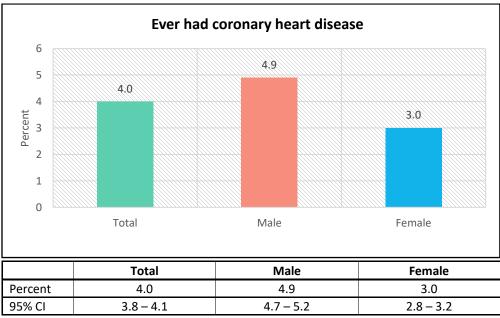
# **Coronary Heart Disease**

Heart disease is the leading cause of death for both men and women in the United States. Coronary heart disease is the most common type of heart disease, killing over 370,000 people annually.<sup>28</sup>

# **Coronary Heart Disease by Gender**

#### **Key Gender Disparities**

- Four percent of Nebraskans reported having ever been diagnosed with coronary heart disease by a health professional.
- Approximately 5% of adult males had ever been diagnosed with coronary heart disease by a health professional, compared to 3.0% of adult females.



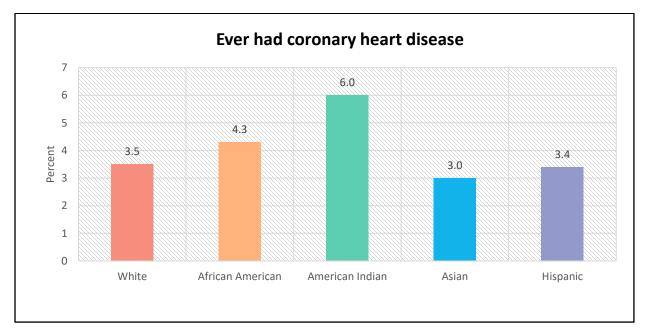
Source: Nebraska BRFSS 2011-2015

<sup>28</sup> Centers for Diseases Control and Prevention. (2015). Heart Disease Facts. Retrieved from https://www.cdc.gov/heartdisease/facts.htm

# **Coronary Heart Disease by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians experienced the highest percentage (6.0%) of individuals diagnosed with coronary heart disease by a health professional, compared to (3.5%) of Whites.
- African Americans (4.3%) were slightly more likely than Whites (3.5%) to have ever been diagnosed with coronary heart disease.
- Hispanics (3.4%) and Asians (3.0%) were slightly less likely than Whites to report having ever had coronary heart disease.



	White	African American	American Indian	Asian	Hispanic
Percent	3.5	4.3	6.0	3.0	3.4
95% CI	3.4 – 3.7	3.4 – 5.6	4.1 - 8.9	1.5 – 6.1	2.5 – 4.5

Source: Nebraska BRFSS 2011-2015

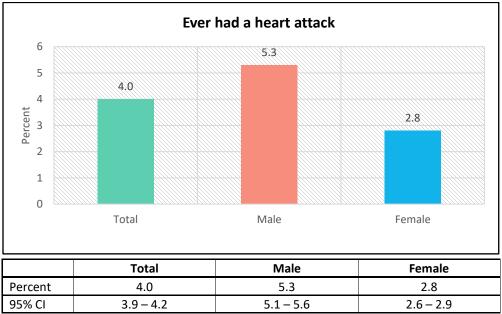
### **Heart Attack**

A heart attack also called a myocardial infarction, occurs when part of the heart muscle cannot receive enough blood flow. In the United States, someone has a heart attack every 43 seconds.<sup>29</sup>

### **Heart Attack by Gender**

### **Key Gender Disparities**

- Four percent of Nebraskans reported having ever had a heart attack.
- Males (5.3%) were 1.9 times more likely than females (2.8%) to have ever had a heart attack.

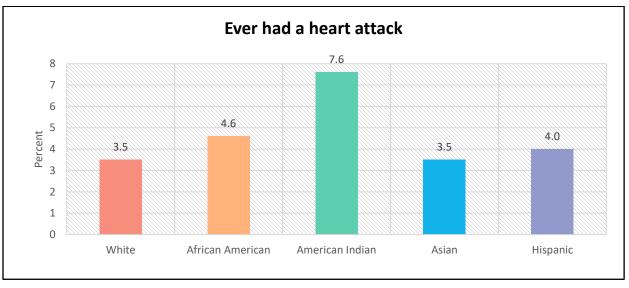


<sup>&</sup>lt;sup>29</sup> American Heart Association (2015). Heart Disease and Stroke Statistics – 2015 update. AHA Statistical Update.

### Heart Attack by Race and Ethnicity

### **Key Race and Ethnicity Disparities**

- American Indians (7.6%) were just over twice as likely as Whites (3.5%) to report having ever had a heart attack.
- African Americans (4.6%), Hispanics (4.0%), and Asians (3.5%) reported similar proportions of those who had ever had a heart attack.



	White	African American	American Indian	Asian	Hispanic
Percent	3.5	4.6	7.6	3.5	4.0
95% CI	3.4 – 3.7	3.6 – 5.9	5.5 – 10.5	1.7 – 6.9	3.1 – 5.1

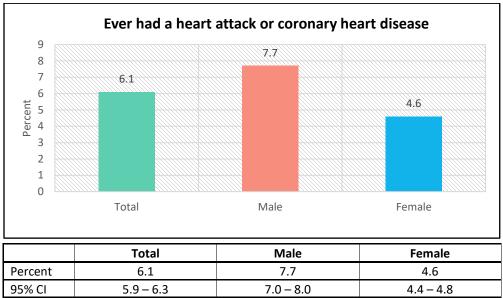
### **Coronary Heart Disease or Heart Attack**

The chart below represents individuals who have had coronary heart disease or a heart attack.

### **Coronary Heart Disease or Heart Attack by Gender**

#### **Key Gender Disparities**

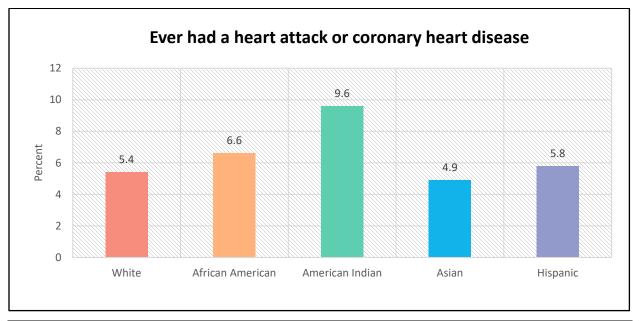
- Approximately 6% of Nebraskans reported having ever had a heart attack or coronary heart disease.
- Males (7.7%) were approximately 1.7 times more likely than were females (4.6%) to have ever had a heart attack or coronary heart disease.



### **Coronary Heart Disease or Heart Attack by Race and Ethnicity**

### **Key Race and Ethnicity Disparities**

- Almost one in ten American Indians (9.6%) reported having ever had a heart attack or coronary heart disease, compared to 5.4% of Whites.
- The African American (6.6%) and Hispanic (5.8%) populations were slightly more likely than the White population to report having ever had a heart attack or coronary heart disease.



	White	African American	American Indian	Asian	Hispanic
Percent	5.4	6.6	9.6	4.9	5.8
95% CI	5.2 – 5.6	5.4 - 8.1	7.2 – 12.5	2.8 - 8.4	4.8 - 7.1

### **Heart Disease Mortality**

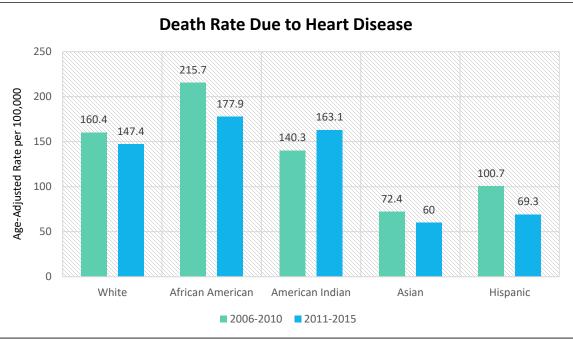
Heart disease is a general term that includes coronary heart disease, rheumatic heart disease, hypertension, and heart failure, among others. Risk factors that can increase an individual's chance of developing heart disease include high blood pressure, high LDL cholesterol, and smoking. Those who have diabetes, are overweight or obese, or have a poor diet are also at a higher risk for heart disease.<sup>30</sup>

### **Key Disparities**

- Overall, African Americans saw the highest death rate due to heart disease from 2011-2015 at 177.9 per 100,000, followed by American Indians at 163.1 per 100,000.
- Asians (60 per 100,000) and Hispanics (69.3 per 100,000) saw much lower death rates due to heart disease from 2011-2015, with rates over two times lower than that of Whites.

#### Comparisons: 2006-2010 and 2011-2015

• In general, death rates due to heart disease decreased from 2006-2010 to 2011-2015, except in the case of American Indians. The death rate due to heart disease in American Indians increased from 140.3 in 2006-2010 to 163.1 per 100,000 in the following five-year period.



#### Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>30</sup> Centers for Disease Control and Prevention. (2016). Heart disease facts. Retrieved from www.cdc.gov/dhdsp/data\_statistics/fact\_sheets/fs\_heart\_disease.htm

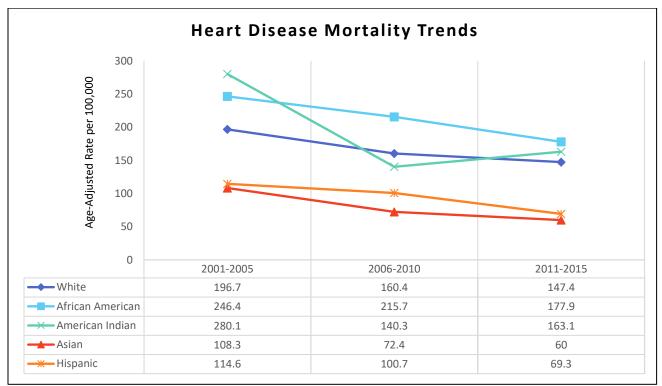
### **Trends: Heart Disease Mortality 2001-2015**

#### **Key Disparities**

- American Indians saw the largest decrease in the death rate due to heart disease, with the rate of 280.1 per 100,000 from 2001-2005, decreased by 117 points to 163.1 per 100,000 from 2011-2015. However, American Indians still have the second-highest heart disease mortality rate.
- The Asian and Hispanic populations consistently saw lower rates of heart disease mortality than other groups.

#### Overall Trends: 2001-2015

- From 2001-2005 to 2011-2015, all groups saw lower rates of heart disease mortality.
- Though American Indians decreased their overall heart disease mortality rate in the past 15 years, there was an increase in the last ten year period from 140.3 (2006-2010) to 163.1 per 100,000 (2011-2015).



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

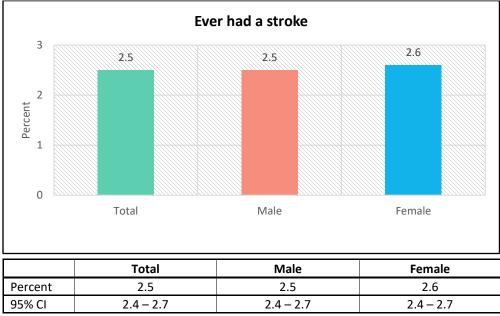
### **Stroke**

Stroke is the fifth leading cause of death in the United States and is a major cause of adult disability. Approximately 800,000 people in the United States have a stroke each year.<sup>31</sup>

### **Stroke by Gender**

### **Key Gender Disparities**

- Overall, 2.5% of Nebraskans reported having ever had a stroke.
- Similar proportions of the male (2.5%) and female (2.6%) populations reported having ever had a stroke.



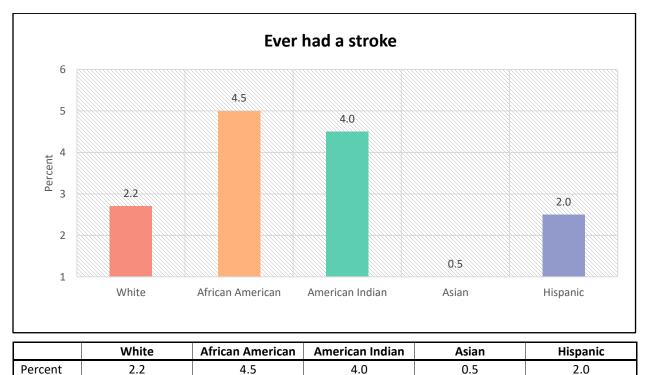
Source: Nebraska BRFSS 2011-2015

<sup>&</sup>lt;sup>31</sup> Centers for Diseases Control and Prevention. (2017). Stroke facts. Retrieved from https://www.cdc.gov/stroke/facts.htm

### **Stroke by Race and Ethnicity**

### **Key Race and Ethnicity Disparities**

- African Americans (4.5%) were twice as likely as Whites (2.2%) to report having ever had a stroke.
- American Indians (4.0%) were 1.8 times more likely to report having ever had a stroke, • compared to Whites (2.2%).
- The Asian population (0.5%) was the least likely to report having ever had a stroke, followed by • the Hispanic population (2.0%).



2.6 - 6.0

0.2 - 1.2

1.4 – 2.8

3.5 – 5.8

95% CI	2.1 – 2.3				
Source: Nebraska BRESS 2011-2015					

Percent

### **Stroke Mortality**

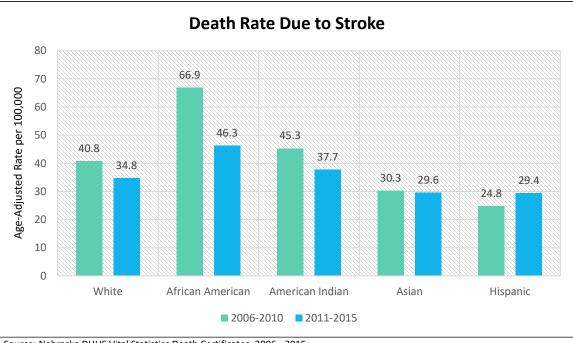
A stroke occurs when blood flow to part of the brain stops. As the blood flow is interrupted, brain cells begin to die, as they cannot get the necessary oxygen. Strokes can cause brain damage, long-term disability, or death.<sup>32</sup> The risk of having a stroke may be reduced by refraining from smoking, maintaining a healthy weight, getting physical activity, and controlling high blood pressure and cholesterol.

#### **Key Disparities**

- Though the African American population saw a decrease in stroke mortality from 66.9 to 46.3 per 100,000, they continued to have a higher death rate than all other populations in both of the five-year periods.
- From 2011-2015, American Indians (37.7%) reported somewhat higher stroke mortality rates than Whites (34.8%).

### Comparisons: 2006-2010 and 2011-2015

• In general, death rates due to stroke decreased from 2006-2010 to 2011-2015, except in the case of Hispanics. The death rate due to stroke in Hispanics increased from 24.8 in 2006-2010 to 29.4 per 100,000 in the following five-year period.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>32</sup> Centers for Disease Control and Prevention. (2016). About stroke. Retrieved from www.cdc.gov/stroke/about.htm

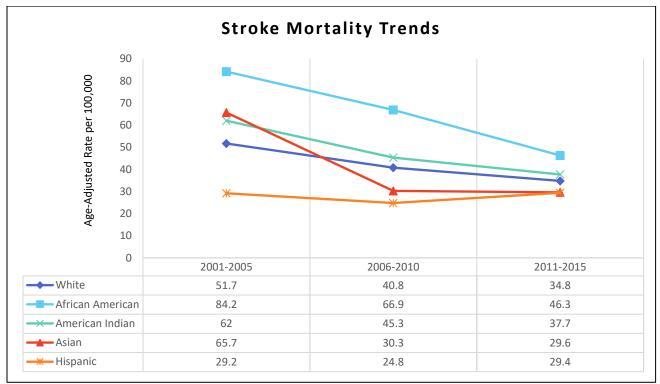
### **Trends: Stroke Mortality 2001-2015**

#### **Key Disparities**

- African Americans saw the largest decrease in the death rate due to stroke, with the rate from 2001-2005 (84.2 per 100,000) decreasing by approximately 38 points to 46.3 per 100,000 from 2011-2015. However, African Americans still had the highest rate of death due to stroke among all populations for each five-year period.
- Hispanics consistently saw lower rates of stroke mortality than other groups.

### Overall Trends: 2001-2015

- From 2001-2005 to 2011-2015, all groups saw lower rates of stroke mortality, except for Hispanics, where the stroke mortality remained relatively stable, increasing from 29.2 to 29.4 per 100,000. Despite the slight increase, Hispanics reported the lowest stroke mortality rates of all populations.
- The Asian population saw a sharp decrease in the stroke mortality rate from 65.7 (2001-2005) to 30.3 per 100,000 (2006-2010). However, in the next five-year period, the rate stabilized with only a slight decrease to 29.6 per 100,000.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

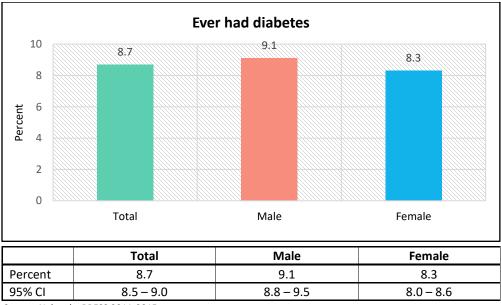
### **Diabetes**

Diabetes is a chronic disease, characterized by high levels of sugar in the blood.<sup>33</sup> Diabetes can be caused by the resistance to or creation of too little insulin; a hormone produced to control blood sugar. The charts below exclude individuals who had diabetes only while pregnant.

### **Diabetes by Gender**

### **Key Gender Disparities**

- In Nebraska, 8.7% of adults reported having ever been diagnosed with diabetes.
- Nebraska males (9.1%) were slightly more likely to have ever been diagnosed with diabetes, compared to Nebraska females (8.3%).



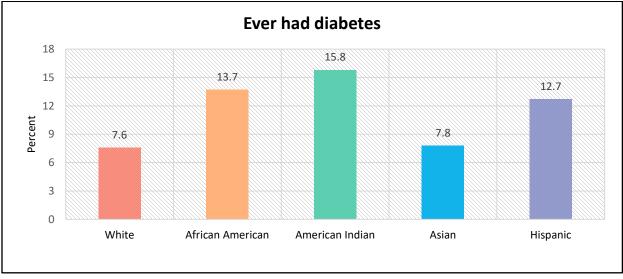
Source: Nebraska BRFSS 2011-2015

<sup>&</sup>lt;sup>33</sup> A.D.A.M Medical Encyclopedia. (2012). Diabetes. Retrieved from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002194

### **Diabetes by Race and Ethnicity**

### **Key Race and Ethnicity Disparities**

- American Indians (15.8%) were over twice as likely as the Whites (7.6%) to report having ever been diagnosed with diabetes.
- African Americans (13.7%) and Hispanics (12.7%) were more likely to report having ever been diagnosed with diabetes than Whites (7.6%).



	White	African American	American Indian	Asian	Hispanic
Percent	7.6	13.7	15.8	7.8	12.7
95% CI	7.3 – 7.8	11.9 – 15.7	13.2 – 18.9	5.4 - 11.1	11.3 - 14.4

### **Diabetes Mortality**

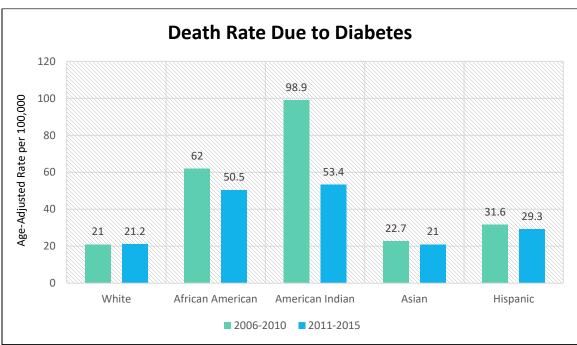
Diabetes-related deaths can be divided into two categories: deaths occurring early, which are associated with diabetic ketoacidosis (DKA) or hypoglycemia, and those resulting from long-term complications.<sup>34</sup> Complications from diabetes can include heart disease, blindness, and kidney failure.<sup>35</sup> The below chart represents only those deaths for which diabetes was the underlying cause and does not include all diabetes-related deaths.

#### **Key Disparities**

- American Indians had the highest death rate due to diabetes in both five-year periods. From 2011-2015, the death rate of American Indians due to diabetes (53.4 per 100,000) was followed closely by African Americans (50.5 per 100,000).
- From 2011-2015, Whites and Asians saw lower death rates due to diabetes at approximately 21 per 100,000.

#### Comparisons: 2006-2010 and 2011-2015

• The death rate due to diabetes in American Indians decreased from 98.9 per 100,000 from 2006-2010 to almost half that from 2011-2015 (53.4 per 100,000).



 African Americans also saw a decrease in the death rate due to diabetes from 62 to 50.5 per 100,000 between the two five-year periods.

Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>34</sup> Daneman, D. (2001). Diabetes-related mortality: a pediatrician's view. Retrieved from http://care.diabetesjournals.org/content/24/5/801.full

<sup>&</sup>lt;sup>35</sup> Centers for Disease Control and Prevention. (2015). Basics about diabetes. Retrieved from www.cdc.gov/diabetes/basics/diabetes.html

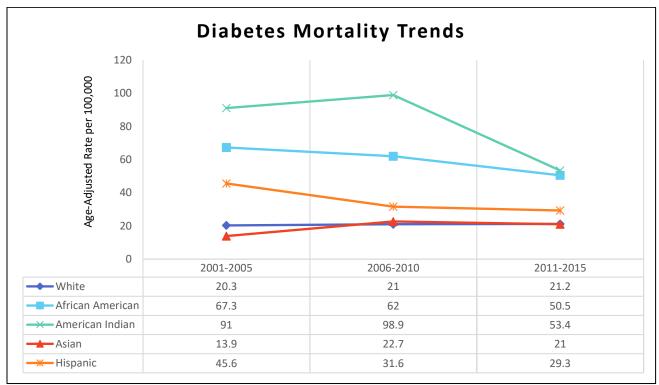
### **Trends: Diabetes Mortality 2001-2015**

#### **Key Disparities**

• American Indians consistently reported the highest diabetes mortality rate over the three fiveyear periods, and African Americans consistently reported the second-highest diabetes mortality rate.

#### Overall Trends: 2001-2015

- While American Indians saw an increase in the death rate due to diabetes from 2001-2005 to the next five-year period, the death rate due to diabetes decreased in the overall fifteen-year period.
- African Americans and Hispanics saw steady decreases in mortality rates due to diabetes over the fifteen-year period.
- Although Asians and Whites reported an increase in diabetes mortality rates between 2001-2005 and 2011-2015, these populations had the lowest rates overall.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

### **Chronic Lung Disease Mortality**

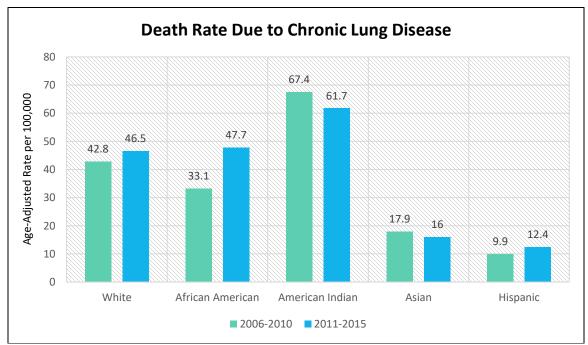
Chronic lung disease refers to a wide variety of lung disorders, including asthma, chronic obstructive pulmonary disease (COPD), chronic bronchitis, and emphysema. Risk factors for chronic lung disease include smoking, air pollution, and occupational exposure to dust. The chart below shows the age-adjusted death rate due to chronic lung disease.

#### **Key Disparities**

- From 2011-2015, American Indians saw the highest death rate due to chronic lung disease at 61.7 per 100,000, approximately 15 points higher than that of Whites at 46.5 per 100,000.
- African Americans reported a slightly higher death rate due to chronic lung disease than did Whites at 47.7 per 100,000 from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, the death rate due to chronic lung disease in African Americans increased from 33.1 to 47.7 per 100,000, an increase of almost 15 points.



• The death rate due to chronic lung disease in American Indians decreased slightly from 67.4 per 100,000 to 61.7 per 100,000 over the two five-year periods.

Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

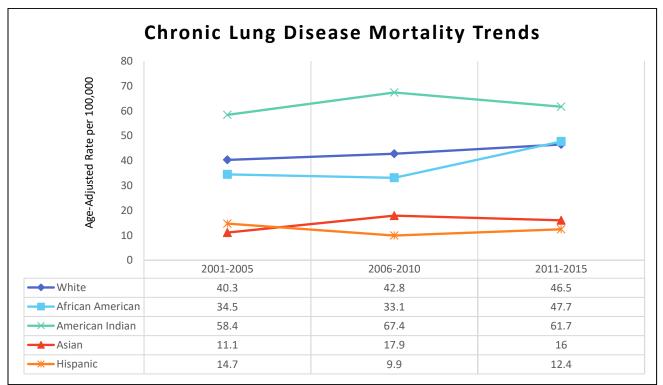
### **Trends: Chronic Lung Disease Mortality 2001-2015**

#### **Key Disparities**

• American Indians consistently had the highest rate of chronic lung disease mortality from 2001-2015.

### Overall Trends: 2001-2015

- While the chronic lung disease mortality rate among American Indians increased between the first two five-year periods, the rate decreased during the most recent five-year period.
- The chronic lung disease mortality rate in African Americans remained relatively stable over the first two five-year periods but increased by almost 15 points from 2006-2010 to 2011-2015.
- The Asian and Hispanic populations consistently saw lower chronic lung disease mortality rates than did other populations.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

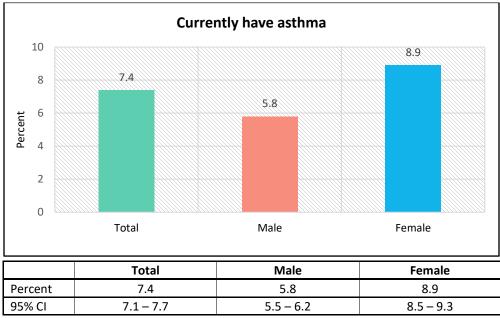
### Asthma

Asthma is a chronic inflammatory disease of the airways that is characterized by recurring symptoms such as wheezing, breathlessness, chest tightness, and coughing. In individuals with asthma, the airways are more responsive to various stimuli, such as pollen, cigarette smoke, or respiratory infections.<sup>36</sup>

### Asthma by Gender

#### **Key Gender Disparities**

- In Nebraska, 7.4% of adults reported currently having asthma.
- Nebraska females (8.9%) were more likely to report currently having asthma than Nebraska males (5.8%).

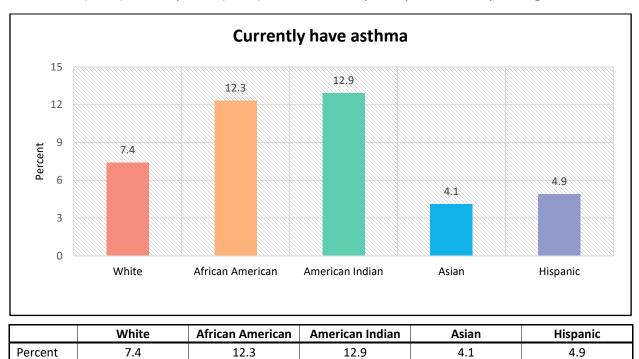


<sup>&</sup>lt;sup>36</sup> Centers for Disease Control and Prevention. (2016). Asthma. Retrieved from www.cdc.gov/asthma/default.htm

### Asthma by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

• American Indians (12.9%) and African Americans (12.3%) were most likely to report currently having asthma, compared to 7.4% of Whites.



9.9 - 16.6

2.6 - 6.4

4.1 - 5.8

• Asians (4.1%) and Hispanics (4.9%) were least likely to report currently having asthma.

Source: Nebraska BRFSS 2011-2015

7.1 – 7.7

10.5 - 14.3

95% CI

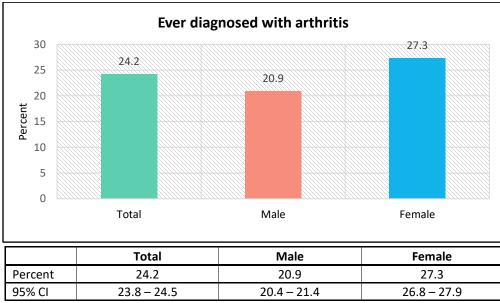
### Arthritis

Arthritis includes more than 100 diseases that affect joints and the surrounding tissues and can cause pain and stiffness in the affected areas.<sup>37</sup> The most common type of arthritis in the United States is osteoarthritis, which wears down cartilage and makes it difficult for bones to glide over each other.<sup>38</sup>

### **Arthritis by Gender**

### **Key Gender Disparities**

- Just under one-fourth of Nebraskans (24.2%) reported having ever been diagnosed with arthritis.
- Arthritis was more common among Nebraska females (27.3%) than among Nebraska males (20.9%).



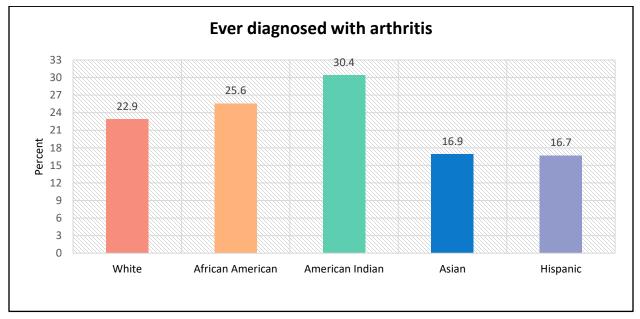
<sup>&</sup>lt;sup>37</sup> Centers for Disease Control and Prevention. (2016). Arthritis. Retrieved from www.cdc.gov/arthritis/basics/faqs.htm

<sup>&</sup>lt;sup>38</sup> National Institutes of Health. (2016). What is osteoarthritis. Retrieved from www.niams.nih.gov/health\_info/osteoarthritis/osteoarthritis\_ff.asp

### Arthritis by Race and Ethnicity

### **Key Race and Ethnicity Disparities**

- American Indians (30.4%) were most likely to report having ever been diagnosed with arthritis, compared to 22.9% of Whites.
- Just over one-fourth of the African American population (25.6%) reported having ever been diagnosed with arthritis.
- The Asian (16.9%) and Hispanic (16.7%) populations were least likely to have ever been diagnosed with arthritis.



	White	African American	American Indian	Asian	Hispanic
Percent	22.9	25.6	30.4	16.9	16.7
95% CI	22.5 – 23.3	23.4 - 28.0	25.9 – 35.3	13.2 – 21.4	15.1 - 18.4

# **Infectious Disease**

Infectious diseases are a leading cause of illness and death worldwide.<sup>39</sup> These diseases can be caused by pathogenic microorganisms, including bacteria, viruses, parasites, and fungus. These organisms enter the body, multiply, and have the potential to cause infection. The disease can be spread directly or indirectly from person to person and can be contracted from contact with certain animals or insects. Especially in lower-income countries, such diseases can be caused by eating and drinking contaminated food or water.<sup>40</sup>

While many infectious diseases, such as measles or chickenpox, can be prevented by vaccines, there is still a wide range of infectious diseases, from pneumonia to HIV/AIDS, causing illness worldwide. While anyone can contract an infectious disease, those with improperly functioning immune systems are at an increased risk, such as those taking steroids that suppress the immune system or those with certain types of cancer.<sup>41</sup>

Certain populations are also affected by higher rates of infectious diseases. For example, mortality rates for HIV/AIDS in the United States have been consistently higher in African Americans, Hispanics, and Native Hawaiian and other Pacific Islanders.<sup>42</sup> As Nebraska experiences large disparities in HIV/AIDS and other sexually transmitted diseases, these issues will be the focus of this section.

<sup>&</sup>lt;sup>39</sup> Centers for Disease Control and Prevention. (2011). A CDC framework for preventing infectious diseases.

<sup>&</sup>lt;sup>40</sup> World Health Organization. (2016). Infectious diseases. Retrieved from www.who.int/topics/infectious\_diseases/en

<sup>&</sup>lt;sup>41</sup> Ibid.

<sup>&</sup>lt;sup>42</sup> Steele, C.B., Meléndez-Morales, L., Campoluci, N.D., & Dean, H.D. (2007). Health disparities in HIV/Aids, viral hepatitis, sexually transmitted diseases, and tuberculosis: issues, burden, and response, a retrospective review.

# **Infectious Disease**

# Sexually Transmitted Disease Incidence

12x

African Americans reported the highest rate of STDs at 2,615.8 per 100,000, compared to Whites at 218.8 per 100,000.

## Gonorrhea Incidence

23.6x

African Americans (716.3 per 100,000) reported a much higher rate of gonorrhea than Whites (30.3 per 100,000).

# Syphilis Incidence

10.4x

African Americans also reported the highest syphilis incidence at 14.5 per 100,000, compared to Whites at 1.4 per 100,000.

### **HIV/AIDS Mortality**

American Indians reported the highest HIV/AIDS mortality rate at 5.6 per 100,000 compared to Whites at 0.7 per 100,000.

African Americans reported the second highest HIV/AIDS mortality rate in Nebraska at 3.6 per 100,000.



Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska DHHS, HIV Prevention Program; Nebraska DHHS Vital Statistics Death Certificates, 2006-2015 158





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### **Sexually Transmitted Disease Incidence**

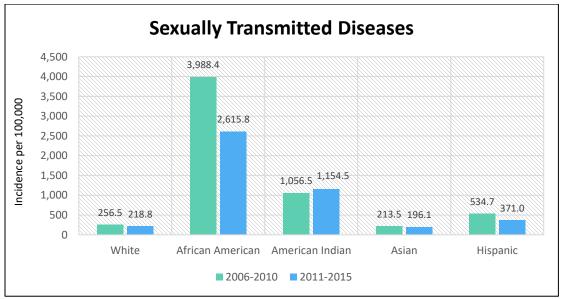
Sexually transmitted diseases (STDs) are one of the most common types of infectious diseases. STDs are typically transmitted through sexual contact. The organisms that cause diseases or infections are usually passed through blood or other bodily fluids. Some sexually transmitted infections can also spread by unsterilized IV drug needles or from mother to baby during childbirth or breastfeeding.

#### **Key Disparities**

- From 2011-2015, Nebraska's African American population had the highest rate of sexually transmitted diseases (2,615.8 per 100,000), a rate approximately 12 times greater than that of Whites at 218.8 per 100,000.
- The American Indian population had the second-highest STD rate in Nebraska at 1,154.5 per 100,000 from 2011-2015.
- The Asian population had the lowest STD rate at only 196.1 per 100,000.

#### Comparisons between 2006-2010 and 2011-2015

- The incidence of STDs in the African American population decreased significantly between 2006-2010 and 2011-2015.
- The STD incidence rate among Asians and Hispanics decreased between 2006-2010 and 2011-2015.
- American Indians reported a slight increase in STD incidences at 98 per 100,000 between 2006-2010 and 2011-2015.



Source: Nebraska DHHS, HIV Prevention Program

### **HIV/AIDS Diagnoses**

While the Human Immunodeficiency Virus (HIV) is quite similar to other viruses such as the flu, the immune system cannot completely get rid of HIV. Over time, HIV is able to destroy cells that the body needs to fight off infections, and individuals are at a higher risk of disease due to a weakened immune system.<sup>43</sup> If untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS), which leaves the body extremely vulnerable to certain diseases and cancers. Currently, more than 12 million individuals in the United States are living with HIV. Individuals who inject drugs, gay and bisexual men and African Americans are disproportionately affected by HIV. In 2015, African Americans accounted for 12% of the nationwide population but represented 45% of the new HIV diagnoses in the United States.<sup>44</sup>

Newly Diagnosed HIV and AIDS Cases between 2011 2015 by Race and Ethnicity								
	2011	2012	2013	2014	2015	Total		
White	49	41	43	48	47	228		
African American	13	25	24	26	17	105		
American Indian	2	1	0	1	5	9		
Asian	1	1	1	1	0	4		
Hispanic	11	11	13	10	11	56		
Multiple races	5	3	1	2	1	12		
Total	81	82	82	88	81	414		

Source: Nebraska DHHS, HIV Prevention Program

Number of HIV/AIDS Deaths between 2011 2015 by Race and Ethnicity								
	2011	2012	2013	2014	2015	Total		
White	12	12	11	7	7	49		
African American	0	3	4	5	2	14		
American Indian	1	0	0	1	1	3		
Asian	0	0	0	0	0	0		
Hispanic	0	1	1	1	0	3		
Multiple races	0	2	3	0	1	6		
Total	13	18	19	14	11	75		

Source: Nebraska DHHS, HIV Prevention Program

<sup>&</sup>lt;sup>43</sup> AIDS.gov. (2016). What is HIV/AIDS. Retrieved from www.aids.gov/hiv-aids-basics/hiv-aids-101/what-is-hiv-aids

<sup>44</sup> Centers for Disease Control and Prevention. (2016). HIV in the United States. Retrieved from www.cdc.gov/hiv/statistics/overview/ataglance.html

### **HIV/AIDS Mortality**

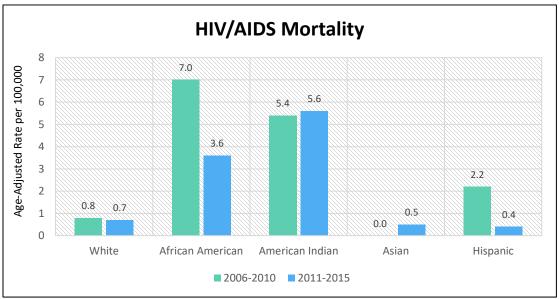
The below chart represents HIV/AIDs mortality rates between 2006-2010 and 2011-2015. In 2014 alone, there were 12,333 deaths nationwide of individuals diagnosed with HIV and classified as AIDS.<sup>45</sup>

#### **Key Disparities**

- From 2011-2015, American Indians had an HIV-AIDS mortality rate of 5.6 per 100,000, compared to 0.7 per 100,000 for Whites.
- African Americans had the second-highest death rate due to HIV/AIDS from 2011-2015 at 3.6 per 100,000.
- The Hispanic population had the lowest mortality rate due to HIV/AIDS at 0.4 per 100,000 from 2011-2015.

### Comparisons between 2006-2010 and 2011-2015

- The rate of HIV/AIDS mortality in African Americans notably decreased from 7.0 to 3.6 per 100,000 between 2006-2010 and 2011-2015.
- The American Indian and Asian populations both had slight increases in HIV/AIDS mortality rate between the two five-year periods.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>45</sup> Centers for Disease Control and Prevention. (2016). HIV in the United States. Retrieved from www.cdc.gov/hiv/statistics/overview/ataglance.html

### **Chlamydia Incidence**

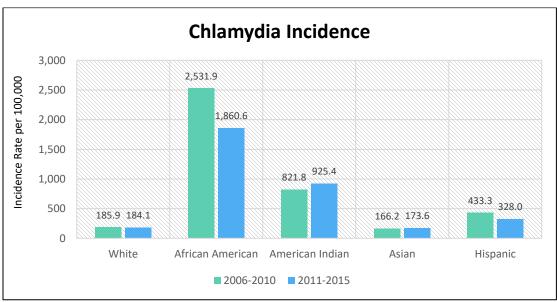
Chlamydia is a sexually transmitted disease that can affect both men and women. Chlamydia can be cured with proper medication. However, if left untreated in women, chlamydia can damage the reproductive system, which can make it difficult to get pregnant later on.<sup>46</sup>

### **Key Disparities**

- From 2011-2015, African Americans had the highest rate of chlamydia incidence in Nebraska at 1,860.6 per 100,000. This rate was approximately 10 times that of Whites at 184.1 per 100,000.
- American Indians had the second-highest rate of chlamydia incidence at 925.4 per 100,000 from 2011-2015.
- The Hispanic population (328.0 per 100,000) had a chlamydia incidence rate 1.8 times greater than that of the White population (184.1 per 100,000).

### Comparisons between 2006-2010 and 2011-2015

- Between 2006-2010 and 2011-2015, the rate of chlamydia incidence in the African American population decreased notably from approximately 2,532 to 1,861 per 100,000.
- The Hispanic population also saw a decrease of just over 100 per 100,000 individuals from 2006-2010 to 2011-2015.
- The American Indian population saw an increase in chlamydia incidence rate from approximately 822 to 925 per 100,000. The Asian population also saw a slight increase from approximately 166 to 174 per 100,000.



Source: Nebraska DHHS, HIV Prevention Program

<sup>&</sup>lt;sup>46</sup> Centers for Disease Control and Prevention. (2017). Chlamydia – CDC fact sheet. Retrieved from www.cdc.gov/std/chlamydia/stdfact-chlamydia.htm

### **Gonorrhea Incidence**

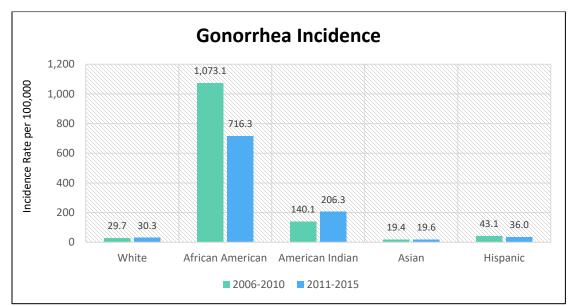
Gonorrhea is a common, sexually transmitted disease that is curable with the right treatment. However, certain drug-resistant strains of gonorrhea are increasing, making treatment more difficult. Gonorrhea can also be spread from mother to baby during childbirth, which can cause serious health problems for the infant. Early treatment of the mother can decrease the risk of health complications for infants.<sup>47</sup>

#### **Key Disparities**

- From 2011-2015, the African American population saw the highest rate of gonorrhea incidence (716.3 per 100,000), compared to 30.3 per 100,000 population among Whites. The gonorrhea incidence rate among African Americans was approximately 24 times higher than Whites.
- From 2011-2015, the American Indian population (206.3 per 100,000) had a gonorrhea incidence rate almost six times the rate of Whites (30.3 per 100,000)

### Comparisons between 2006-2010 and 2011-2015

• The African American population saw a decrease of approximately 357 per 100,000 in gonorrhea incidence rate between 2006-2010 and 2011-2015.



• The American Indian population saw an increase in gonorrhea incidence rate from approximately 140 to 206 per 100,000 between 2006-2010 and 2011-2015.

Source: Nebraska DHHS, HIV Prevention Program

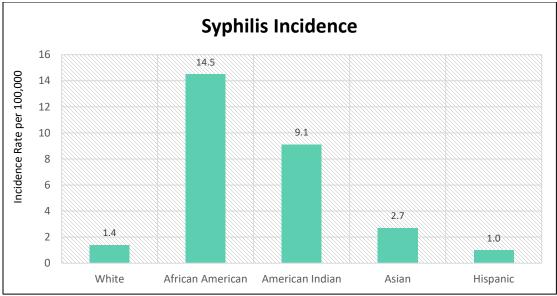
<sup>47</sup> Centers for Disease Control and Prevention. (2016). Gonorrhea – CDC fact sheet. Retrieved from www.cdc.gov/std/gonorrhea/stdfact-gonorrhea.htm

### **Syphilis Incidence**

Syphilis is a sexually transmitted infection that can be cured with antibiotics. However, the damage that has already occurred may not be reversed. Without proper treatment, syphilis can spread to the brain and nervous system and to the eyes. This creates a higher risk of severe headaches, paralysis, dementia, and loss of vision.<sup>48</sup>

### **Key Disparities**

- From 2011-2015, African Americans had the highest syphilis incidence at 14.5 per 100,000. This rate was 10 times higher than Whites at 1.4 per 100,000.
- American Indians also had a higher rate of syphilis at 9.1 per 100,000, a rate 6.5 times that of Whites.
- Asians (2.7 per 100,000) and Hispanics (1.0 per 100,000) had somewhat lower rates of syphilis from 2011-2015.



Source: Nebraska DHHS, HIV Prevention Program (2011-2015)

<sup>48</sup> Centers for Disease Control and Prevention. (2017). Syphilis – CDC fact sheet. Retrieved from www.cdc.gov/std/syphilis/stdfact-syphilis.htm

# Cancer

Cancer was the leading cause of death in Nebraska in 2014 and accounted for 3,459 resident deaths. This number represents just under one-fourth of all deaths that occurred among Nebraska residents in 2014.<sup>49</sup>

Cancer can develop in almost any tissue. It occurs when abnormal cells divide uncontrollably, where they can invade nearby tissues and spread to other parts of the body. Fortunately, many cancer deaths can be prevented. For example, screening for cervical or colorectal cancers can find precancerous lesions that can be treated before becoming cancerous.<sup>50</sup> The likelihood of individuals getting cancer can also be reduced by avoiding tobacco and limiting alcohol, eating fruits and vegetables, maintaining a healthy weight, and being physically active.

For minority populations, access to culturally and linguistically appropriate information on prevention, early detection, and treatment is essential. Complex and interrelated factors affect the risk of developing cancer. These factors also contribute to the cancer incidence and death rate among racial, ethnic, and underserved groups.

<sup>&</sup>lt;sup>49</sup> Nebraska Department of Health and Human Services. (2014). Death highlights. Retrieved from

http://dhhs.ne.gov/publichealth/Vital%20Statistics%20Reports/Death%20Summary%202014.pdf

<sup>&</sup>lt;sup>50</sup> Centers for Disease Control and Prevention. (2016). How to prevent cancer or find it early. Retrieved from https://www.cdc.gov/cancer/dcpc/prevention/index.htm

# Cancer



# **Cancer Mortality**

African Americans (200.6 per 100,000) reported a higher cancer mortality rate than Whites (160.6 per 100.000).





American Indians (18.6 per 100,000) reported a higher mortality rate due to breast cancer, compared to Whites (11 per 100,000).



African Americans (15.7 per 100,000) also reported a higher mortality rate due to breast cancer than Whites.

### **Cancer Trends**

The death rate due to cancer in Whites, African Americans and Hispanics consistently decreased from 2001 to 2015.





Although the rate of death due to cancer in African Americans decreased from 2001 to 2015, African Americans still consistently had higher cancer mortality rates when compared to other populations.

Office of Health Disparities and Health Equity **Division of Public Health** Nebraska Department of Health and Human Services Source: Nebraska DHHS Vital Statistics Death Certificates. 2006-2015





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### **Cancer Mortality**

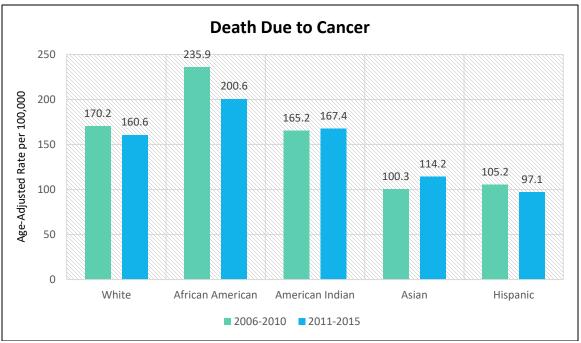
The chart below represents the cancer mortality rate due to all types of cancer. In general, cancer results from the abnormal growth of cells, which can invade nearby tissues. Cancer cells can also spread to other parts of the body through blood or lymph systems. There are more than 100 types of cancer.<sup>51</sup>

#### **Key Disparities**

- African Americans had the highest rate of death due to cancer from 2011-2015 at 200.6 per 100,000. Hispanics had a death rate due to cancer approximately half that of African Americans at 97.1 per 100,000.
- American Indians had the second-highest death rate due to cancer at 167.4 per 100,000 from 2011-2015, followed closely by Whites at 160.6 per 100,000.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, the rate of death due to cancer decreased among Whites, African Americans, and Hispanics. The highest decrease was seen in the African American population from 235.9 to 200.6 per 100,000.



• The American Indian and Asian populations both saw an increase in mortality rate due to cancer between the two five-year periods.

Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>51</sup> National Institutes of Health. (2016). Cancer. Retrieved from www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0015630/

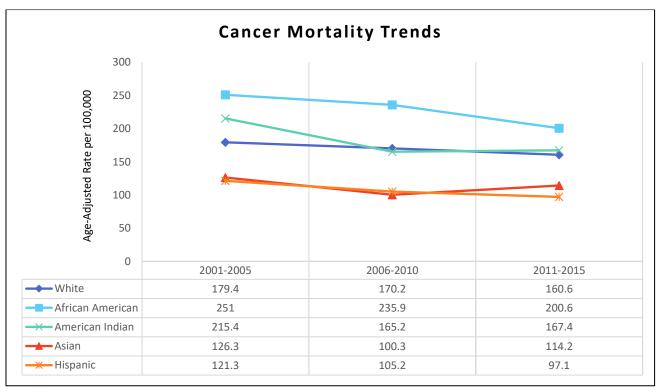
### Trends: Cancer Mortality 2001-2015

#### **Key Disparities**

• Although the mortality rate due to cancer among African Americans decreased from 2001 to 2015, African Americans still had consistently higher cancer mortality rates, compared to other groups.

### Overall Trends: 2001-2015

- The cancer mortality rate among Whites, African Americans, and Hispanics consistently decreased between the three five-year periods, though Hispanics had the lowest rate.
- Though American Indians and Asians saw a decrease in the death rate due to cancer from 2001-2005 to 2006-2010, both populations saw an increase in death rate for the following five-year period.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

### **Breast Cancer Mortality**

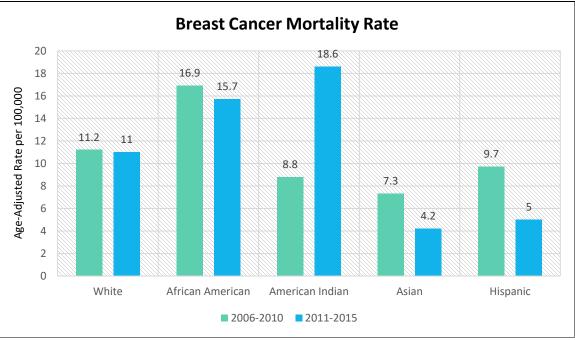
After skin cancer, breast cancer is the most common cancer among women in the United States. While deaths from breast cancer have somewhat declined in recent decades, breast cancer is still the second leading cause of death by cancer among women overall.<sup>52</sup>

#### **Key Disparities**

- From 2011-2015, American Indians had the highest breast cancer mortality rate at 18.6 per 100,000, followed by African Americans at 15.7 per 100,000.
- Asians (4.2 per 100,000) and Hispanics (5.0 per 100,000) had the lowest death rates due to breast cancer from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

- Between the two five-year periods, the death rate due to breast cancer decreased in all populations, with the exception of American Indians.
- Between 2006-2010 and 2011-2015, the death rate due to breast cancer in American Indians more than doubled from 8.8 to 18.6 per 100,000.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>52</sup> Centers for Disease Control and Prevention. (2017). Breast cancer. Retrieved from www.cdc.gov/cancer/breast/

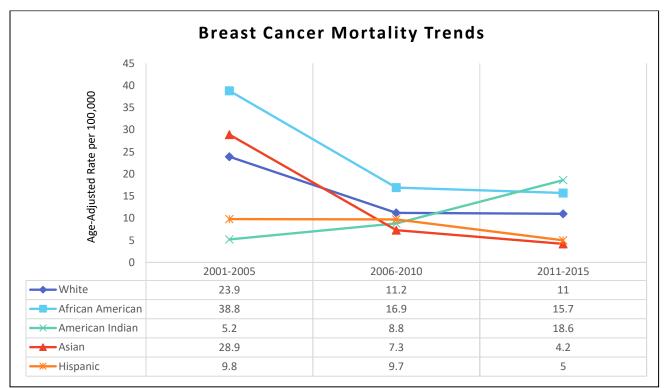
### **Trends: Breast Cancer Mortality 2001-2015**

#### **Key Disparities**

• While African Americans had the highest breast cancer mortality rate from 2001-2010, American Indians had the highest rate in the most recent five-year period from 2011-2015.

#### Overall Trends: 2001-2015

- Between 2001-2005 and 2006-2010, Whites, African Americans, and Asians saw a sharp decrease in the death rate due to breast cancer. In the next five-year period from 2011-2015, all three populations saw a further decrease in death rate, though to a lesser extent.
- While American Indians saw the lowest rate of death due to breast cancer from 2001-2005 at 5.2 per 100,000, they had the highest breast cancer mortality rate from 2011-2015 at 18.6 per 100,000.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

# Maternal, Infant, and Child Health

In any given year, six million women become pregnant. The health of mothers, infants, and children reflects the health status of a nation and forms the basis for the health of the next generation. In particular, the infant mortality rate is recognized worldwide as an indicator of health status and social well-being. Infant mortality is associated with socioeconomic status, access to health care, and the health status of women of childbearing age. Moreover, when women make positive health decisions while pregnant, it allows the next generation to start life as healthy as possible.<sup>53</sup>

In 2005, with an infant mortality rate of 6.9 per 1,000 live births, the U.S. was ranked 30<sup>th</sup> among developed nations after ranking 29<sup>th</sup> in 2004.<sup>54</sup> Within the United States, rates of infant mortality are higher in some areas. Nebraska was ranked 16<sup>th</sup> in 2010 with an infant mortality rate of 6.2 per 1,000 live births, reflecting a positive move from 25<sup>th</sup> in 2007 when the infant mortality rate was 6.5 per 1,000 live births.

Racial and ethnic minority populations are disproportionately at risk for infant deaths 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.

<sup>&</sup>lt;sup>53</sup> Healthy People. (2012). Maternal, infant, and child health. Retrieved from www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=26

<sup>&</sup>lt;sup>54</sup> National Center for Health Statistics. (2008). Health, United States, 2008 With Chart book on Trends in the Health of Americans. Hyattsville, Maryland.

# Maternal, Infant, and Child Health



American Indian population was least likely to receive first trimester prenatal care.

# Low Birth Weight

2x A

.91

54%

African American babies were twice as likely as White babies to be of low birth weight.

# Tobacco Use During Pregnancy

American Indians were almost twice as likely as Whites to use tobacco during pregnancy.



# Infant Mortality

African Americans had the highest rate of infant mortality at 13.4 per 1,000 live births, compared to Whites at 5.8 per 1,000.

2.3X

### Teen Births

American Indians had the highest teen birth rate at 144.6 per 1,000 females, compared to Whites at 46.4 per 1,000.

3.1X

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001-2015





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### **Infant Mortality**

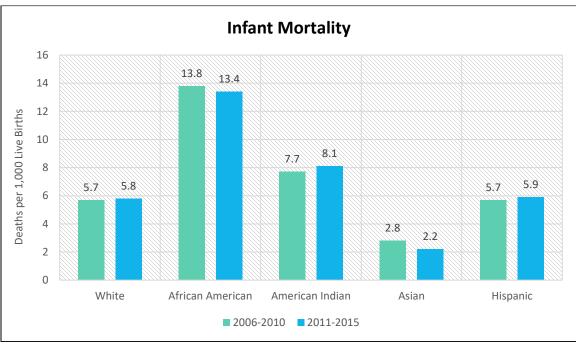
The infant mortality rate is defined as the number of infant deaths up to one year old per 1,000 live births in a given time period. The infant mortality rate only includes infant deaths that were initially classified as live births. Infant mortality is one of the most widely used indicators of the health and welfare of a population, as it reflects the general state of maternal health and the effectiveness of primary health care.<sup>55</sup>

### **Key Disparities**

- From 2011-2015, African Americans (13.4 per 1,000 live births) had the highest infant mortality rate, which was over twice the infant mortality rate among Whites.
- From 2011-2015, American Indians (8.1 per 1,000 live births) had the second-highest infant mortality rate.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, the infant mortality rate among African Americans slightly declined from 13.8 to 13.4 per 1,000 live births. African Americans had the highest infant mortality rate compared to other populations in both years.



• The infant mortality rate among American Indians and Hispanics increased slightly between 2006-2010 and 2011-2015.

Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

<sup>55</sup> Centers for Disease Control and Prevention. (2012). Infant mortality. Retrieved from www.cdc.gov/reproductivehealth/MaternalInfantHealth/InfantMortality.htm

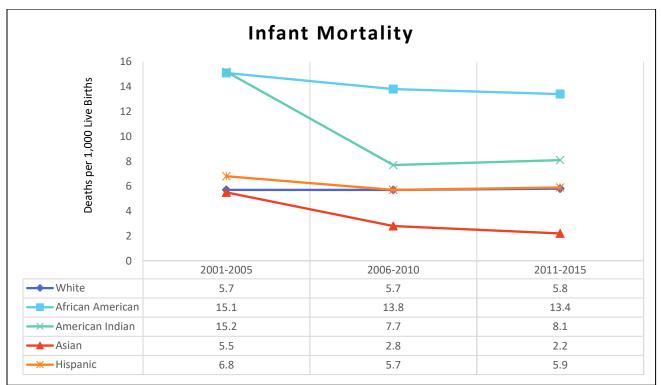
### **Trends: Infant Mortality**

#### **Key Disparities**

- Overall, African Americans saw the highest rates of infant mortality. From 2011-2015, African Americans saw 13.4 infant deaths per 1,000 live births. American Indians saw the next highest rate of infant mortality for the same period at 8.1 per 1,000 live births.
- Asians consistently saw lower rates of infant mortality from 5.5 per 1,000 (2001-2005) to 2.2 per 1,000 (2011-2015).

### Overall Trends: 2001 to 2015

• In general, the infant mortality rate has been decreasing in most populations. Though African Americans saw a decrease from 15.1 (2001-2005) to 13.4 (2011-2015) infant deaths per 1,000 live births, they continue to have the highest rate.



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

### **First Trimester Prenatal Care**

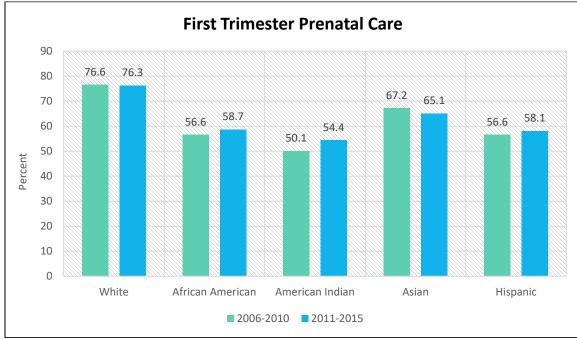
Early prenatal care is defined as care within the first trimester of pregnancy. Babies born to mothers who receive no prenatal care are three times more likely to be born at low birth weight and five times more likely to die than those whose mothers receive prenatal care.<sup>56</sup> Prenatal care is more likely to be effective if women begin receiving care early during pregnancy.

#### **Key Disparities**

- From 2006-2015, Whites were more likely to have had first-trimester prenatal care than all other populations.
- American Indians were least likely to have first-trimester prenatal care in both five-year periods.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, African Americans, American Indians, and Hispanics saw an increase in the percentage of individuals who reported first-trimester prenatal care.



• Asians were the only minority population to see a decrease in those who reported first-trimester prenatal care between the two five-year periods.

Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

<sup>&</sup>lt;sup>56</sup> Office on Women's Health. U.S. Department of Health and Human Services. (2009). Prenatal care fact sheet. Retrieved from www.womenshealth.gov/publications/ourpublications/fact-sheet/prenatal-care.html

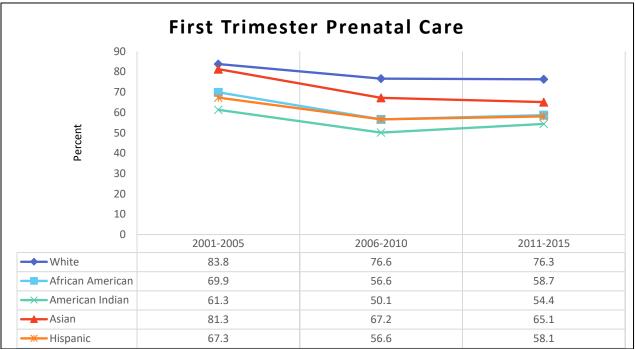
### **Trends: First Trimester Prenatal Care**

#### **Key Disparities**

- Overall, American Indians consistently reported lower rates of mothers who received prenatal care in the first trimester, followed by Hispanics and African Americans.
- From 2011-2015, American Indian mothers were approximately 22 percentage points less likely than White mothers to receive prenatal care in their first trimester.

### Overall Trends: 2001 to 2015

- From 2001-2005 to 2006-2010, all populations saw a decrease in the percentage of mothers who received first-trimester prenatal care. Asian mothers saw the largest decrease from 81.3% (2001-2005) to 67.2% (2006-2010).
- In the most recent five-year period, the percentages of mothers receiving first-trimester prenatal care were similar to the percentages of 2006-2010. The largest gap was approximately four percentage points in the American Indian population from 50.1% (2006-2010) to 54.4% (2011-2015).



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

### Low Birth Weight

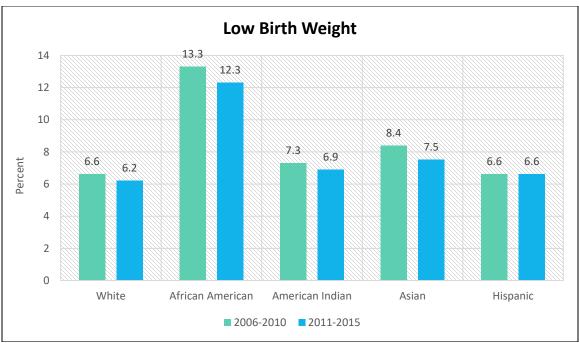
Infants weighing less than 2,500 grams (5 lbs., 8 oz.) at birth were considered to be of low birth weight.<sup>57</sup> Approximately two-thirds of low birth weight infants and 98% of very low birth weight infants are born preterm. Infants born at a low birth weight who survive their first year are at increased risk of physical, neurological, and developmental complications compared to normal birth weight infants.<sup>58</sup>

#### **Key Disparities**

- The low birth weight rate among African Americans was approximately twice that of Whites in both five-year periods.
- From 2006-2015, the White and Hispanic populations were least likely to report low birth weights.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, African Americans saw a decrease of one percentage point in the proportion of low birth weight rates, yet still had the highest low birth weight rate among all populations.



• The American Indian and Asian populations both saw a decrease in the low birth weight rate between the two five-year periods.

Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

<sup>&</sup>lt;sup>57</sup> Lucile Packard Children's Hospital at Stanford. (2013). Low birth weight. Retrieved from www.lpch.org/DiseaseHealthInfo/HealthLibrary/hrnewborn/lbw.html <sup>58</sup> Ibid.

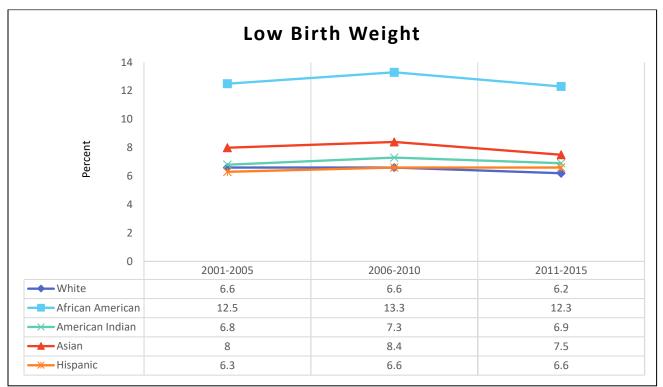
### **Trends: Low Birth Weight**

#### **Key Disparities**

- African Americans consistently saw higher percentages of babies born with low birth weights. From 2011-2015, the percentage of African American babies born at a low birth rate (12.3%) was twice as high as that of White babies born at a low birth weight (6.2%).
- Asian babies were consistently the second most likely to be born at a low birth weight at approximately 7.5-8% from 2001-2015.

#### Overall Trends: 2001 to 2015

• The percentage of babies born with low birth rates remained somewhat stable from 2001-2005 to 2006-2010. In the last five-year period, all populations saw a decrease in the percentage of babies born with a low birth rate, with the exception of the Hispanic population, which saw no change.



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

### **Tobacco Use During Pregnancy**

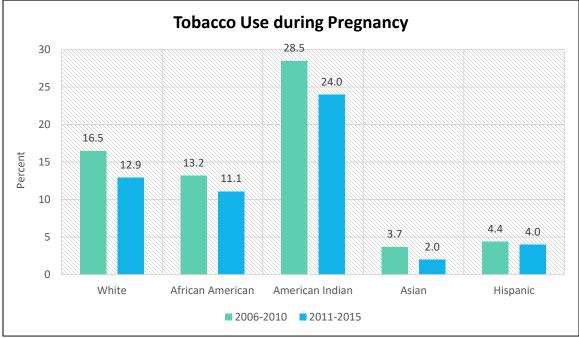
Smoking while pregnant can cause health problems, including premature birth and infant death. Smoking during and after pregnancy is a risk factor of Sudden Infant Death Syndrome (SIDS). Babies born to mothers who smoke are also more likely to have birth defects, which include cleft lip or cleft palate.<sup>59</sup>

#### **Key Disparities**

- American Indians were most likely to report using tobacco during pregnancy in both five-year periods.
- African Americans were also somewhat more likely than other minority populations to report using tobacco during pregnancy.

#### Comparisons: 2006-2010 and 2011-2015

• Between the two five-year periods, the rate of American Indians who reported using tobacco during pregnancy decreased by 4.5 percentage points. Nevertheless, American Indians remain to report the highest rate of tobacco use during pregnancy.



• The rate of tobacco use during pregnancy decreased among African Americans, Asians, and Hispanics between the two five-year periods.

Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

<sup>&</sup>lt;sup>59</sup> Centers for Disease Control and Prevention. (2016). Tobacco use and pregnancy. Retrieved from www.cdc.gov/reproductivehealth/maternalinfanthealth/tobaccousepregnancy

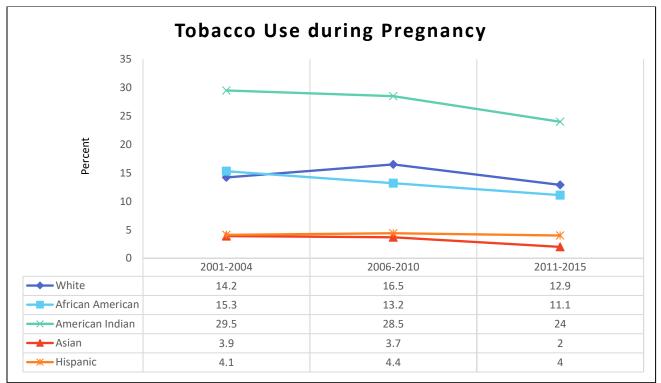
### **Trends: Tobacco Use during Pregnancy**

#### **Key Disparities**

- American Indians reported the highest percentage of tobacco use during pregnancy at over one-fourth of mothers from 2001-2010 and just under one-fourth from 2011-2015.
- African Americans and Whites also reported relatively high percentages of mothers who used tobacco during pregnancy at 11.1% and 12.9%, respectively in 2011-2015.

#### Overall Trends: 2001 to 2015

- Although the percentage of American Indian mothers who used tobacco during pregnancy remained consistently higher than other populations, the percentage decreased by 5.5 percentage points from the first five-year period to the last.
- The Asian and Hispanic populations consistently decreased the percentage of tobacco use during pregnancy from 2001-2015, and their percentages remained notably lower than other populations.



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

### **Teen Births**

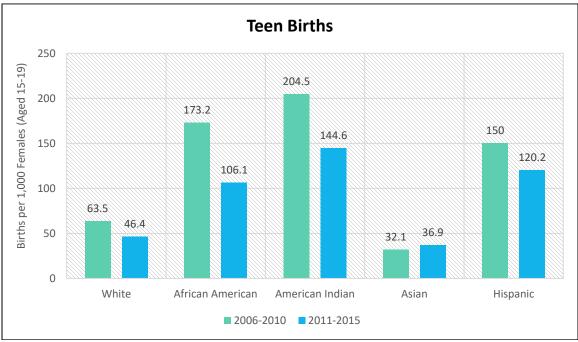
Teen births are defined as any live births among females ages 15-19. As a group, adolescent mothers and their children are at risk for numerous adverse outcomes. Adolescent mothers, as well as their children, are more likely to drop out of school. Children of adolescent mothers are more likely to have behavioral, economic, and medical problems and are more likely to become adolescent parents themselves.<sup>50</sup>

#### **Key Disparities**

- The teen birth rate among American Indians decreased from 204.5 per 1,000 (2006-2010) to 144.6 (2011-2015). However, the American Indian population still had the highest rate of teen births in both five-year periods.
- Hispanics and African Americans also saw relatively high teen birth rates at 120.2 and 106.1 per 1,000 females, respectively in 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

• From 2006-2010 to 2011-2015, all populations, excluding the Asian population, saw a decrease in the rate of teen births. While the Asian population saw a slight increase in teen birth rate from 32.1 to 36.9 per 1,000 females, they had the lowest rate of any population.



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2006 – 2015

<sup>&</sup>lt;sup>60</sup> Centers for Disease Control and Prevention (2016). About teen pregnancy. Retrieved from www.cdc.gov/teenpregnancy/about

### **Inadequate Prenatal Care**

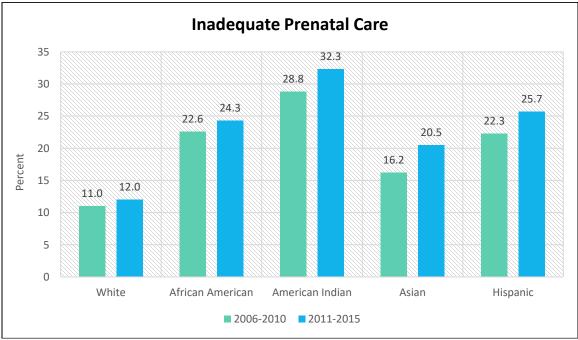
Prenatal care is important, as healthcare providers are able to examine the health of mother and child and provide necessary information related to nutrition and behavioral risk factors that could affect both the mother and the baby.<sup>61</sup> Inadequacy of prenatal care was measured by the Kotelchuck Index, also called the Adequacy of Prenatal Care Utilization Index.

#### **Key Disparities**

- From 2006-2015, all minority populations reported higher percentages of inadequate prenatal care than the White population.
- From 2011-2015, approximately one-third of American Indians and one-fourth of both African Americans and Hispanics reported inadequate prenatal care.

#### Comparisons: 2006-2010 and 2011-2015

- Between the two five-year periods, the rate of inadequate prenatal care increased among all populations.
- The Asian population reported the highest increase between the two five-year periods, from 16.2% to 20.5% reporting inadequate prenatal care.



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

<sup>&</sup>lt;sup>61</sup> Centers for Disease Control and Prevention. (2017). Pregnancy and prenatal care. Retrieved from www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/PregnancyPrenatalCare.html

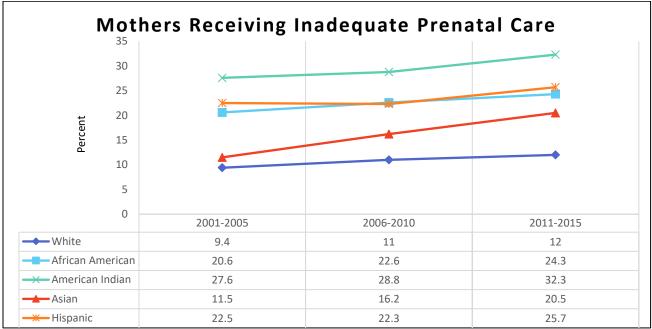
### **Trends: Inadequate Prenatal Care**

#### **Key Disparities**

- American Indian mothers were most likely to receive inadequate prenatal care out of all populations. From 2001-2005 to 2011-2015, the percentage of American Indian mothers receiving inadequate prenatal care increased from 27.6% to 32.3%.
- From 2011-2015, Hispanic mothers saw the second-highest percentage of mothers receiving inadequate prenatal care at 25.7%, followed closely by African Americans at 24.3% and Asians at 20.5%.

#### Overall Trends: 2001 to 2015

- Overall, an increasing percentage of mothers are receiving inadequate prenatal care among all populations.
- The percentage of Asian mothers receiving inadequate prenatal care saw the largest increase from 11.5% (2001-2005) to 20.5% (2011-2015).



Source: Nebraska DHHS Vital Statistics, Birth Certificates, 2001 – 2015

## **PRAMS & Breastfeeding**

The Nebraska Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing population-based survey of new mothers. With the overarching goal of reducing infant illness and death, PRAMS collects state-specific data regarding attitudes and feelings about pregnancy, support systems, use of alcohol and tobacco during pregnancy, nutrition awareness, and the infant's early development. The data collected from PRAMS is used to understand the behaviors and experiences of new moms in relationship to unfavorable pregnancy outcomes. Maternal and child health indicators such as unintended pregnancies, prenatal care, and breastfeeding allow Nebraska to identify and monitor any changes in these areas.<sup>62</sup>

Breastfeeding is an especially important indicator and is associated with numerous health benefits for both infants and their mothers. The American Academy of Pediatrics (AAP) recommends that infants be exclusively breastfed for the first six months of life. For the next six months, the AAP recommends continuing breastfeeding while introducing and gradually increasing solid food intake.<sup>63</sup> Breast milk helps to strengthen an infant's immune system, thus resulting in fewer cases of illness for newborns. Breastfeeding can also decrease the risk of breast and ovarian cancer in mothers and may decrease the risk of postpartum depression.<sup>64</sup>

Despite these benefits, breastfeeding rates remain low among certain groups, showing racial and economic disparities. These groups include women who are young, unmarried, African American, have less than a college degree, or are living below the federal poverty threshold. Furthermore, many women stop breastfeeding soon after they begin for various reasons, such as smoking, medication use, physical and mental health issues, or the need to return to work.<sup>65</sup>

<sup>&</sup>lt;sup>62</sup> Centers for Disease Control and Prevention. (2016). PRAMS. Retrieved from www.cdc.gov/prams

<sup>&</sup>lt;sup>63</sup> American Academy of Pediatrics. (2012). Breastfeeding and the use of human milk. *Pediatrics*, 129, e827-e841.

<sup>&</sup>lt;sup>64</sup> Centers for Disease Control and Prevention. (2013). PRAMS and breastfeeding. Retrieved from www.cdc.gov/prams/breastfeeding.htm

<sup>65</sup> National Immunization Survey. (2010). Racial and ethnic differences in breastfeeding initiation and duration. Morbidity and Mortality Weekly Report, 59(11), 327-334.

## PRAMS and Breastfeeding



**Breastfeeding at the Hospital** 

American Indian women (92.5%) were least likely to have breastfed at the hospital, compared to 97.1% of Whites.





African American women (70.0%) were less likely than White women (80.6%) to breastfeed for at least four weeks.

**Breastfeeding at Least Four Weeks** 

### Breastfeeding at Least Eight Weeks



American Indian women (52.1%) and African American women (61.1%) were less likely to breastfeed for at least eight weeks, compared to 69.7% of White women.

### **HIV Test**

Approximately 83% of African American and

American Indian women were tested for HIV during

pregnancy, compared to 62.3% of White women.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska PRAMS 2014

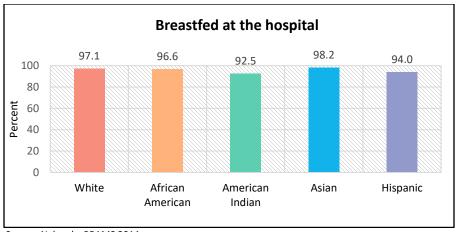




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### **Breastfed at the Hospital**

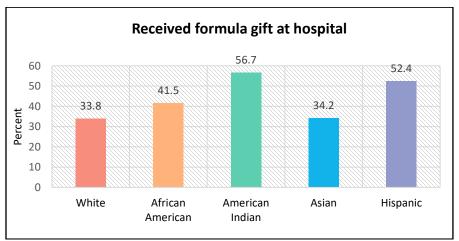
- In Nebraska, approximately 97% of White women breastfed their babies at the hospital, compared to only 92.5% of American Indian women.
- Asian women were most likely to report breastfeeding at the hospital at 98.2% compared to all other populations.



Source: Nebraska PRAMS 2014

### **Received Formula Gift at Hospital**

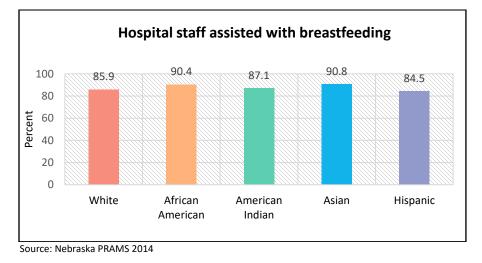
- Approximately 57% of American Indian women received formula as a gift at the hospital, compared to 33.8% of White women.
- A relatively high proportion of Hispanic women (52.4%) also reported receiving formula as a gift while at the hospital.



Source: Nebraska PRAMS 2014

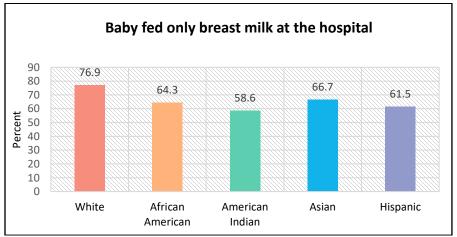
### **Hospital Staff Assistance with Breastfeeding**

- Approximately 90% of Asian and African American women reported getting assistance from hospital staff with breastfeeding.
- Hispanic and American Indian women were somewhat less likely to receive assistance from hospital staff, with breastfeeding at approximately 85-87%.



### **Baby Fed Only Breast Milk at the Hospital**

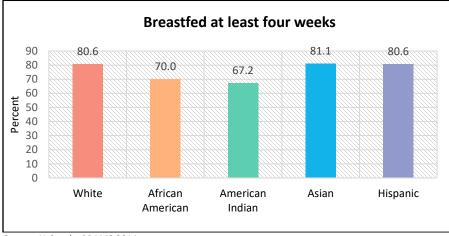
- Whites reported the highest proportion (76.9%) of infants who were fed breast milk exclusively at the hospital.
- American Indians reported the lowest proportion (58.6%) of infants who were exclusively fed breast milk during their time at the hospital, compared to 76.9% of White infants.



Source: Nebraska PRAMS 2014

### **Breastfed at Least Four Weeks**

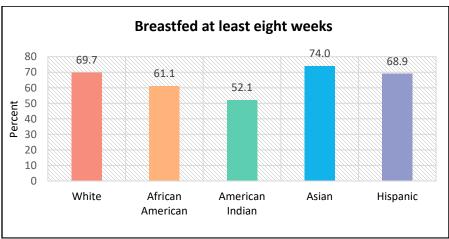
- Approximately 81% of White, Asian, and Hispanic women breastfed for at least four weeks.
- African American women (70%) and American Indian women (67.2%) were less likely to have breastfed for at least four weeks.



Source: Nebraska PRAMS 2014

### **Breastfed at Least Eight Weeks**

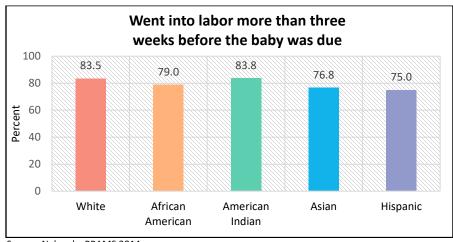
- Asian women were most likely to have breastfed for at least eight weeks at 74.0%.
- American Indian women (52.1%) and African American women (61.1%) were less likely to have breastfed for at least eight weeks, compared to 69.7% of White women.



Source: Nebraska PRAMS 2014

### **Preterm Labor**

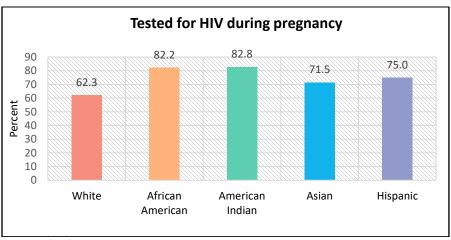
• Among minority groups, American Indian women (83.8%) were most likely to have preterm labor, followed by African American women (79%) and Asian women (76.8%).



• Hispanic women were the least likely to have preterm labor at 75%.

### **HIV Test**

- Approximately 83% of African American women and American Indian women were tested for HIV during pregnancy, compared to 62.3% of White women.
- Hispanic women (75%) and Asian women (71.5%) were also somewhat more likely to have been tested for HIV during pregnancy, compared to 62.3% of White women.



Source: Nebraska PRAMS 2014

Source: Nebraska PRAMS 2014

## **Injury and Violence**

According to the National Center for Health Statistics, injuries (intentional and unintentional) resulted in 2.8 million inpatient hospitalizations, 41.3 million visits to hospital emergency departments, and 105.3 million physician visits in 2004. According to 2006 CDC estimates, the lifetime cost of injuries occurring in a single year in the United States is \$406 billion, including medical expenses and productivity losses.<sup>66</sup>

Nebraska recorded 15,256 deaths in 2007. Of these, over 16% were from intentional and unintentional injuries, including 674 unintentional injury deaths, 181 suicides, and 71 homicides.<sup>67</sup> Both intentional and unintentional injuries are among the top 15 killers of Americans in all age groups, and the leading cause of death among those 1-44 years of age.<sup>68</sup> Approximately 72% of deaths among adolescents aged 10-24 are due to injuries from motor vehicle crashes, homicide, suicide, and all other unintentional injuries.

Various factors can affect an individual's risk of injury or violence, including individual behaviors, physical environment, and access to services. Injury prevention generally falls into related categories, such as modifying the environment, as well as education and behavior change.<sup>69</sup>

 <sup>&</sup>lt;sup>66</sup> Nebraska Department of Health and Human Services, Division of Public Health. (2007). Nebraska 2010 Health Goals and Objectives: A Midcourse Review.
 <sup>67</sup> Nebraska Department of Health and Human Services. (2007). Nebraska vital statistics report: death highlights. Retrieved from:

http://dhhs.ne.gov/publichealth/Vital%20Statistics%20Reports/Death%20Summary%202007.pdf 68 Healthy People 2010. (2012). Injury and Violence Prevention. Retrieved from http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24

# **Injury and Violence**



### **Motor Vehicle Fatalities**

American Indians (17.6 per 100.000) had a higher mortality rate due to motor vehicle accidents, compared to Whites at 12.4 per 100.000.



### Suicide

Asians and Hispanics had the lowest rate of deaths due to suicide at approximately 5 per 100,000.

## Homicide



The death rate due to homicide was highest among African Americans (28.8 per 100,000), compared to Whites at 2.2 per 100.000.

### **Unintentional Injury**



Unintentional injury deaths include those resulting from motor vehicle crashes, falls, residential fires, poisoning, and drowning, among others.



American Indians had the highest mortality rate due to unintentional injury at 44.1 per 100,000, compared to Whites at 36.8 per 100,000.

Office of Health Disparities and Health Equity **Division of Public Health** Nebraska Department of Health and Human Services Source: Nebraska DHHS Vital Statistics Death Certificates. 2006-2015 191





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### **Unintentional Injury Mortality**

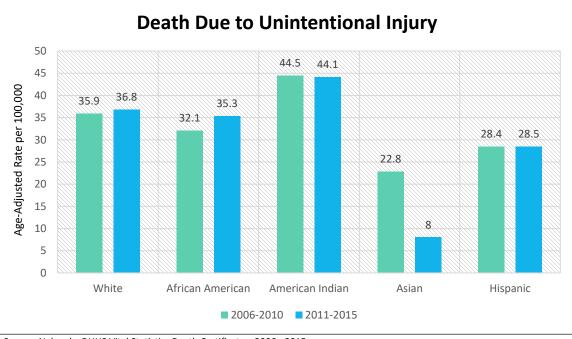
Unintentional injury deaths include those resulting from motor vehicle crashes, falls, residential fires, poisoning, and drowning, among others. In 2014, unintentional injury deaths were the fourth leading cause of death in the United States.<sup>70</sup>

#### **Key Disparities**

- The death rate due to unintentional injury was highest among American Indians at 44.1 per 100,000 from 2011-2015.
- African Americans and Whites also saw higher rates of death due to unintentional injury from 2011-2015 at 35.3 and 36.8 per 100,000, respectively.

#### Comparisons: 2006-2010 and 2011-2015

- Death rates due to unintentional injury remained relatively stable between the two five-year periods for Whites, American Indians, and Hispanics.
- Between the two five-year periods, the death rate due to unintentional injury increased for African Americans from 32.1 to 35.3 per 100,000.
- Asians saw a sharp decrease in the death rate due to unintentional injury from 22.8 to 8 per 100,000 between the two five-year periods.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>70</sup> Centers for Disease Control and Prevention. (2014). Deaths: final data for 2014. National Vital Statistics Report, 65 (4).

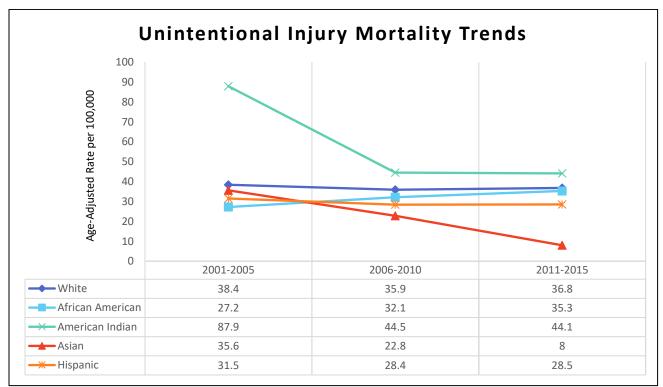
### **Trends: Unintentional Injury Mortality 2001-2015**

#### **Key Disparities**

- American Indians consistently had a higher death rate due to unintentional injury, compared to all other populations.
- From 2006-2015, Asians had a lower death rate due to intentional injury when compared to other populations.

#### Overall Trends: 2001-2015

- African Americans were the only population to experience a consistent increase in the death rate due to unintentional injury for the fifteen-year period from 27.2 per 100,000 (2001-2005) to 35.3 (2011-2015).
- Though American Indians saw a sharp decrease in the death rate due to unintentional injury from 87.9 per 100,000 (2001-2005) to 44.5 per 100,000 (2006-2010), the final five year period showed only a very slight decrease to 44.1 per 100,000 (2011-2015).



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

### **Motor Vehicle Fatalities**

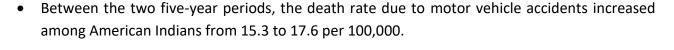
Motor vehicle crashes are one of the leading causes of death in the United States. The cost of medical care associated with these crashes has been nationally around \$80 billion yearly.<sup>71</sup> In 2015 in Nebraska, 46 individuals were injured each day, and one person was killed every 36 hours due to traffic accidents due to 218 fatal crashes.<sup>72</sup>

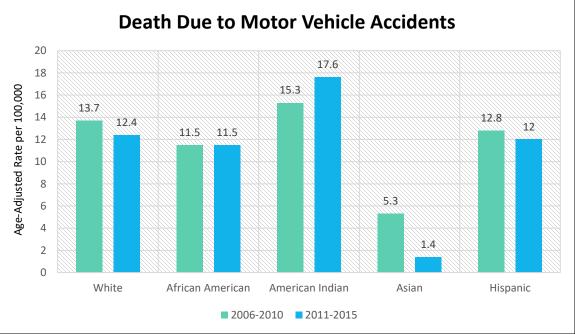
#### **Key Disparities**

- The death rate due to motor vehicle accidents was highest among American Indians (17.6 per 100,000) from 2011-2015, compared to only 12.4 per 100,000 among Whites.
- The Asian population saw the lowest death rate due to motor vehicle accidents at 1.4 per 100,000 in 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

• From 2006-2010 to 2011-2015, the death rate due to motor vehicle accidents remained relatively stable among the African American and Hispanic populations.





Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

<sup>&</sup>lt;sup>71</sup> Centers for Disease Control and Prevention. (2015). Cost data and prevention policies. Retrieved from www.cdc.gov/motorvehiclesafety/costs/index.html

<sup>&</sup>lt;sup>72</sup> Nebraska Department of Roads. (2015). Annual report: traffic crash facts. Lincoln, NE: State of Nebraska.

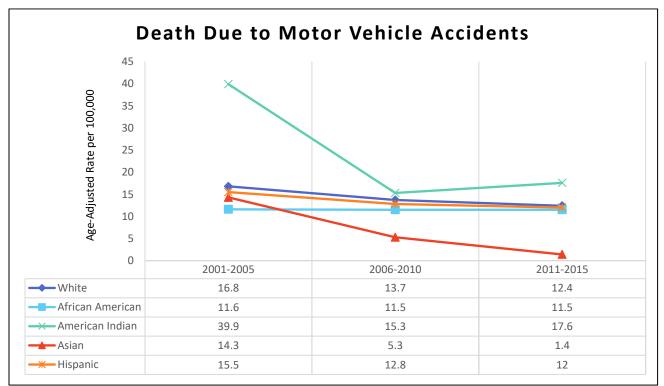
### **Trends: Motor Vehicle Fatalities 2001-2015**

#### **Key Disparities**

- American Indians consistently had a higher death rate due to motor vehicle accidents, compared to all other populations.
- From 2006-2015, Asians had a lower death rate due to motor vehicle accidents when compared to other populations.

#### Overall Trends: 2001-2015

- American Indians saw a sharp decrease in the death rate due to motor vehicle accidents from 39.9 per 100,000 (2001-2005) to 15.3 per 100,000 (2006-2010). However, the death rate due to motor vehicle accidents increased several points in the next five-year period to 17.6 per 100,000 (2011-2015).
- While the African American death rate due to motor vehicle accidents remained stable at approximately 11.5 per 100,000 from 2001-2015, the rates for the Asian and Hispanic populations decreased during each five-year period.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

### Suicide

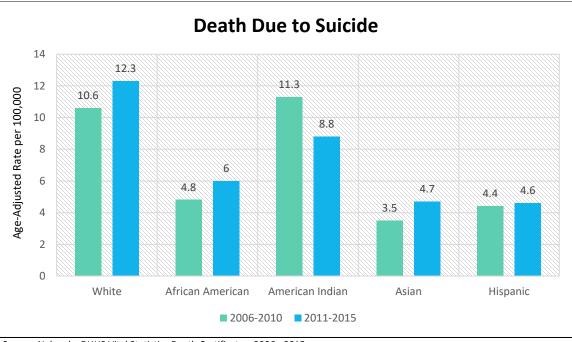
In 2013, over 41,000 suicides were reported in the United States, and almost 500,000 individuals with self-inflicted injuries were treated in emergency departments.<sup>73</sup> In 2013, suicide was the second leading cause of death among individuals aged 15-34 and the fourth leading cause of death among individuals aged 35-54.<sup>74</sup>

#### **Key Disparities**

- From 2011-2015, the White population had the highest death rate due to suicide at 12.3 per 100,000, followed by American Indians at 8.8 per 100,000.
- The Asian and Hispanic populations had the lowest death rates due to suicide at approximately five per 100,000 from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

- Death rates due to suicide increased from 2006-2010 to 2011-2015 among Whites, African Americans, Asians, and Hispanics.
- Though the death rate due to suicide among American Indians decreased from 11.3 (2006-2010) to 8.8 per 100,000 (2011-2015), these rates were higher than those of all other minority populations.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

 <sup>&</sup>lt;sup>73</sup> Centers for Disease Control and Prevention. (2015). Understanding suicide fact sheet. Retrieved from www.cdc.gov/violenceprevention/pdf/suicide\_factsheet-a.pdf
 <sup>74</sup> Ibid.

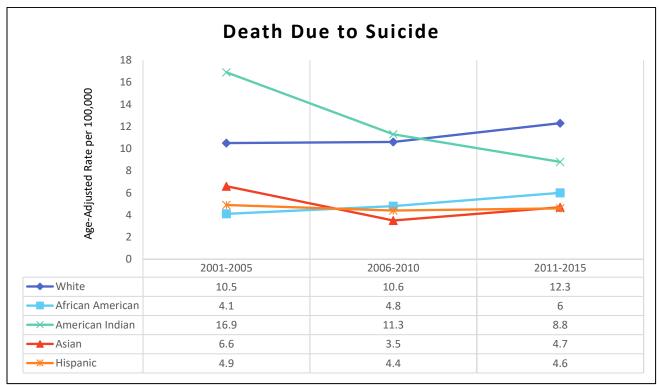
### Trends: Suicide 2001-2015

#### **Key Disparities**

- American Indians and Whites consistently had higher death rates due to suicide, compared to all other groups. While American Indians had higher death rates due to suicide from 2001-2010, Whites had a higher rate in the most recent five-year period.
- The African American, Asian, and Hispanic populations saw death rates due to suicide of approximately 4-6 per 100,000.

#### Overall Trends: 2001-2015

- American Indians saw the largest decline in the death rate due to suicide from 16.9 per 100,000 (2001-2005) to 8.8 per 100,000. However, from 2011-2015, they still had the second-highest rate of death to suicide.
- The African American population saw a steady increase in the death rate due to suicide over the three five-year periods, from 4.1 per 100,000 (2001-2005) to 6 per 100,000 (2011-2015).



Source: Nebraska DHHS Vital Statistics Death Certificates, 2001 - 2015

### Homicide

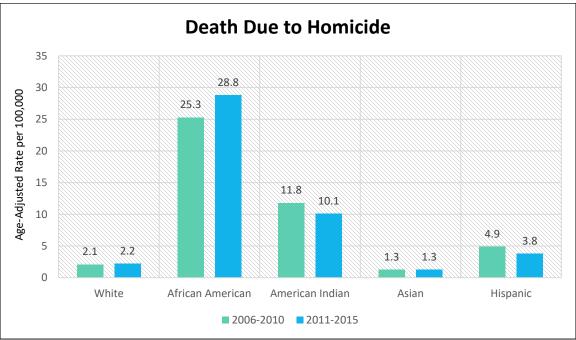
In 2014, homicide accounted for 15,809 deaths in the United States. Approximately 69% of those deaths were the result of firearms.

#### **Key Disparities**

- The death rate due to homicide was highest among African Americans at 28.8 per 100,000 from 2011-2015, compared to 2.2 per 100,000 among Whites.
- American Indians also saw a somewhat higher death rate due to homicide than other populations at 10.1 per 100,000 from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

- The White and Asian populations had a low and stable death rate due to homicide over the two five-year periods. The American Indian and Hispanic populations each saw a slight decrease in the death rate due to homicide.
- African Americans had the highest death rate due to homicide in both five-year periods. They were the only group to see a notable increase in the death rate from 25.3 per 100,000 (2006-2010) to 28.8 per 100,000 (2011-2015).



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

## Substance Abuse

Substance abuse refers to the excessive use of potentially addictive substances, such as alcohol or drugs, which may modify bodily functions and negatively affect an individual's life. Social attitudes, in addition to political and legal responses to the consumption of alcohol and illicit drugs, make substance abuse one of the most complex public health issues. Along with the considerable health implications, substance abuse has been a crux in the criminal justice system and a major focal point in discussions regarding social values.

Substance abuse and its related effects are among society's top health and social concerns. From 2006-2010, excessive alcohol use accounted for approximately 88,000 deaths per year in the United States due to various diseases, motor vehicle crashes, homicide, and suicide.<sup>75</sup> Excessive alcohol consumption can lead to cirrhosis of the liver and is associated with heart disease, cancer, and stroke. If abuse starts in youth, further damage occurs in the developing brain, resulting in lifelong impaired cognitive function and memory problems. Alcohol use by pregnant women is harmful to the fetus and can lead to miscarriage, stillbirth, and physical and mental birth defects.

Tobacco use also has a large impact on an individual's health status and is the leading cause of preventable death in the United States. Smoking can cause cancer, heart disease, stroke, lung diseases, diabetes, and other diseases. Cigarette smoking causes more than 480,000 deaths yearly in the United States.<sup>76</sup>

<sup>&</sup>lt;sup>75</sup> Centers for Disease Control and Prevention. (2014). Alcohol deaths. Retrieved from www.cdc.gov/features/alcohol-deaths

<sup>&</sup>lt;sup>76</sup> Centers for Disease Control and Prevention. (2012). Current cigarette smoking among adults in the United States. Retrieved from www.cdc.gov/tobacco/data\_statistics/fact\_sheets/adult\_data/cig\_smoking/index.htm

# **Substance Abuse**

## Current Cigarette Smoking

2x

Over one-third of the American Indian population (37.9%) reported currently smoking cigarettes, compared to just under one-fifth of Whites (19.0%).



### Binge Drinking

The White population (23.4%) was most likely to binge drink, followed by 21.9% of the American Indian population.



21.9%

### Alcohol Related Deaths



American Indians reported the highest alcohol-related death rate at 86.9 per 100,000, compared to Whites at 31 per 100,000.

### **Drug-Induce Deaths**



Drug-induced causes of death include not only deaths from dependent and non-dependent use of drugs (legal and illegal use), but also poisoning from medically prescribed and other drugs.



American Indians had the highest drug-induced death rate of any population at 16.5 per 100,000, compared to Whites at 7.7 per 100,000.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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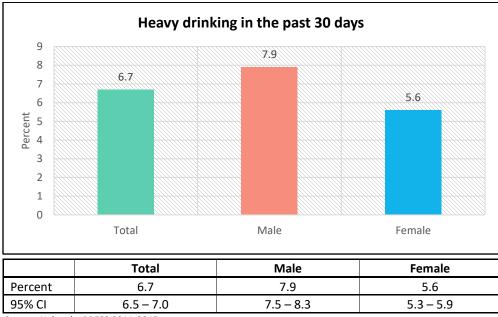
### **Heavy Drinking**

Heavy drinking was defined as males consuming more than 60 alcoholic beverages in one month, and females consuming more than 30 alcoholic beverages in one month. Drinking excessive alcohol for an extended period can result in high blood pressure, heart disease, stroke, certain cancers, and mental health problems.<sup>77</sup>

### **Heavy Drinking by Gender**

#### **Key Gender Disparities**

• Approximately 7% of adults in Nebraska reported heavy drinking in the past 30 days.



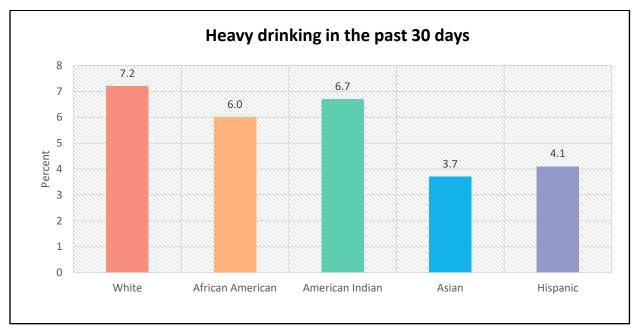
• Males (7.9%) were more likely than females (5.6%) to report heavy drinking in the past 30 days.

<sup>&</sup>lt;sup>77</sup> Centers for Disease Control and Prevention. (2016). Alcohol use and your health. Retrieved from www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm

### Heavy Drinking by Race and Ethnicity

### **Key Race and Ethnicity Disparities**

- Of all minority populations, American Indians (6.7%) reported the highest percentage of heavy drinking heavy in the past 30 days, followed by African Americans at 6.0%.
- The Asian population (3.7%) reported the lowest percentage of individuals who reported heavy drinking.



	White	African American	American Indian	Asian	Hispanic
Percent	7.2	6.0	6.7	3.7	4.1
95% CI	6.9 – 7.5	4.6 – 7.8	4.3 - 10.3	2.1 - 6.6	3.2 – 5.2

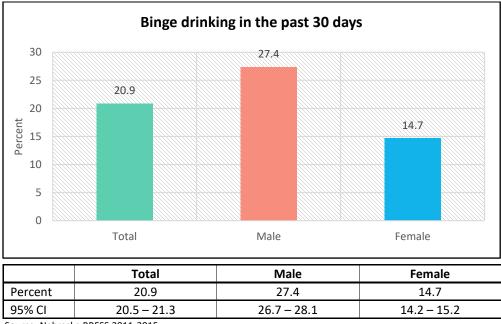
### **Binge Drinking**

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines binge drinking as drinking five or more alcoholic beverages on any one occasion.<sup>78</sup> The data comprised below includes males who had five or more drinks and females who had four or more drinks on any one day in the past month.

### **Binge Drinking by Gender**

#### **Key Gender Disparities**

- Approximately 21% of adults in Nebraska reported binge drinking in the past 30 days.
- Males (27.4%) were almost twice as likely as females (14.7%) to report binge drinking in the past 30 days.

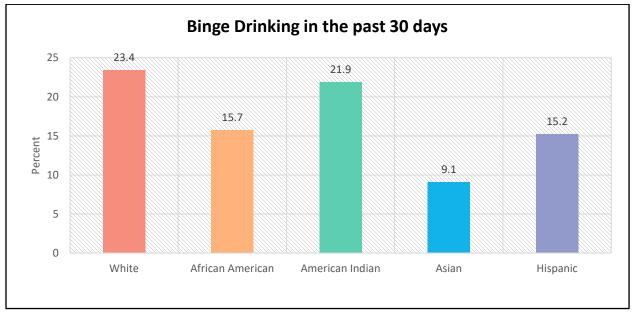


<sup>&</sup>lt;sup>78</sup> National Institutes of Health. (2016). Drinking levels defined. Retrieved from https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-bingedrinking

### **Binge Drinking by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- A higher percentage of American Indians reported binge drinking (21.9%) in the past 30 days, compared to other minority populations.
- African Americans (15.7%) and Hispanics (15.2%) were notably more likely to binge drink than Asians (9.1%).
- Whites reported the highest percentage of binge drinking individuals in the past 30 days at 23.4%.



White	African American	American Indian	Asian	Hispanic
23.4	15.7	21.9	9.1	15.2
23.0 - 23.9	13.6 - 18.2	17.8 – 26.7	6.8 – 12.0	13.6 – 17.0
	23.4	23.4 15.7	23.4 15.7 21.9	23.4         15.7         21.9         9.1

### **Alcohol-Related Deaths**

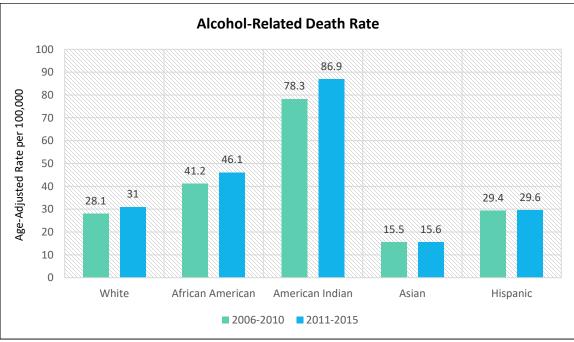
Alcohol can be a direct cause of death, as in the case of alcohol poisoning, or a contributing factor in the death, such as with chronic liver disease, motor vehicle crashes, or homicide.

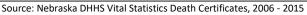
#### **Key Disparities**

- The alcohol-related death rate for American Indians (86.9 per 100,000) was 2.8 times higher than that of Whites (31 per 100,000) from 2011-2015. African Americans also had a death rate somewhat higher than Whites at 46.1 per 100,000.
- Hispanics (29.6 per 100,000) and Asians (15.6 per 100,000) had the lowest alcohol-related death rates.

#### Comparisons: 2006-2010 and 2011-2015

- From 2006-2010 to 2011-2015, the alcohol-related death rate increased in all populations. However, the increase was by less than one percentage point among Asians and Hispanics.
- Between the two five-year periods, American Indians saw an increase in the alcohol-related death rate of 8.6 points, while African Americans saw an increase of 4.9 points.





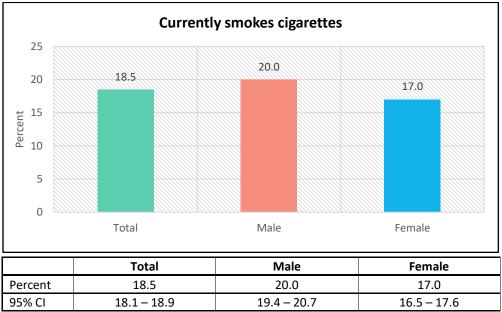
### **Current Cigarette Smoking**

Tobacco is the leading cause of preventable death and disease in the United States. Smoking increases the risk of chronic diseases, such as lung disease, coronary heart disease, stroke, and various cancers.<sup>79</sup> Cigarette smoking causes nearly one in five deaths each year in the United States.<sup>80</sup>

### **Current Cigarette Smoking by Gender**

#### **Key Gender Disparities**

- In Nebraska, 18.5% of the population reported being current cigarette smokers.
- Males (20.0%) were three percent more likely to currently smoke cigarettes than females (17.0%).



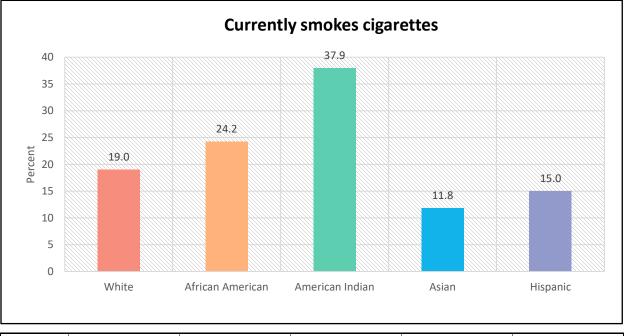
<sup>&</sup>lt;sup>79</sup> Centers for Disease Control and Prevention. (2016). Health effects of cigarette smoking. Retrieved from www.cdc.gov/tobacco/data\_statistics/fact\_sheets/health\_effects/effects\_cig\_smoking/

<sup>&</sup>lt;sup>80</sup> Centers for Disease Control and Prevention. (2013). QuickStats: number of deaths from 10 leading causes. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6208a8.htm?s\_cid=mm6208a8\_w

### **Current Cigarette Smoking by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians were most likely to report currently smoking cigarettes at 37.9% of the population, followed by African Americans at 24.2%.
- The Asian population (11.8%) and the Hispanic population (15.0%) were less likely than Whites ٠ (19.0%) to report as current smokers.



	White	African American	American Indian	Asian	Hispanic
Percent	19.0	24.2	37.9	11.8	15.0
95% CI	18.6 – 19.5	21.6 - 27.0	32.8 - 43.2	8.5 – 16.2	13.5 – 16.6
	ko BBESS 2011 2015				

### **Drug-Induced Deaths**

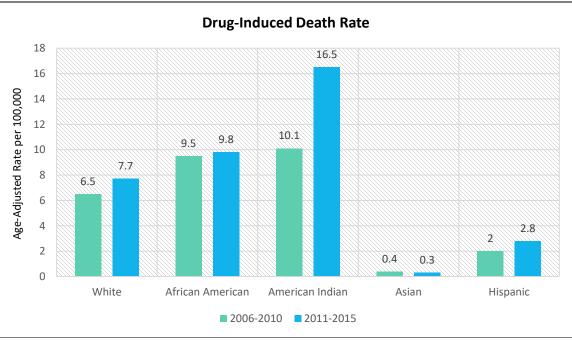
Drug-induced causes of death include not only deaths from dependent and nondependent use of drugs (legal and illegal use), but also poisoning from medically prescribed and other drugs. It excludes accidents, homicides, and other causes indirectly related to drug use.

#### **Key Disparities**

- From 2011-2015, American Indians saw the highest rate of drug-induced death at 16.5 per 100,000. During the same period, the drug-induced death rate for Whites was less than half that at 7.7 per 100,000.
- African Americans also had a somewhat higher drug-induced death rate at 9.8 per 100,000 from 2011-2015.

#### Comparisons: 2006-2010 and 2011-2015

- From 2006-2010 to 2011-2015, the drug-induced death rate increased among all populations, with the exception of among the Asian population, which saw a slight decrease.
- While the White, African American, and Hispanic populations saw increases of approximately one percentage point or less, the American Indian population saw a rise of 6.4 percentage points between the two five-year periods.



Source: Nebraska DHHS Vital Statistics Death Certificates, 2006 - 2015

# **Risk Factors for Illness**

Risk factors for illness include characteristics or habits of individuals that increase their likelihood of developing a disease. In 2013, heart disease and stroke are the first and third leading causes of death in the United States and combined are the most widespread and costly health problems, accounting for \$320 billion in health care expenditures annually in the United States.<sup>81</sup> These diseases are also the most preventable, as the risk factors can be somewhat easily controlled. These risk factors include high blood pressure, cholesterol, cigarette smoking, diabetes, obesity, and physical inactivity.

Risk factors that contribute to adverse health outcomes are more prevalent among racial and ethnic minority populations. Individuals with lower socioeconomic status are also more likely to report higher rates of smoking, heavy drinking, and obesity, as well as lower consumption of fruits and vegetables and limited participation in leisure-time physical activity.

<sup>&</sup>lt;sup>81</sup> Healthypeople.gov (2012). Heart disease and stroke. Retrieved from www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21

# Risk Factors for Illness



# **Overweight or Obese**

Almost three-fourths of African Americans (74.6%) were overweight or obese, compared to 65.1% of Whites.

# Physical Inactivity and Activity Limitations



One-third of the Hispanic population (33.8%) reported having no physical activity outside of work in the past 30 days, compared to 21.7% of the White population.



American Indians (12.2%) were over twice as likely as Whites (5.4%) to report that poor physical or mental health limited usual activities on 14 or more of the past 30 days.

# **Mental Health**

Mentally Unwell

American Indians reported the highest average number of days (4.7) of being mentally unwell in the past 30 days, compared to an average of 3 days for Whites.





Over one-fourth of American Indians (25.6%) had been diagnosed with a depressive disorder, compared to 18.1 % of Whites.

Depressive Disorder

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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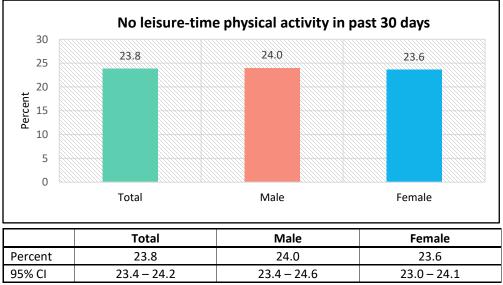
# **Physical Inactivity**

Regular physical activity helps to improve health and can decrease the risk of numerous chronic diseases.<sup>82</sup> Those represented in the charts below had no leisure-time physical activity in the past month.

### **Physical Inactivity by Gender**

#### **Key Gender Disparities**

- Approximately 24% of adults in Nebraska reported that they were not engaged in any leisuretime physical activity in the past 30 days.
- The percentages of adult males and females that reported not engaging in any leisure-time physical activity in the past 30 days were similar at 24% and 23.6%, respectively.

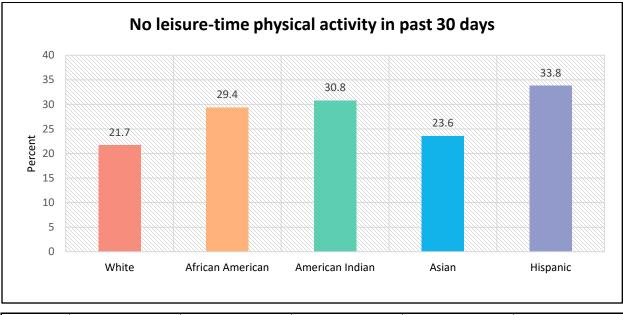


<sup>&</sup>lt;sup>82</sup> Centers for Disease Control and Prevention. (2016). Physical Activity. Retrieved from www.cdc.gov/physicalactivity/basics/index.htm

# **Physical Inactivity by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- Approximately one-third of the Hispanic population (33.8%) reported having no leisure-time physical activity in the past 30 days, compared to 21.7% of the White population.
- American Indians (30.8%), African Americans (29.4%), and Asians (23.6%) were all more likely than Whites (21.7%) to report having no leisure-time physical activity in the past 30 days.



	White	African American	American Indian	Asian	Hispanic
Percent	21.7	29.4	30.8	23.6	33.8
95% CI	21.3 – 22.2	26.6 - 32.3	26.0 - 35.9	19.3 – 28.4	31.6 - 36.0

Source: Nebraska BRFSS 2011-2015

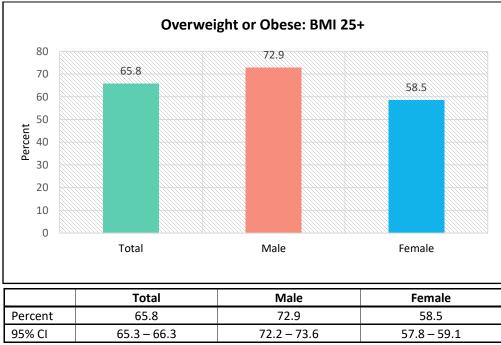
# **Overweight or Obese**

Body Mass Index (BMI) is an estimated measure of an adult's body fat, which is determined by the ratio of an individual's height and weight. Higher BMIs can indicate a higher risk of heart disease, high blood pressure, type 2 diabetes, and certain cancers. Individuals with a BMI of 25-29.9 are considered overweight, while individuals with a BMI of 30 or higher are considered obese. Those represented in the chart below represent individuals who were overweight or obese.

### **Overweight or Obese by Gender**

#### **Key Gender Disparities**

• Almost two-thirds of Nebraskans were overweight or obese at 65.8%.

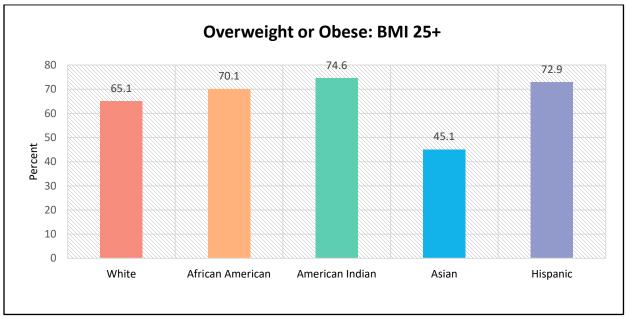


• Males (72.9%) were more likely to be overweight or obese, compared to females (58.5%).

## **Overweight or Obese by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- Almost three-fourths of the American Indian population (74.6%) was overweight or obese, compared to 65.1% of the White population.
- Hispanics (72.9%) and African Americans (70.1%) were more likely to be overweight or obese than Whites (65.1%).



• Asians (45.1%) were the least likely to be overweight or obese.

	White	African American	American Indian	Asian	Hispanic
Percent	65.1	70.1	74.6	45.1	72.9
95% CI	64.6 - 65.7	67.0 – 73.0	69.4 – 79.1	39.7 – 50.7	70.7 – 74.9

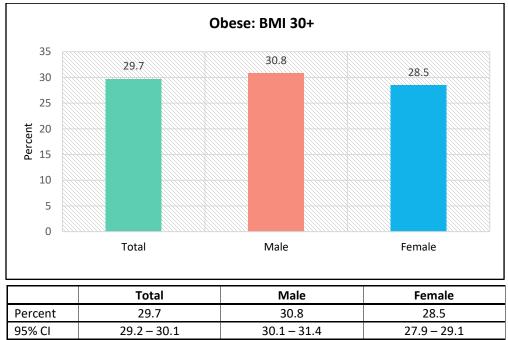
# **Obesity**

A Body Mass Index of 30 or higher is considered obese.

### **Obesity by Gender**

#### **Key Gender Disparities**

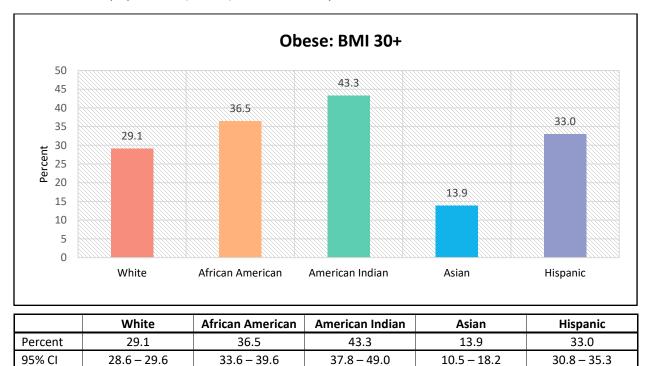
- Approximately 30% of Nebraskans were overweight from 2011-2015.
- Males (30.8%) were slightly more likely than females (28.5%) to be obese.



# **Obesity by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians (43.3%) were the most likely population to be obese, compared to 29.1% of Whites.
- Both African Americans (36.5%) and Hispanics (33.0%) were more likely to be obese than Whites (29.1%).



• The Asian population (13.9%) was least likely to be obese.

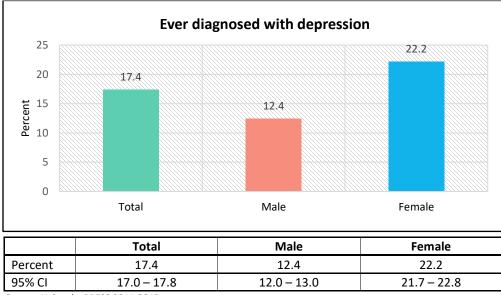
# **Depressive Disorder**

Depressive disorders are often characterized by feelings of sadness and hopelessness, though individuals with a major depressive disorder may also experience loss of interest in activities, changes in weight or activity, insomnia, and difficulties concentrating. If not treated, individuals with depression face a higher risk of suicide, heart disease, and other mental disorders.<sup>83</sup>

### **Depressive Disorder by Gender**

#### **Key Gender Disparities**

- In Nebraska, 17.4% of the population reported having ever been diagnosed with depression.
- Females (22.2%) were 1.8 times more likely than males (12.4%) to report having ever been diagnosed with depression.

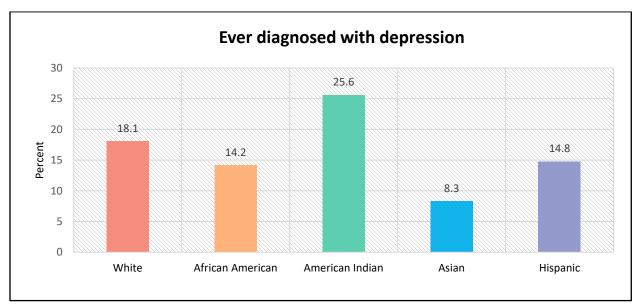


<sup>&</sup>lt;sup>83</sup> Centers for Disease Control and Prevention. (2016). Depression. Retrieved from www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm

### **Depressive Disorder by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- Just over one-fourth of American Indians (25.6%) reported having ever been diagnosed with depression, compared to 18.1 percent of Whites.
- African Americans 14.2% and Hispanics 14.8% reported similar percentages of individuals who had ever been diagnosed with depression.



White	African American	American Indian	Asian	Hispanic
18.1	14.2	25.6	8.3	14.8
17.6 – 18.5	12.3 - 16.4	21.4 - 30.3	6.0 - 11.5	13.2 - 16.4
	18.1	18.1 14.2	18.1 14.2 25.6	18.1         14.2         25.6         8.3

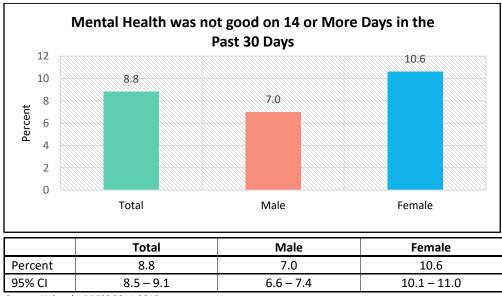
# **Mentally Unwell**

This measure was evaluated by asking, 'Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days in the past 30 days was your mental health was not good?' Those represented in the chart below responded with 14 or more days.

# **Mentally Unwell by Gender**

#### **Key Gender Disparities**

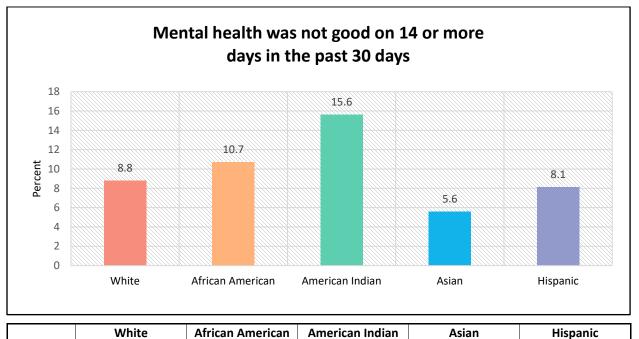
- Just under 9% of Nebraskans reported being mentally unwell on 14 or more days in the past 30 days.
- The percentage of female Nebraskans (10.6%) that reported being mentally unwell on 14 or more days in the past 30 days was higher than the percentage reported by the male Nebraskans (7.0%).



# **Mentally Unwell by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians (15.6%) reported the highest percentage of those being mentally unwell on 14 or more days in the past 30 days.
- Asians reported the lowest percentage of those being mentally unwell for 14 or more days in the past 30 days, followed by the Hispanics at 8.1%.
- African Americans reported that 10.7% of the population were mentally unwell for 14 or more days in the past 30 days; approximately 2% higher than the percentage reported by Whites (8.8%).



	white	African American	American mulan	Asiali	пізр
Percent	8.8	10.7	15.6	5.6	8
95% CI	8.5 – 9.1	9.1 - 12.6	12.4 – 19.6	3.9 – 8.0	7.0 -
Source: Nebras	ska BRFSS 2011-2015				

8.1 ) – 9.3

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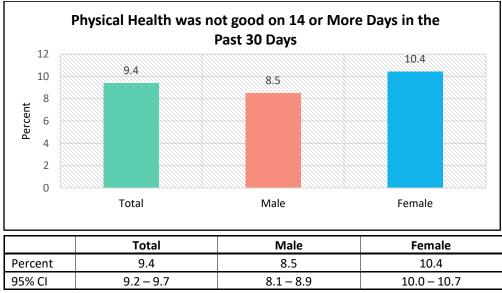
# **Physically Unwell**

Respondents were asked, 'Thinking about your physical health, which includes physical illness and injury, for how many days in the past 30 days was your physical health not good?' Those represented in the chart below responded with 14 days or more.

## **Physically Unwell by Gender**

#### **Key Gender Disparities**

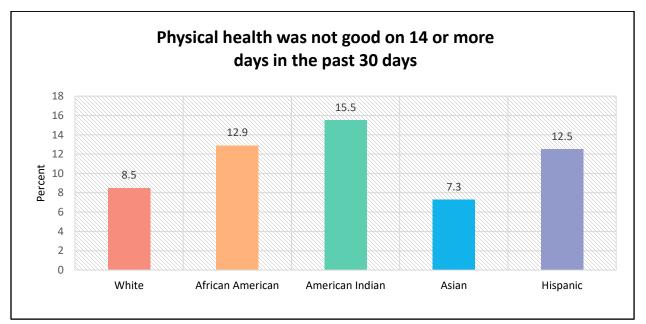
- Approximately one out of 10 Nebraskans surveyed reported that they were physically unwell on 14 or more days in the past 30 days.
- Female Nebraskans (10.4%) reported a slightly higher percentage of those being physically unwell on 14 or more days in the past 30 days compared to the male Nebraskans (8.5%).



# **Physically Unwell by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians (15.5%) reported the highest percentage of those being physically unwell on 14 or more days in the past 30 days.
- Asians reported the lowest percentage of those being physically unwell for 14 or more days in the past 30 days, followed by the Whites at 8.5%.
- African Americans reported that 12.9% of the population were physically unwell for 14 or more days in the past 30 days; second-highest percentage compared to other populations



	White	African American	American Indian	Asian	Hispanic
Percent	8.5	12.9	15.5	7.3	12.5
95% CI	8.3 - 8.8	10.8 - 15.3	12.6 - 19.0	4.9 - 10.6	11.1 - 14.0

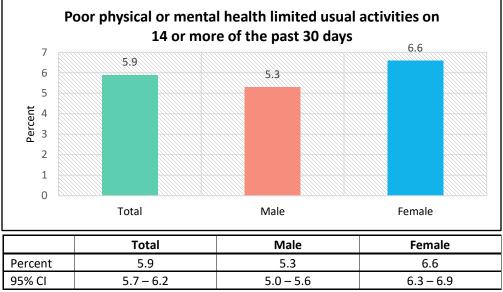
# **Activity Limitations**

The charts below represent individuals who responded that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.

# **Activity Limitations by Gender**

#### **Key Gender Disparities**

- Approximately 6% of Nebraskans reported that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.
- Females (6.6%) were more likely than males (5.3%) to report that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.

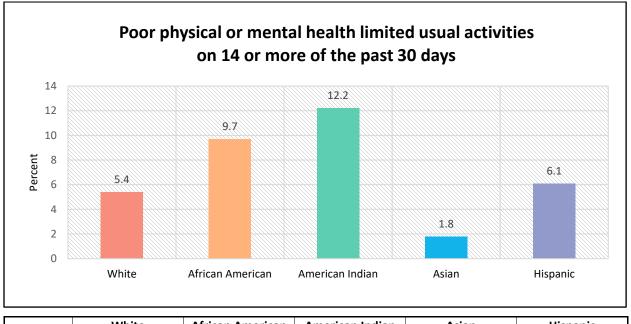


Source: Nebraska BRFSS 2011-2015

# **Activity Limitations by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- American Indians (12.2%) were over twice as likely as Whites (5.4%) to report that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.
- African Americans (9.7%) and Hispanics (6.1%) were more likely than Whites (5.4%) to report that poor physical or mental health limited their usual activities on 14 or more of the past 30 days.



	White	African American	American Indian	Asian	Hispanic
Percent	5.4	9.7	12.2	1.8	6.1
95% CI	5.2 – 5.6	8.0 - 11.6	9.4 – 15.9	1.0 - 3.2	5.2 – 7.1
Source: Nebras	ska BRESS 2011-2015				

# **Health Behaviors**

Health behaviors refer to an individual's actions regarding their health and well-being. Health behavior stresses individual responsibility in maintaining health and preventing illness through a variety of activities and prevention measures.<sup>84</sup>

Research suggests certain health behaviors yield a longer and healthier life. For example, the Centers for Disease Control and Prevention identified five health behaviors that are important in preventing chronic disease. These behaviors include getting adequate exercise, never smoking, consuming alcohol in moderation, maintaining healthy body weight, and obtaining enough sleep.<sup>85</sup>

Screenings are also a very important part of health behavior. Screenings are tests done to find a condition before symptoms begin. Screenings can include physical exams, laboratory tests, imaging procedures, and genetic tests. Understanding there is a problem is the first step to appropriate action against the disease.

It is important to note that access to sufficiently nutritious foods, safe places to exercise, and other resources that result in improved health and well-being are often limited in low-income neighborhoods, and research shows that tobacco products and alcohol are marketed more aggressively to racial and ethnic minority groups.<sup>86</sup> These are contributing factors to the disparities seen in positive health behaviors.

<sup>&</sup>lt;sup>84</sup> Matarazzo, J.D. (1980). Behavioral health and behavioral medicine: frontiers for a new health psychology. American Psychologist, Vol. 35: 807-817.

<sup>&</sup>lt;sup>85</sup> Liu Y., Croft J.B., Wheaton A.G., Kanny D., Cunningham T.J., Lu H., et al. (2013). Clustering of five health-related behaviors for chronic disease prevention among adults. Preventing Chronic Disease 2016;13:160054

<sup>&</sup>lt;sup>86</sup> D. J. Moore, J. D. Williams, W. J. Qualls. (1996). Target marketing of tobacco and alcohol-related products to ethnic minority groups in the United States. Ethn Dis. 1996 Winter-Spring; 6(1-2): 83–98.

# **Health Behaviors**

Positive health behaviors, such as routine check-ups and taking preventative measures, can help to prevent disease and play an important role ensuring a healthy life.

# Routine Check-Up

The Hispanic population (54.8%) was the least likely population to report having had a routine check-up in the past year, compared to 60.6% of Whites.

# HIV Test

Asians were the least likely population to have been tested for HIV, at 28.5% of the population.

# Vaccinations



Approximately 37% of both the Hispanic and African American populations reported having had a flu shot within the past year, making them the least likely populations to have done so.



Less than half of the Hispanic population aged 65 and older (47.6%) had ever had a pneumonia vaccination, compared to 72.2% of Whites.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





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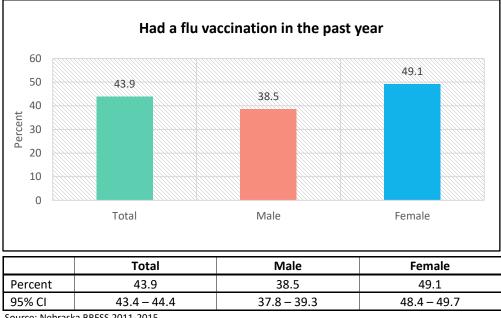
# **Flu Shot**

Flu shots protect individuals against the most common influenza viruses, and it is recommended that everyone over six months of age get a flu shot every influenza season.<sup>87</sup> Flu shots not only reduce the risk of vaccinated individuals getting sick but also decrease the chance of spreading the flu to others and throughout a community.

### Flu Shot Disparities by Gender

#### **Key Gender Disparities**

- Approximately 44% of Nebraskans reported having had a flu vaccination in the past year. •
- Almost half of the female population (49.1%) reported having had a flu vaccination in the past • year, compared to only 38.5% of the male population.



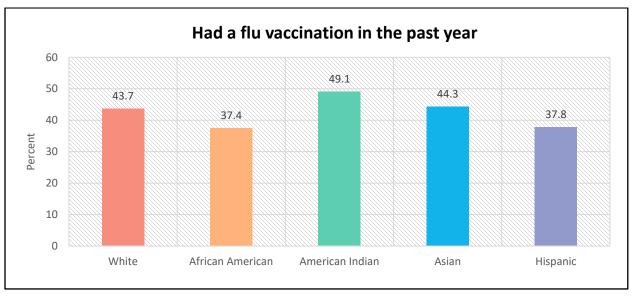
Source: Nebraska BRFSS 2011-2015

<sup>&</sup>lt;sup>87</sup> Centers for Disease Control and Prevention. (2016). Key facts about seasonal flu vaccine. Retrieved from www.cdc.gov/flu/protect/keyfacts.htm

## Flu Shot Disparities by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

- African Americans (37.4%) and Hispanics (37.8%) were the least likely to have had a flu vaccination in the past year, compared to 43.7% of Whites.
- Almost half of the American Indian population (49.1%) reported having had a flu vaccination in the past year.



	White	African American	American Indian	Asian	Hispanic
Percent	43.7	37.4	49.1	44.3	37.8
95% CI	43.1 - 44.2	34.3 - 40.6	43.9 – 54.4	39.1 – 49.7	35.6 - 40.0

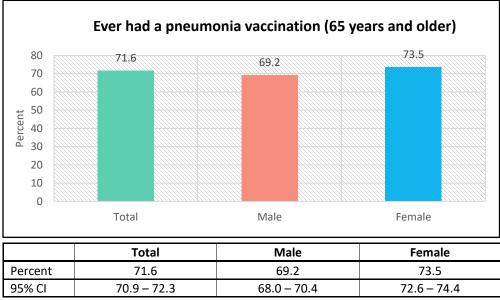
# **Pneumonia Shot**

A pneumonia shot or pneumococcal vaccine is usually given only once or twice in an individual's lifetime and is different from a flu shot.<sup>88</sup> Pneumococcus can cause pneumonia (lung infection), ear infections, sinus infections, and meningitis. While the pneumococcal disease is common in young children, adults over the age of 65 face the greatest risk of serious infection.

### **Pneumonia Shot Disparities by Gender**

#### **Key Gender Disparities**

- In Nebraska, 71.6% of adults aged 65 and older reported having ever had a pneumonia vaccination.
- Females were slightly more likely to have ever had a pneumonia vaccination at 73.5%, compared to 69.2% of males.

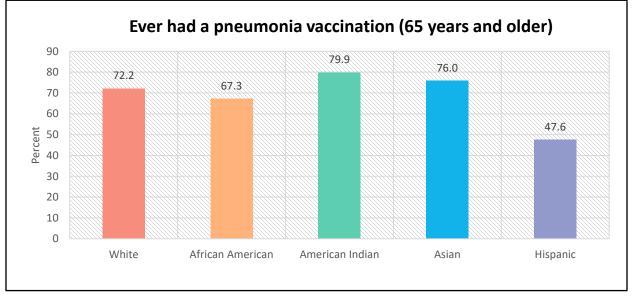


<sup>&</sup>lt;sup>88</sup> Centers for Disease Control and Prevention. (2016). Pneumococcal vaccination: what everyone should know. Retrieved from www.cdc.gov/vaccines/vpd/pneumo/public/index.html

### Pneumonia Shot Disparities by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

- Hispanics were least likely to have ever had a pneumonia vaccination at 47.6%, compared to 72.2% of Whites.
- African Americans (67.3%) were also less likely than Whites (72.2%) to report having ever had a pneumonia vaccination.
- American Indians were the most likely minority population to report having ever had a pneumonia vaccination at 79.9%, followed by Asians at 76.0%.



	White	African American	American Indian	Asian	Hispanic
Percent	72.2	67.3	79.9	76.0	47.6
95% CI	71.5 – 72.9	59.7 – 74.0	69.5 – 87.5	61.3 - 86.3	40.5 - 54.8

Source: Nebraska BRFSS 2011-2015

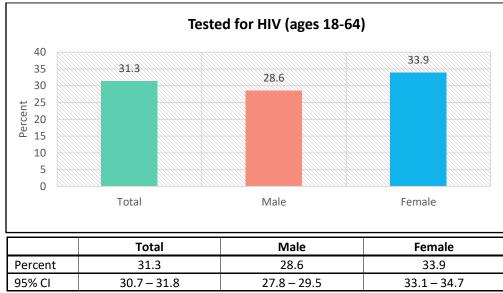
### **HIV Test**

While the Human Immunodeficiency Virus (HIV) is quite similar to other viruses, the immune system cannot completely get rid of HIV. Over time, HIV is able to destroy cells that the body needs to fight off infections.<sup>89</sup> If untreated, HIV can lead to acquired immunodeficiency syndrome (AIDS), which leaves the body extremely vulnerable to certain diseases and cancers. The charts below represent individuals who have been tested for HIV, excluding blood donations.

### **HIV Test by Gender**

#### **Key Gender Disparities**

• Approximately 31% of Nebraskans aged 18-64 reported having ever been tested for HIV.



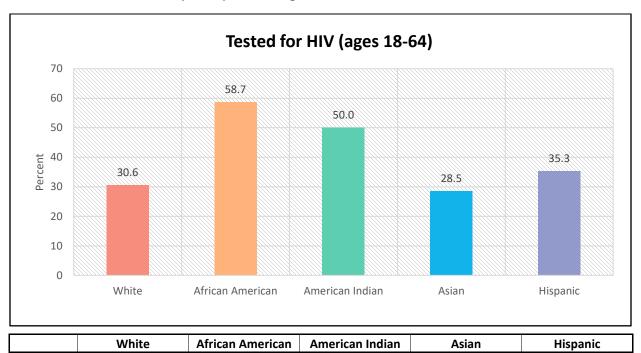
• Females (33.9%) were slightly more likely to have been tested for HIV than were males (28.6%).

<sup>&</sup>lt;sup>89</sup> AIDS.gov. (2016). What is HIV/AIDS? Retrieved from www.aids.gov/hiv-aids-basics/hiv-aids-101/what-is-hiv-aids

### **HIV Test by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

• The African American population (58.7%) was approximately 1.9 times more likely than the White population (30.6%) to report having ever been tested for HIV.



50.0

43.8 - 56.2

28.5

23.3 - 34.3

35.3

33.1 - 37.6

• Asians were least likely to report having ever been tested for HIV at 28.5%.

58.7

55.1 - 62.2

Source: Nebraska BRFSS 2011-201	.5
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30.6

30.0 - 31.2

Percent

95% CI

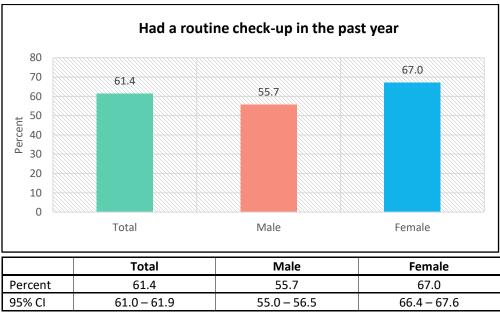
# **Routine Check-Up**

Routine check-ups are helpful in finding problems before they become a cause for concern. Finding problems earlier makes chances for treatment better. Scheduling regular check-ups with a physician is an important step in maintaining a long, healthy life.

### **Routine Check-up by Gender**

#### **Key Gender Disparities**

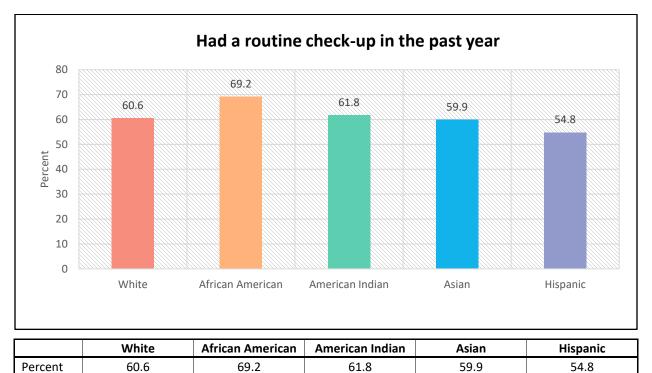
- In Nebraska, 61.4% of adults reported having had a routine check-up in the past year.
- Females (67.0%) were over ten percentage points more likely than males (55.7%) to have had a routine check-up in the past year.



# **Routine Check-up by Race and Ethnicity**

#### **Key Race and Ethnicity Disparities**

- The African American population (69.2%) was most likely to report having had a routine checkup in the past year, followed by American Indians (61.8%).
- The Hispanic population was the least likely to have had a routine check-up in the past year at 54.8%.



56.6 - 66.7

54.8 - 64.9

52.7 - 56.9

Source: Nebraska BRFSS 2011-2015
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60.1-61.2

66.3 - 72.0

95% CI

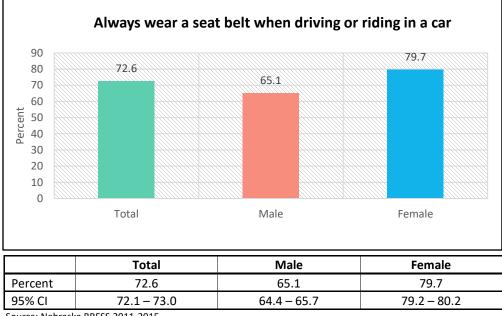
# Seat Belt

Motor vehicle crashes are one of the leading causes of death among individuals aged 1-54 in the United States. Seat belts have been shown to reduce serious injuries and deaths by almost half in motor vehicle accidents.<sup>90</sup> The below chart represents the percentage of adults 18 and older who reported always using a seat belt when driving or riding in a car.

### Seat Belt by Gender

#### **Key Gender Disparities**

- In Nebraska, 72.6% of individuals reported always wearing a seatbelt when in a car.
- Females (79.7%) were over ten percentage points more likely than males (65.1%) to report always wearing a seat belt when driving or riding in a car.



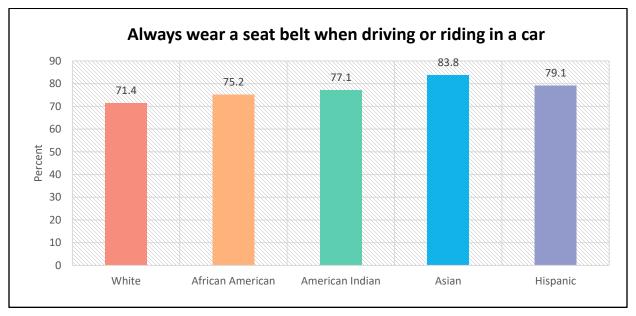
Source: Nebraska BRFSS 2011-2015

<sup>&</sup>lt;sup>90</sup> US Department of Transportation. (2000). Fatality reduction by safety belts for front-seat occupants of cars and light trucks: updated and expanded estimates based on 1986-99 FARS data.

## Seat Belt by Race and Ethnicity

#### **Key Race and Ethnicity Disparities**

- Asians were most likely to report always wearing a seat belt when driving or riding in a car at 83.8%, followed by Hispanics at 79.1%.
- Of the minority populations, African Americans were least likely to report always wear a seat belt when driving or riding in a car at 75.2%.



	White	African American	American Indian	Asian	Hispanic
Percent	71.4	75.2	77.1	83.8	79.1
95% CI	71.0 - 71.9	72.3 – 77.8	72.8 – 80.9	79.7 – 87.2	77.2 – 80.8

# Reactions to Race: Perceived Treatment and Health

As illustrated throughout this report, a disproportionate amount of health problems affects minority populations throughout Nebraska. Various factors influence the health outcomes of these groups through multiple channels. Some of the most commonly researched determinants include lower levels of socioeconomic status and lack of health care coverage. The following chapter deals with a less examined factor, perceived discrimination, which also plays a role in the health outcomes of minority groups.

Perceived discrimination has been found to have a negative impact on mental and physical health.<sup>91</sup> Particularly, perceived discrimination has been linked to hypertension, obesity, high blood pressure, and substance abuse.<sup>92</sup> Though more research is needed, these outcomes may be linked in part to the higher stress faced by individuals who perceive higher levels of discrimination.

The following chapter summarizes the data taken from the Reactions to Race module of the Behavioral Risk Factor Surveillance System (BRFSS). This module explores and discusses previously uncharted social and emotional factors related to race and monitors the effects of self- and socially-assigned race on biological and mental health, illustrating work-related treatment based on race, as well as treatment in hospitals and other settings. Please note, data for the Reactions to Race module was not collected in 2011, and the following chapter summarizes the four-year period from 2012-2015.

<sup>&</sup>lt;sup>91</sup> Pascoe, E. A. & Richman, L. S., (2009). Perceived discrimination and health: a meta-analytic review. *Psychological Bulletin*, 135(4), 531-554.

<sup>&</sup>lt;sup>92</sup> Williams, D.R. & Neighbors, H.W., (2003). Racial/ethnic discrimination and health: findings from community studies. American Journal of Public Health, 93(2), 200-208.

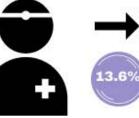
# **Reactions to Race**

Perceived Treatment and Health



Approximately one in ten African Americans felt they were treated worse than individuals of other races at work.





#### Treatment when Seeking Health Care

American Indians were more likely to feel they were treated worse than individuals of other races when seeking health care.

### Physical and Emotional Symptoms Due to Race



American Indians (11.8%) were more likely to experience physical symptoms, such as headache or pounding heart, as a result of how they were treated based on race, compared to Whites at 1.2%.



African Americans (13.6%) were much more likely to experience emotionally upset as a result of how they were treated based on race, compared to Whites at 2.1%.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2012-2015





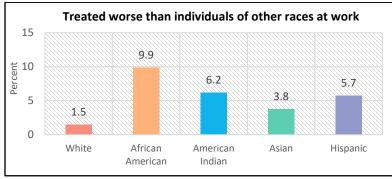
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# **Treatment at Work**

Respondents were asked: Within the past 12 months at work, do you feel you were treated worse than, the same as, or better than people of other races? The following chart represents those individuals who felt they were treated worse than other races at work.

#### **Key Disparities**

- Approximately one-tenth of the African American population (9.9%) felt that they were treated worse than individuals of other races at work, followed by American Indians at 6.2%.
- The Hispanic (5.7%) and Asian (3.8%) populations were also more likely to feel that they were treated worse than individuals of other races at work, compared to only 1.5% of the White population.



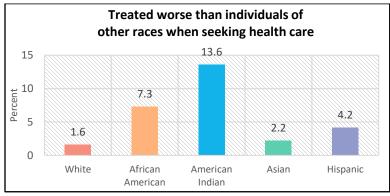
Source: Nebraska BRFSS 2012-2015

# **Experience Seeking Health Care**

Respondents were asked: Within the past 12 months, when seeking health care, do you feel your experiences were worse than, the same as, or better than people of other races? The following chart represents those individuals who felt they were treated worse than other races when seeking health care.

#### **Key Disparities**

- American Indians were most likely to report feeling being treated worse than individuals of other races when seeking healthcare at 13.6% of the population.
- African Americans also saw a higher proportion of individuals who reported feeling being treated worse than those of other races when seeking healthcare at 7.3% of the population.



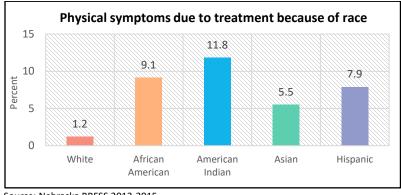
Source: Nebraska BRFSS 2012-2015

# **Physical Symptoms Due to Race**

Respondents were asked: Within the past 30 days, have you experienced any physical symptoms, for example, a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?

#### **Key Disparities**

- American Indians (11.8%) and African Americans (9.1%) were most likely to experience physical • symptoms due to treatment based on race.
- Hispanics (7.9%) and Asians (5.5%) also experienced higher proportions of individuals experiencing • physical symptoms due to treatment based on race, compared to Whites at only 1.2%.



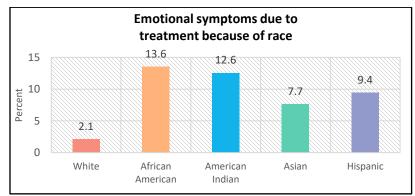
Source: Nebraska BRFSS 2012-2015

# **Emotional Symptoms Due to Race**

Respondents were asked: Within the past 30 days, have you felt emotionally upset, for example, angry, sad, or frustrated, as a result of how you were treated based on your race?

#### **Key Disparities**

- African Americans (13.6%) and American Indians (12.6%) experienced emotional symptoms due to treatment based on race at proportions approximately six times that of Whites (2.1%).
- Hispanics (9.4%) and Asians (7.7%) also saw higher proportions of those who experienced emotional • symptoms due to treatment based on race.



Source: Nebraska BRFSS 2012-2015

# **Risk Factors for Nebraska Immigrants**

The United States has a long history of welcoming immigrants from around the world. Through the years, there have been ebbs and flows in immigration levels, with some eras described as "great waves" of immigration. The Census Bureau does not ask questions about the immigration status of respondents. In most cases, a foreign-born individual can become a naturalized citizen after at least five years of residence.<sup>93</sup>

Immigration is a major contributor to population growth in the United States. According to the U.S. Census Bureau, it took only 39 years – from 1967 to 2006 – for the United States population to increase by an estimated 100 million people. Much of this growth came from legal immigrants and their offspring. Over the last ten years, the United States has welcomed an average of 900,000 new, legal immigrants every year.<sup>94</sup> Nebraska, in particular, ranked 18th out of 51 states (including District of Columbia) for percent change between 2000 and 2011, seeing a 55.6% increase in that time period.<sup>95</sup> Between October 1, 1997, and September 30, 2006, 27,290 persons were granted legal, permanent residence in Nebraska (this includes both new arrivals and persons who adjusted their status).<sup>96</sup> Nebraska immigrant admissions for the most recent ten-year period for which data was available averaged 2,808 people per year. The year 2001 had the highest number of immigrant admissions at 3,839. Additionally, 6.3% of Nebraska's population is foreign-born, and almost half of this population entered Nebraska in the year 2000 or later.

For the purposes of this report, survey participants listed as born outside of the United States (foreignborn) were considered immigrants. In this chapter, only those indicators that demonstrated the disparities faced by immigrant individuals are presented.

<sup>&</sup>lt;sup>93</sup> Schmidley, A. D. (2001). U.S. Census Bureau. Profile of the foreign-born population in the United States: 2000. Washington, DC: U.S. Government Printing Office <sup>94</sup> U.S. Citizenship and Immigration Services. (2012). USCIS strategic plan. Retrieved from www.hsdl.org/?view&did=235207

<sup>95</sup> Migration Policy Institute. (2012). Nebraska: social and demographic characteristics. Retrieved from www.migrationinformation.org/datahub/state.cfm?ID=NE

<sup>&</sup>lt;sup>96</sup> Zhang, A. (2009). Racial/ethnic minority population growth state of Nebraska. Retrieved from http://dhhs.ne.gov/Reports/Minority%20Population%20Growth%20-%202009.pdf

# Risk Factors for Nebraska Immigrants



Foreign-born Nebraskans were almost four times more likely than native-born Nebraskans to have no health care coverage.



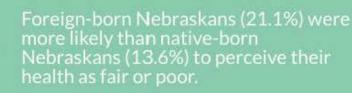
# Unable to See a Physician Due to Cost



One-fifth of foreign-born Nebraskans were unable to see a physician due to cost.

# **Perceived Health Status**

How an individual views his or her health – excellent, very good, good, fair, or poor.



Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015

1.6x





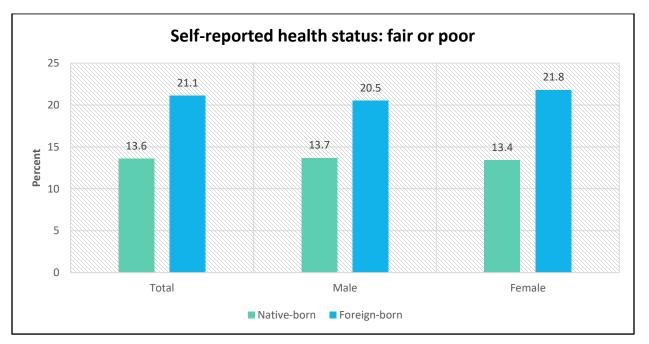
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# **Perceived Health Status**

Perceived health status measures how an individual views his or her health – excellent, very good, good, fair, or poor. Individuals who have lower incomes or are uninsured are more likely to report being in fair or poor health and have higher rates of hospitalization and mortality compared to those who report excellent or good health.<sup>97</sup>

#### **Key Disparities:**

- The foreign-born population (21.1%) was approximately 1.6 times more likely to report being in fair or poor health than the native-born population (13.6%).
- Approximately 21% of foreign-born males reported being in fair or poor health, compared to only approximately 14% of native-born males.
- The gap within the female population was slightly larger, with 21.8% of foreign-born females reporting a fair or poor health status, and only 13.4% of native-born females reporting the same.



	Total		Male		Female	
Birthplace	Native	Foreign	Native	Foreign	Native	Foreign
Percent	13.6	21.1	13.7	20.5	13.4	21.8
95% CI	13.1 - 14.0	18.5 – 24.0	13.0 - 14.4	16.8 – 24.9	12.8 - 14.0	18.5 – 25.6

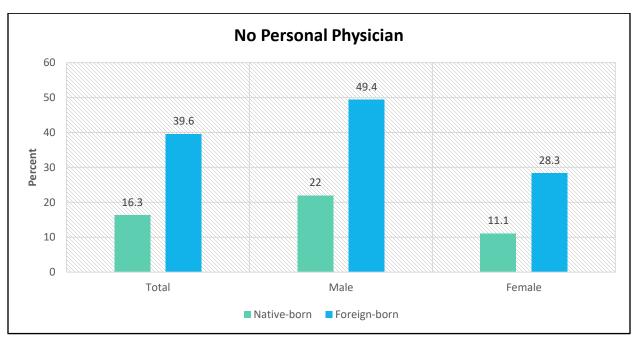
<sup>&</sup>lt;sup>97</sup> United States Office of Disease Prevention and Health Promotion. (2016). General health status. Retrieved from www.healthypeople.gov/2020/about/foundation-healthmeasures/General-Health-Status

# **No Personal Physician**

A physician provides a combination of direct care and, as necessary, counsel the patient in the appropriate use of specialists and advanced treatment locations. Individuals without a personal physician are less likely to have routine checkups and more likely to have fractured inadequate care.

#### **Key Disparities:**

- The proportion of foreign-born individuals who reported having no personal physician (39.6%) was over twice that of native-born individuals who reported the same (16.3%).
- Almost half of the foreign-born male population (49.4%) reported having no personal physician, compared to just over one-fifth of native-born males (22%).



• While 28.3% of foreign-born females reported not having a personal physician, only 11.1% of native-born females reported the same.

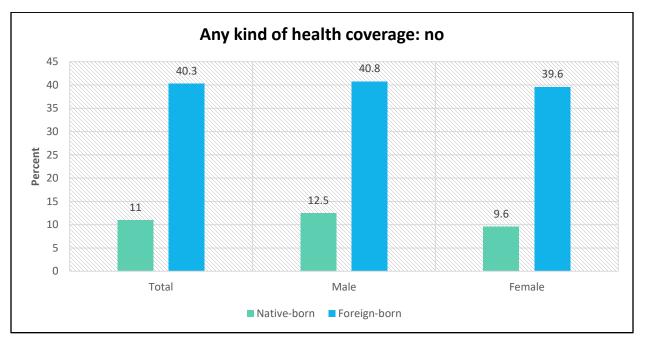
Birthplace	Native	Foreign	Native	Foreign	Native	Foreign
Percent	16.3	39.6	22.0	49.4	11.1	28.3
95% CI	15.7 – 16.9	36.2 - 43.0	21.0 - 23.0	44.5 – 54.3	10.4 - 11.8	24.3 - 32.7

# **No Health Coverage**

Lack of a health care plan or inadequate insurance coverage prevents many individuals from getting needed care. Individuals with health insurance are generally more likely to have a primary care provider and to have received appropriate preventative care, such as early prenatal care, immunizations, or health screenings.

#### **Key Disparities**

- The foreign-born population was less likely to have health coverage than was the native-born population. The proportion of foreign-born individuals (40.3%) without health coverage was over 3.5 times greater than the proportion of native-born individuals (11%) without health coverage.
- Just over two-fifths of foreign-born males (40.8%) reported not having health coverage, compared to only one-eighth of native-born males (12.5%).
- The proportion of foreign-born females without health coverage (39.6%) was just over four times higher than the proportion of native-born females (9.6%) reporting the same.



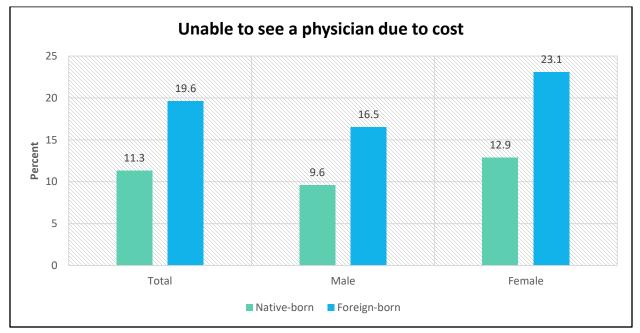
	Total		Total Male			Female	
Birthplace	Native	Foreign	Native	Foreign	Native	Foreign	
Percent	11.0	40.3	12.5	40.8	9.6	39.6	
95% CI	10.5 – 11.5	36.9 - 43.7	11.7 – 13.4	35.9 – 45.9	9.0 - 10.3	35.1 - 44.3	

# Unable to See a Physician Due to Cost

For individuals with no insurance and limited financial resources, the decision of whether or not to see a doctor is often a financial choice rather than a medical one. Even when health benefits are available, they may not be sufficient to ensure access to needed health care services.

#### **Key Disparities:**

- Approximately one-fifth (19.6%) of foreign-born individuals reported being unable to see a doctor due to cost, compared to only just over one-tenth (11.3%) of native-born individuals.
- Overall, the proportions of native-born and foreign-born females who were unable to see a physician due to cost were greater than those of native-born and foreign-born males, respectively.
- Foreign-born males (16.5%) were 1.7 times more likely than were native-born males (9.6%) to report being unable to see a physician due to cost.



• Foreign-born females (12.9%) were 1.8 times more likely than were native-born females (23.1%) to report being unable to see a physician due to cost.

Total		Ma	ale	Female	
Native	Foreign	Native	Foreign	Native	Foreign
11.3	19.6	9.6	16.5	12.9	23.1
10.9 - 11.8	17.1 – 22.3	8.9 – 10.3	13.3 – 20.4	12.3 – 13.6	19.4 – 27.1
	<b>Native</b> 11.3	Native         Foreign           11.3         19.6	NativeForeignNative11.319.69.6	Native         Foreign         Native         Foreign           11.3         19.6         9.6         16.5	NativeForeignNativeForeignNative11.319.69.616.512.9

# Risk Factors for Limited English-Speaking Nebraskans

Individuals who reported speaking English less than "very well" were classified as Limited English Proficient (LEP) by the U.S. Census Bureau. These individuals, whose primary language is not English, may have difficulty in certain areas of the language, such as reading, writing, speaking, or understanding. While much of the LEP population is comprised of immigrants, approximately 19% of the population nationwide was born in the United States. These individuals often have immigrant parents and family members. Between 1990 and 2013, the LEP population in the United States grew by 80%.<sup>98</sup>

LEP individuals self-assess their own level of English proficiency, and there are no set definitions for the measurement of speaking English 'not very well.' In this report, LEP was defined as those who speak English not well or not at all. In this chapter, only indicators that demonstrate the disparities faced by LEP individuals are presented.

<sup>98</sup> Zong, J. & Batalova, J. (2015). The limited English proficient population in the United States. The Online Journal of the Migration Policy Institute.

# Risk Factors for Limited English Speaking Nebraskans



# **Perceived Health Status**

Limited English speaking Nebraskans were 2.4 times more likely to perceive their health status as fair or poor, compared to proficient English speakers.



# Heart Attack

Limited English proficient Nebraskans (5.9%) were more likely to have ever had a heart attack than English proficient Nebraskans (3.2%).

# Physically Unwell

1.81



Limited English speaking Nebraskans (16.1%) were more likely to feel that their physical health was not good on 10 or more days in the past 30 days, compared to English proficient Nebraskans (9.5%).

### **Access to Health Care**

Health Insurance



Limited English speaking Nebraskans were more than twice as likely to have no health insurance than English speaking Nebraskans.

Personal Physician



Approximately 30% of limited English speaking Nebraskans had no personal physician, compared to 20% of English proficient Nebraskans.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





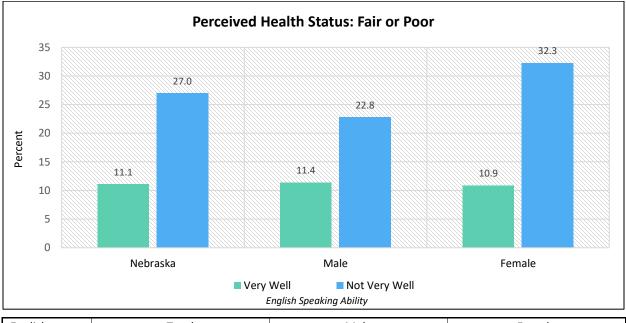
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# **Perceived Health Status**

Perceived health status was calculated by asking individuals if their health, in general, was excellent, very good, good, fair, or poor. Those who answered fair or poor are represented in the chart below.

#### **Key Disparities**

- Overall, LEP Nebraskans (27.0%) were almost 2.5 times more likely to perceive their health status as fair or poor, compared to proficient English speakers (11.1%).
- Almost one-third of limited English-speaking females (32.3%) reported being in fair or poor health, compared to approximately one-tenth of English proficient females (10.9%).



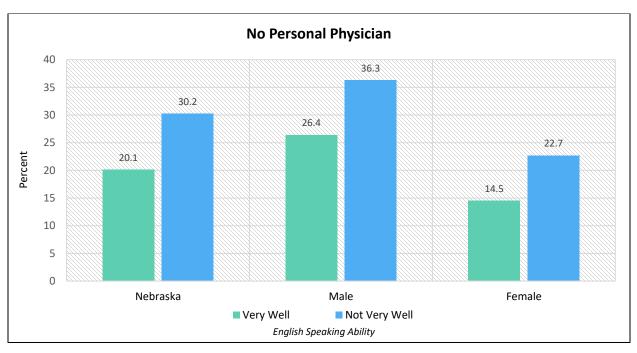
English	Total		Μ	ale	Female		
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well	
Percent	11.1	27	11.4	22.8	10.9	32.3	
95% CI	10.0 - 12.4	23.6 - 30.8	9.5 – 13.6	18.7 – 27.4	9.7 – 12.3	26.6 - 38.5	

## **No Personal Physician**

Having no personal physician being defined as not having one person that the respondent thought of as a personal doctor or health care provider. Those who had no personal physician are represented in the chart below.

#### **Key Disparities**

 In Nebraska, 30.2% of LEP individuals did not have a personal physician. This percentage was 1.5 times higher than the proportion of English proficient individuals who reported the same (20.1%).



• Males with limited English proficiency were more likely to report not having a personal physician at 36.3%, compared to only 26.4% of English proficient males.

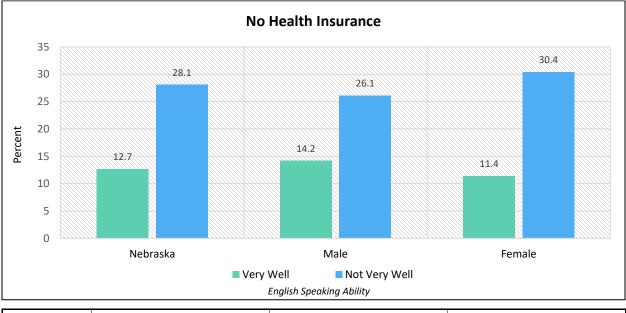
English	Total		M	Male		Female	
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well	
Percent	20.1	30.2	26.4	36.3	14.5	22.7	
95% CI	18.4-22	26.2-34.5	23.5-29.5	30.7-42.2	12.7-16.6	17.5-29	

# **No Health Insurance**

Respondents were asked: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Services?

#### **Key Disparities**

- Overall, 28.1% of limited English-speaking Nebraskans reported not having health insurance. This proportion was over twice that of English proficient Nebraskans (12.7%).
- Limited English-speaking females (30.4%) were approximately 2.7 times more likely than English proficient females (11.4%) to report not having health insurance.



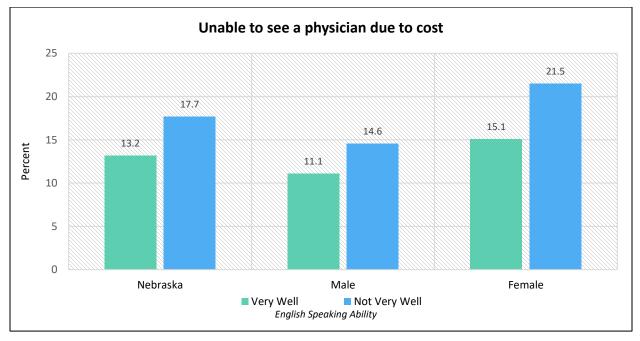
English	То	Total		Male		Female	
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well	
Percent	12.7	28.1	14.2	26.1	11.4	30.4	
95% CI	11.3-14.3	24-32.6	11.8-17	20.6-32.5	9.8-13.2	24.5-37.1	
Courses Nabusalus D	DECC 2011 2015						

# Unable to See a Physician Due to Cost

Respondents were asked: Was there a time in the past 12 months when you needed to see a doctor, but could not because of cost?

#### **Key Disparities**

- Limited English proficient Nebraskans (17.7%) were 4.5 percentage points more likely to be unable to see a physician due to cost than English proficient Nebraskans (13.2%).
- Limited English-speaking females (21.5%) were more likely to be unable to see a doctor due to cost, compared to 15.1% of English proficient females.



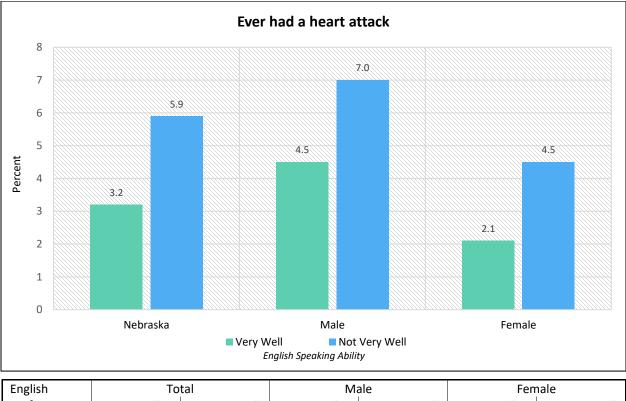
English	Total		M	ale	Female	
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well
Percent	13.2	17.7	11.1	14.6	15.1	21.5
95% CI	11.8-14.8	14.7-21.2	9-13.7	11-19.1	13.4-17	16.7-27.4

### **Heart Attack**

Respondents were asked: Has a doctor, nurse, or other health professionals ever told you that you had a heart attack, also called a myocardial infarction?

#### **Key Disparities**

- In Nebraska, limited English proficient individuals (5.9%) were 1.8 times more likely than English proficient individuals (3.2%) to have ever had a heart attack.
- Limited English proficient males were more likely to have ever had a heart attack at 7%, compared to 4.5% of English-speaking males.



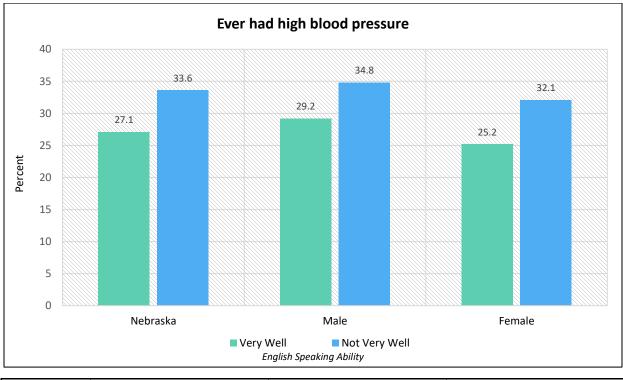
English	Total		M	ale	Female		
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well	
Percent	3.2	5.9	4.5	7	2.1	4.5	
95% CI	2.8-3.8	4.6-7.5	3.7-5.5	5.1-9.6	1.6-2.8	2.9-6.8	

# **High Blood Pressure**

Respondents were asked: *Have you ever been told by a doctor, nurse, or other health professionals that you have high blood pressure?* This does not include females who were pregnant.

#### **Key Disparities**

- Approximately one-third of limited English proficient individuals (33.6%) reported having ever had high blood pressure, compared to 27.1% of English proficient individuals.
- Females who were not English proficient (32.1%) were approximately seven percentage points more likely than English proficient females (25.2%) to have ever had high blood pressure.



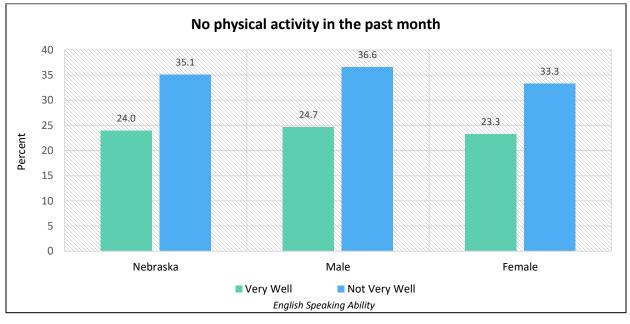
English	Total		M	ale		nale
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well
Percent	27.1	33.6	29.2	34.8	25.2	32.1
95% CI	25.5-28.7	30.2-37.1	26.7-31.8	30.2-39.7	23.4-27.1	27.2-37.4

# **Physical Inactivity**

Physical inactivity refers to those people who had no leisure-time physical activity in the past month.

#### **Key Disparities**

- Over one-third (35.1%) of limited English speakers reported having no physical activity in the past month, compared to just under one-fourth (24%) of proficient English speakers.
- Limited English-speaking males (36.6%) were over ten percentage points more likely than English-speaking males (24.7%) to report no physical activity in the past month.



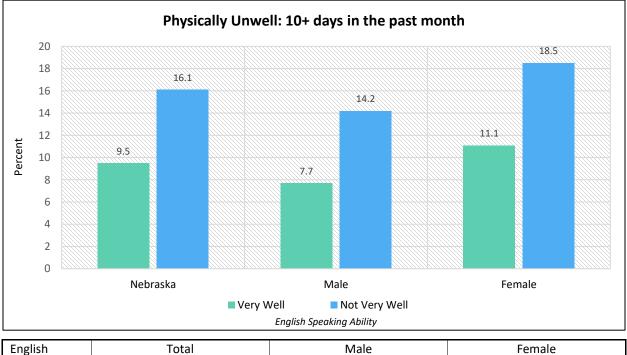
English	Total		М	ale	Female	
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well
Percent	24	35.1	24.7	36.6	23.3	33.3
95% CI	22.4-25.6	31.3-39.2	22.3-27.3	31.3-42.2	21.2-25.5	28-39.2

# **Physically Unwell**

Respondents were asked to think about their physical health, including physical illness and injury, and then asked for how many days during the past 30 days, their physical health was not good. Those represented in the charts below responded with 10 or more days.

#### **Key Disparities**

- In Nebraska, 16.1% of limited English speakers reported being physically unwell on ten or more days in the past month, compared to 9.5% of proficient English speakers.
- Limited English-speaking males (14.2%) were almost twice as likely as English-speaking males (7.7%) to report being physically unwell on ten or more days in the past month.



English	Total		M	ale	Female	
Proficiency	Very Well	Not Very Well	Very Well	Not Very Well	Very Well	Not Very Well
Percent	9.5	16.1	7.7	14.2	11.1	18.5
95% CI	8.5-10.5	13.5-19.1	6.4-9.1	10.9-18.3	9.8-12.5	14.6-23.1

# **Risk Factors for Low-Income Nebraskans**

Socioeconomic status is said to be the single largest predictor of health. An individual's socioeconomic status is a combination of income, education, and occupation, all of which can contribute to health disparities. Though these factors are interrelated, some studies have found that low income is the greatest risk factor for poor health.<sup>99</sup> Living below or near the poverty line can reduce an individual's access to health care. Moreover, poverty has been linked to chronic stress and therefore associated with higher morbidity and mortality rates.

For the purposes of this report, only those indicators that demonstrate the disparities faced by individuals with low-income are presented. Low-income individuals were classified as those with an income of less than \$25,000 yearly.

<sup>&</sup>lt;sup>99</sup> Williams, D. (2001). Low income, not race or lifestyle, is the greatest threat to health. Retrieved from www.rwjf.org/en/library/research/2001/01/low-income--not-race-orlifestyle--is-the-greatest-threat-to-hea.html

# Risk Factors for Low-Income Nebraskans

The likelihood of having health insurance and a personal physician increases as income levels increase.

# Health Care Coverage

Approximately two of every five Nebraskans earning less than \$25,000 annually did not have health care coverage.



# Diabetes

2.3x

Nebraskans earning less than \$25,000 were most likely to have been diagnosed with diabetes (12.3%), a percentage 2.3 times higher than that of those earning over \$75,000 (5.4%).

### **Perceived Health Status**

Approximately 30% of individuals who earned less than \$25,000 annually perceived their health status as fair or poor.

Only 5% of individuals who earned more than \$75,000 annually perceived their health status as fair or poor.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015



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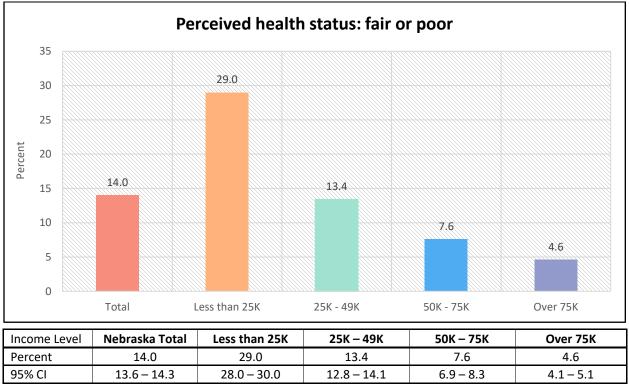
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### **Perceived Health Status**

Perceived health status was calculated by asking individuals if, in general, their health was excellent, very good, good, fair, or poor. Those who answered fair or poor are represented in the chart below.

#### **Key Disparities**

- While the statewide percentage of those who perceived their health status as fair or poor was 14%, over twice that proportion was reported by those with an income of less than \$25,000 annually (29%).
- Individuals with higher incomes were less likely to report their health status as fair or poor, with only 4.6% of those earning over \$75,000 being in fair or poor health, followed by 7.6% of those earning \$50,000-\$75,000.

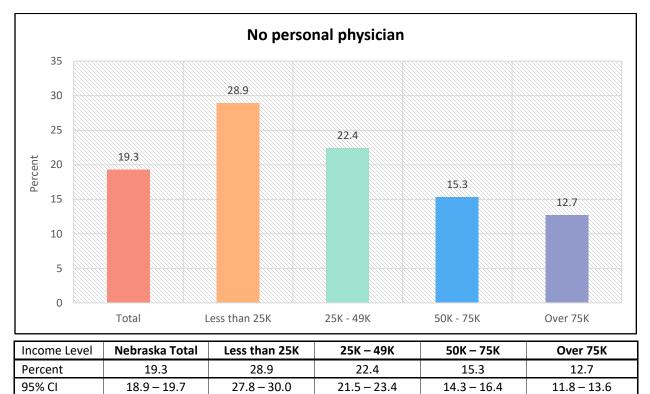


### **No Personal Physician**

Having no personal physician was defined as not having one person that the respondent thought of as a personal doctor or health care provider. Those without personal physicians are represented in the chart below.

#### **Key Disparities**

- The percentage of individuals without a personal physician decreased as annual income increased.
- The proportion of Nebraskans earning less than \$25,000 who did not have a personal physician (28.9%) was over twice that of those earning over \$75,000 (12.7%).

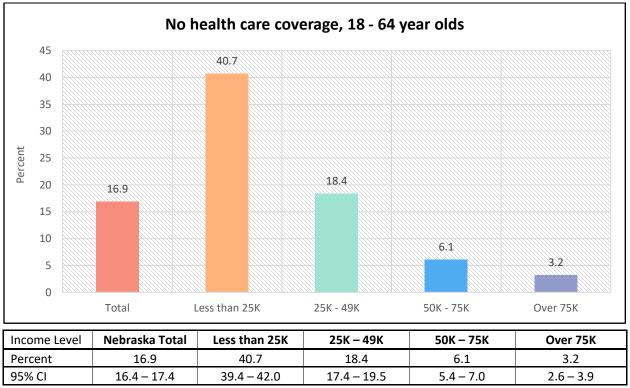


### **No Health Insurance**

Respondents were asked: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Services?

#### **Key Disparities**

- Approximately two-fifths (40.7%) of Nebraskans with an income of less than \$25,000 reported not having health care coverage, a proportion approximately 2.4 times greater than the statewide proportion of 16.9%.
- Those earning \$25,000-\$49,000 were still relatively likely to not have health coverage (18.4%), compared to only 6.1% of those earning \$50,000-\$75,000 and 3.2% of those earning over \$75,000.

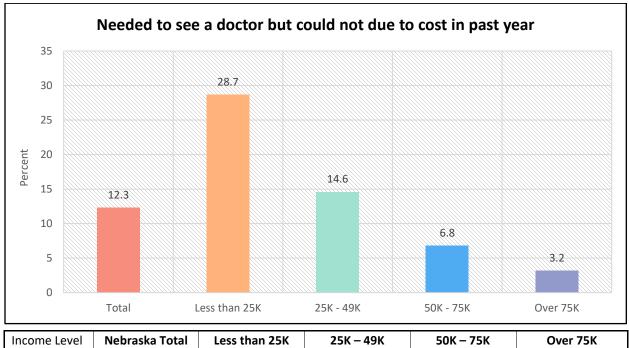


# Unable to See a Physician Due to Cost

Respondents were asked: Was there a time in the past 12 months when you needed to see a doctor, but could not because of cost?

#### **Key Disparities**

- Nebraskans with lower incomes were more likely to be unable to see a doctor due to cost in the past year. Of Nebraskans earning less than \$25,000, 28.7% were unable to see a doctor due to cost, over twice the proportion of the statewide percentage (12.3%).
- Individuals earning \$25,000-\$49,000 were second most likely to report being unable to see a doctor due to cost at 14.6%. This proportion was over twice that of those earning \$50,000-75,000 (6.8%) and approximately 4.6 times the proportion of those earning over \$75,000 (3.2%).



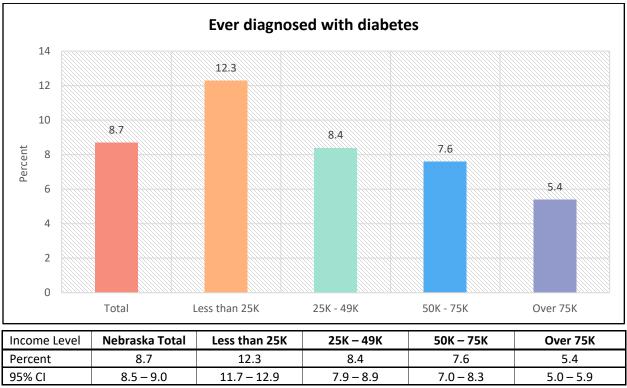
Income Level	Nebraska Total	Less than 25K	25K – 49K	50K – 75K	Over 75K
Percent	12.3	28.7	14.6	6.8	3.2
95% CI	12.0 - 12.7	27.7 – 29.8	13.8 – 15.4	6.1 – 7.5	2.7 – 3.7

### **Diabetes**

Respondents were asked: *Have you ever been told by a doctor that you have diabetes?* Females diagnosed only while pregnant is not included in the chart below.

#### **Key Disparities**

- Compared to the statewide percentage of 8.7%, the percentage of Nebraskans earning over \$25,000 who had ever been diagnosed with diabetes was somewhat lower. Those earning over \$75,000 were the least likely to have ever been diagnosed with diabetes at only 5.4%.
- Nebraskans earning less than \$25,000 were the most likely to have ever been diagnosed with diabetes (12.3%), a percentage 2.3 times higher than those earning over \$75,000 (5.4%).

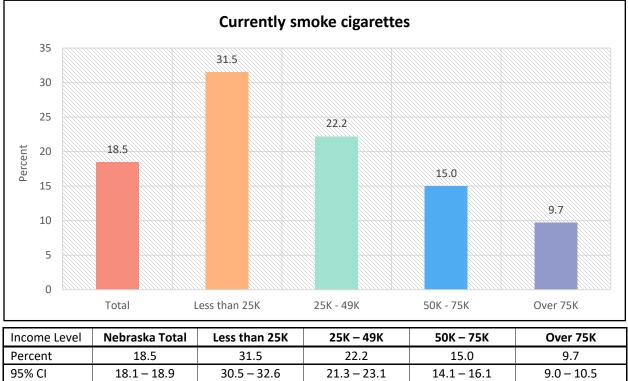


## **Current Cigarette Smoking**

The chart below represents the proportion of individuals who currently smoke cigarettes. This includes those who have smoked at least 100 cigarettes in their lifetime and currently smoke cigarettes every day or some days.

#### **Key Disparities**

- The likelihood that an individual currently smoked cigarettes decreased as annual income increased.
- Almost one-third of those earning less than \$25,000 (31.5%) reported currently smoking cigarettes, a proportion over three times higher than those earning over \$75,000 (9.7%).

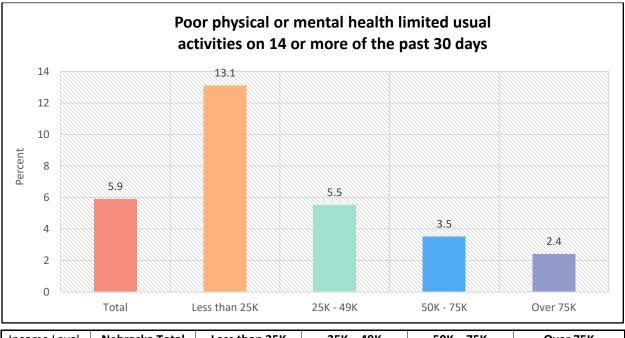


# **Activity Limitations**

Limitation in activities refers to a long-term reduction in an individual's ability to carry out activities. Those represented in the chart below responded that physical or mental health problems limited their activity on 14 or more days of the past 30 days.

#### **Key Disparities**

- Those with lower income levels were more likely to report having limited activity due to poor physical or mental health on 14 or more of the past 30 days, with 13.1% of those earning less than \$25,000 reporting accordingly.
- The proportion of Nebraskans with an annual income greater than \$25,000 that reported limitations in activities due to poor physical or mental health on 14 or more days in the past 30 days is less than the statewide proportion of 5.9%.
- Nebraskans earning over \$75,000 annually were the least likely to report limitations in activities due to poor physical or mental health on 14 or more of the past 30 days at only 2.4%.



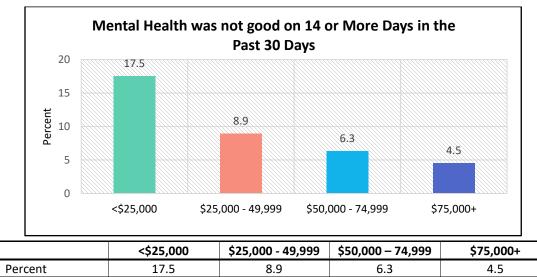
Income Level	Nebraska Total	Less than 25K	25К — 49К	50K – 75K	Over 75K
Percent	5.9	13.1	5.5	3.5	2.4
95% CI	5.7 – 6.2	12.4 – 13.9	5.1 – 5.9	3.0 - 4.1	2.1 - 2.9

# **Mentally Unwell**

Respondents were asked: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days in the past 30 days was your mental health was not good? Those represented in the chart below responded with 14 or more days.

#### **Key Disparities**

- The percentage of Nebraskan reported being mentally unwell on 14 days or more in the past 30 days decreases as the annual income earned increases.
- Nebraskans earning \$25,000 and lower reported the highest percentage of those being mentally unwell for 14 days or more in the past 30 days at 17.5%
- The lowest percentage of those being mentally unwell for 14 or more days in the past 30 days was reported by Nebraskans earning \$75,000 or more (4.5%), followed by those earning \$50,000-74,999 (6.3%) and \$25,000-49,999 (8.9%) annually.



8.3 – 9.6

5.6 - 7.0

3.9 – 5.1

16.6 - 18.3

95% CI

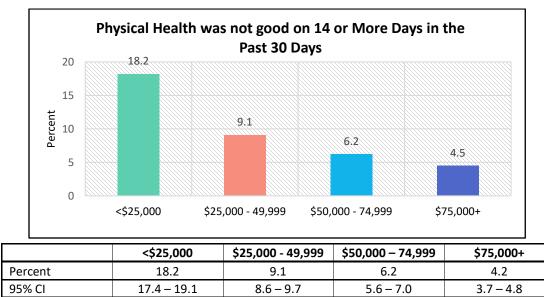
Source: Nebraska BRFSS 2011-2015

# **Physically Unwell**

Respondents were asked: *Thinking about your physical health, which includes physical illness and injury, for how many days in the past 30 days was your physical health not good?* Those represented in the chart below responded with 14 days or more.

#### **Key Disparities**

- The percentage of those being physically unwell for 14 days or more in the past 30 days declined as the annual income earned by Nebraskans increases.
- Nebraskans that earned less than \$25,000 annually reported the highest percentage of those being physically unwell for 14 days or more in the past 30 days at 18.2%.
- Nebraskans earning \$75,000 or more reported the lowest percentage of those being physically unwell for 14 days or more in the past 30 days.

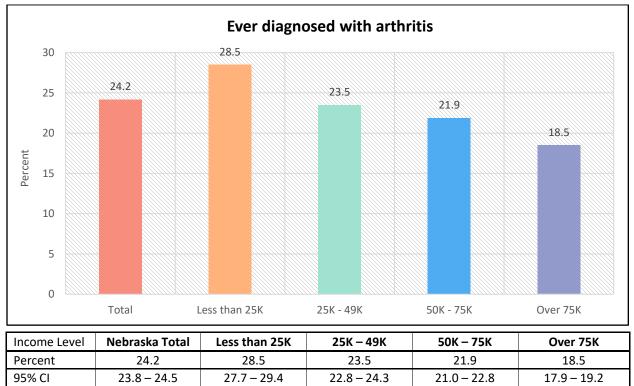


# Arthritis

Respondents were asked: Has a doctor, nurse, or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

#### **Key Disparities**

- Of Nebraskans with an income of less than \$25,000, 28.5% reported having ever been diagnosed with arthritis. This percentage was 1.5 times higher than that of those earning over \$75,000 (18.5%).
- Compared to the statewide proportion of 24.2%, those earning \$25,000-\$75,000 were slightly less likely to have ever been diagnosed with arthritis at approximately 22-23.5% of the population.

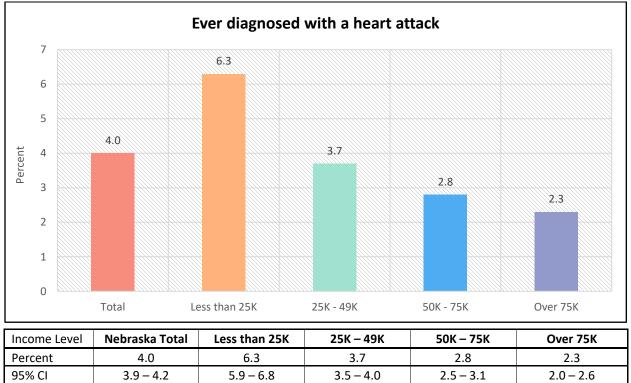


### **Heart Attack**

Respondents were asked: Has a doctor, nurse, or other health professionals ever told you that you had a heart attack, also called a myocardial infarction?

#### **Key Disparities**

- Nebraskans earning less than \$25,000 were the most likely to have ever been diagnosed with a heart attack at 6.3%, which was 1.6 times higher than the statewide proportion of 4.0%.
- Nebraskans with an income of more than \$75,000 (2.3%) were the least likely to have ever been diagnosed with a heart attack, followed closely by those earning \$50,000-\$75,000 at 2.8%.

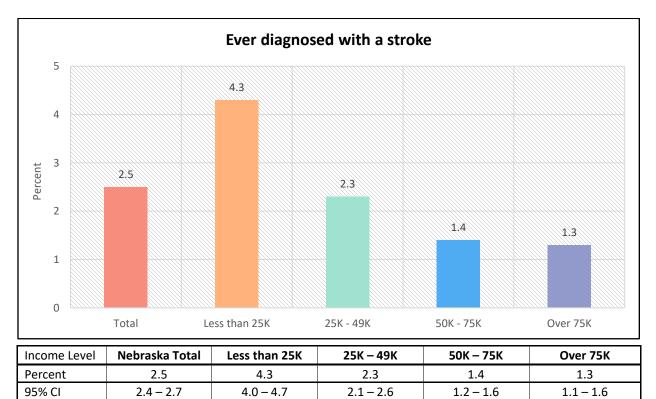


# Stroke

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you had a stroke?* 

#### **Key Disparities**

- The proportion of individuals diagnosed with a stroke decreased as annual income increased.
- Those earning less than \$25,000 were the most likely to have ever been diagnosed with a stroke at 4.3%, over three times the proportion of those earning over \$75,000 (1.3%).



# **Risk Factors for Less Educated Nebraskans**

Educational attainment and health are the two most important characteristics of human capital, both positively influencing productivity and improving individual well-being.<sup>100</sup> The relationship between health and education has three possible explanations: better health allows one to invest more in education, certain factors affect education and health in a similar manner, or education leads to better health. No matter the reason, it is clear the education and health are positively correlated, and thus, education is considered a social determinant of health.

Research has shown that individuals with higher educational attainment often live longer lives and have lower morbidity rates from common diseases.<sup>101</sup> The education level of adults has also been linked to the health of their children. For example, studies have reported that babies born to women who did not complete high school are almost twice as likely to die before the age of one compared to babies born to women who are high school graduates.<sup>102</sup> Lower education levels affect not only mortality and morbidity but have also been linked to poor health, more stress, and lower self-confidence.<sup>103</sup> Although life expectancy has been increasing overall, the gap in life expectancy between those with and without a college education continues to grow.

For the purposes of this report, only those indicators that demonstrated the disparities faced by individuals with lower educational attainment are presented.

<sup>&</sup>lt;sup>100</sup> Groot, W., & van den Brink, H. M. (2006). What does education do to our health? Measuring the effects of education on health and civic engagement. In Proceedings of the Copenhagen Symposium, Amsterdam, The Netherlands (Vol. 1).

<sup>&</sup>lt;sup>101</sup> Cutler, D. and Lleras-Muney, A. (2007). Education and health. Retrieved from http://www.npc.umich.edu/publications/policy\_briefs/brief9

<sup>102</sup> Robert Wood Johnson Foundation. (2011). Education and Health. Retrieved from: www.rwjf.org/content/dam/farm/reports/issue\_briefs/2011/rwjf70447

<sup>&</sup>lt;sup>103</sup> World Health Organization. (2013). The determinants of health. Retrieved from http://www.who.int/hia/evidence/doh/en/.

# Risk Factors for Less Educated Nebraskans

# Unable to See a Physician Due to Cost

Approximately 27% of Nebraskans with less than a high school education could not see a doctor due to cost within the past year, compared to 6% of Nebraskan college graduates.

### Diabetes

4.3x

.9x

Approximately 12% of Nebraskans with less than a high school education had diabetes, compared to only 6% of Nebraskan college graduates.

### **Heart Attack**

Approximately 7% of Nebraskans with less than a high school education had ever had a heart attack, compared to only 2.3% of Nebraskan college graduates.

# **Perceived Health Status**

Approximately 35% of Nebraskans with less than a high school education perceived their health status as fair or poor.

Only approximately 6% of Nebraskans who had completed college reported their health status as fair or poor.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





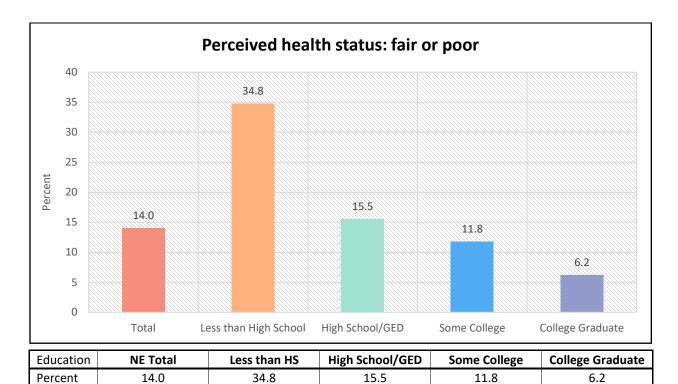
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## **Perceived Health Status**

Perceived health status was calculated by asking individuals if, in general, their health was excellent, very good, good, fair, or poor. Those who answered fair or poor are represented in the chart below.

#### **Key Disparities**

- The proportion of individuals who reported their health as fair or poor decreased, notably with higher educational attainment.
- Individuals with less than a high school education (34.8%) were most likely to report their health status as fair or poor. This proportion was over twice that of high school graduates (15.5%) who reported the same.



14.9 - 16.1

11.3 - 12.3

5.8 - 6.6

• Individuals with less than a high school education (34.8%) were approximately 5.6 times more likely than were college graduates (6.2%) to report being in fair or poor health.

Source: Nebraska BRFSS 2011-2015

13.6 - 14.3

33.1 - 36.7

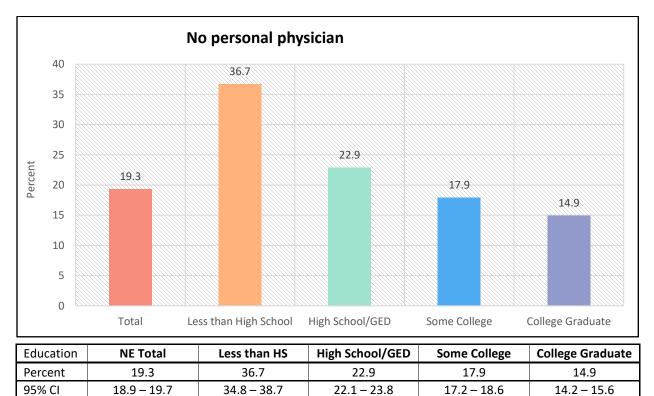
95% CI

### **No Personal Physician**

Having no personal physician was defined as not having one person thought of as a personal doctor or health care provider. Those who had no personal physician are represented in the chart below.

#### **Key Disparities**

- The percentage of individuals without a personal physician had an inverse relationship with educational attainment. The percentage of those with no personal physician decreased as educational attainment increased.
- Nebraskans with less than a high school education (36.7%) were most likely to have no personal physician. This percentage was 1.9 times greater than the statewide percentage of 19.3%.

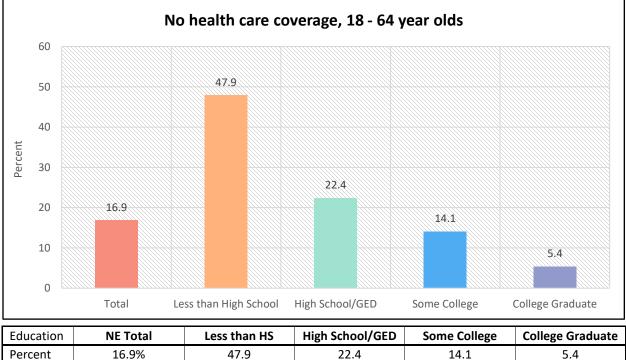


### **No Health Insurance**

Respondents were asked: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Services?

#### **Key Disparities**

- Almost half of the Nebraskans with less than a high school education (47.9%) reported not • having health care coverage, compared to just over one-fifth of high school graduates (22.4%).
- College graduates (5.4%) were the least likely to have no health care coverage, followed by individuals with some college (14.1%).



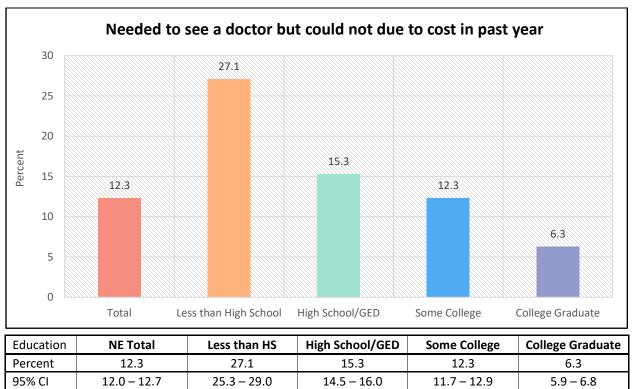
Education	NE Total	Less than HS	High School/GED	Some College	College Graduate
Percent	16.9%	47.9	22.4	14.1	5.4
95% CI	16.4 - 17.4	45.6 - 50.2	21.5 - 23.4	13.4 - 14.8	4.9 – 5.9
Source: Nobracl	C DDESS 2011 2015				

# Unable to See a Physician Due to Cost

Respondents were asked: Was there a time in the past 12 months when you needed to see a doctor, but could not because of cost?

#### **Key Disparities**

- The likelihood of not being able to see a doctor due to cost decreased with higher educational attainment.
- Nebraskans with less than a high school education (27.1%) were most likely to report being unable to see a doctor in the past year due to cost, a proportion over twice that of the overall Nebraska population (12.3%).
- High school graduates (15.3%) were second-most likely to report being unable to see a doctor due to cost, followed by individuals with some college (12.3%) and college graduates (6.3%).

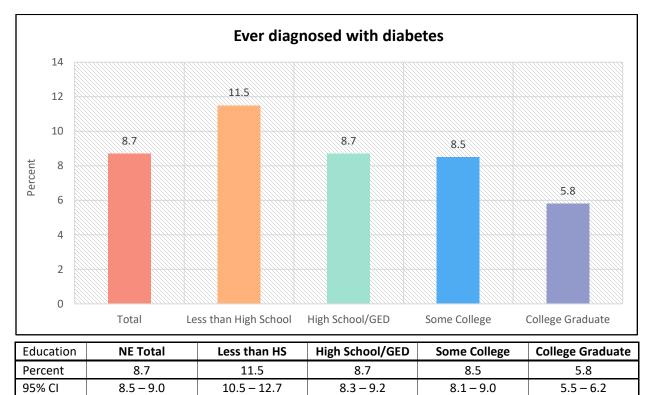


## **Diabetes**

Respondents were asked: *Have you ever been told by a doctor that you have diabetes?* Females diagnosed only while pregnant are excluded from the chart below.

#### **Key Disparities**

- Over one-tenth of those with less than a high school education (11.5%) reported having been diagnosed with diabetes, compared to only 5.8% of college graduates.
- High school graduates (8.7%) and individuals with some college (8.5%) reported proportions of those who had ever been diagnosed with diabetes similar to the proportion of the statewide population (8.7%).

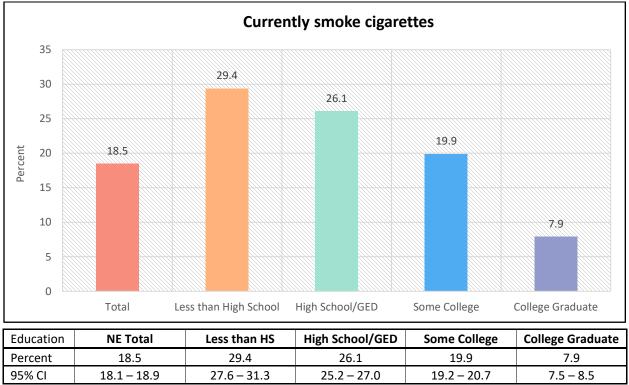


## **Current Cigarette Smoking**

Respondents were considered to be current cigarette smokers if they reported smoking at least 100 cigarettes in their lifetime and currently smoke cigarettes every day or some days.

#### **Key Disparities**

- Individuals with lower educational attainment levels were more likely to be current smokers, with those with less than a high school education being the most likely to currently smoke cigarettes (29.4%).
- Over one-fourth of high school graduates (26.1%) were current smokers, compared to approximately one-fifth of individuals with some college (19.9%) and less than one-tenth of college graduates (7.9%).

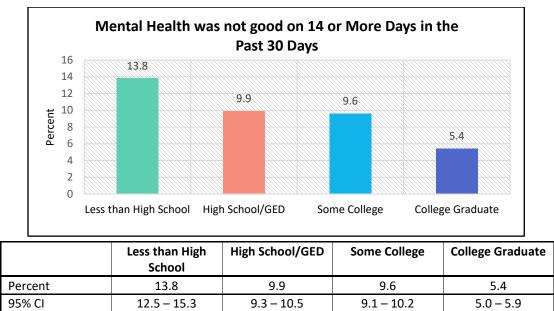


# **Mentally Unwell**

Respondents were asked: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days in the past 30 days was your mental health was not good? Those represented in the chart below responded with 14 or more days.

#### **Key Disparities**

- Nebraskan with less than high school education (13.8%) reported the highest percentage of those being mentally unwell for 14 or more days in the past 30 days.
- Nebraskan with high school education or GED (9.9%) were slightly more likely than those who attended college (9.6%) to report being mentally unwell for 14 or more days in the past 30 days.
- The highest percentage of respondents who reported being mentally unwell on 14 or more days in the past 30 days was reported by Nebraska college graduates (5.4).



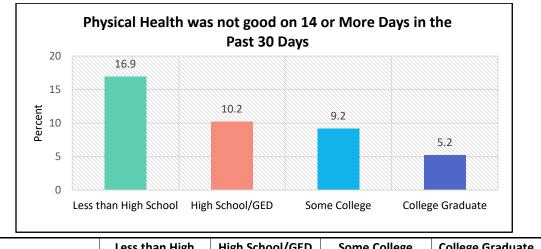
Source: Nebraska BRFSS 2011-2015

# **Physically Unwell**

Respondents were asked: *Thinking about your physical health, which includes physical illness and injury, for how many days in the past 30 days was your physical health not good?* Those represented in the chart below responded with 14 days or more.

#### **Key Disparities**

- Nebraskan with less than high school education (16.9%) reported the highest percentage of those being physically unwell for 14 or more days in the past 30 days.
- Nebraskan with high school education or GED (10.2%) were more likely than those who attended college (9.2%) to report being physically unwell for 14 or more days in the past 30 days.
- The highest percentage of respondents who reported being physically unwell on 14 or more days in the past 30 days was reported by Nebraska college graduates (5.2%).



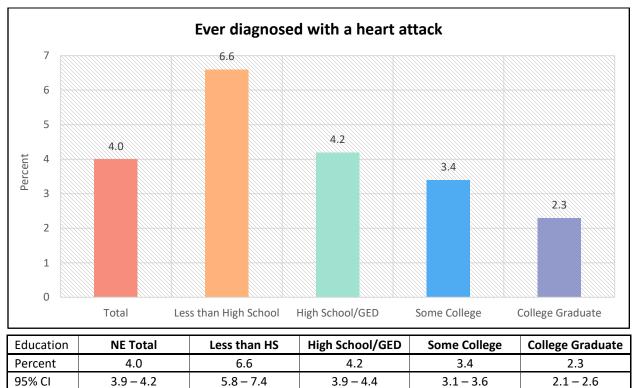
	Less than High School	Hign School/GED	Some College	College Graduate
Percent	16.9	10.2	9.2	5.2
95% CI	15.6 - 18.4	9.7 – 10.7	8.7 – 9.7	4.9 - 5.6

### **Heart Attack**

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?* 

### **Key Disparities**

- The likelihood of having ever had a heart attack was higher for those with lower levels of educational attainment.
- Nebraskans with less than a high school education (6.6%) were 2.9 times more likely than college graduates (2.3%) to have ever been diagnosed with a heart attack.
- Nebraskans who had some college education (3.4%) or who were college graduates (2.3%) were less likely than the overall Nebraska population (4.0%) to report having ever been diagnosed with a heart attack.



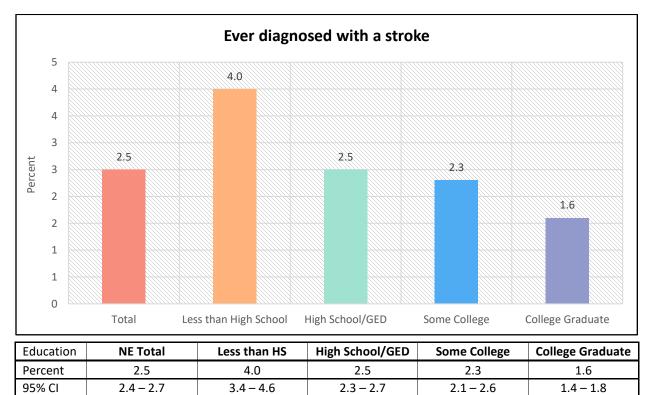
Source: Nebraska BRFSS 2011-2015

## Stroke

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you had a stroke?* 

### **Key Disparities**

- Nebraskans with lower educational attainment were more likely to have ever been diagnosed with a stroke. Nebraskans with less than a high school education were most likely to have ever been diagnosed with a stroke at 4%.
- Nebraskans with less than a high school education (4%) were 2.5 times more likely than were college graduates (1.6) to have ever been diagnosed with a stroke.



Source: Nebraska BRFSS 2011-2015

# **Risk Factors for Disabled Nebraskans**

A disability refers to any condition of the mind or body that makes it difficult for an individual to participate in certain activities or limits interactions with the world around them. As approximately 19% of the United States population is living with a disability, it is important to make sure the disabled population is not overlooked when considering health outcomes and disparities.<sup>104</sup>

Disabled individuals are less likely to have preventative care services, such as routine check-ups or cancer screenings. Disabled individuals are also more likely to have unhealthy behaviors such as cigarette smoking or inadequate physical activity.<sup>105</sup> However, the severity and overall health of disabled individuals often depends on the availability of assistive technology, the support of family and friends, and social, political, and cultural influences.<sup>106</sup>

While this chapter compares health outcomes between the disabled and non-disabled populations, it is important to remember that there are many types of disabilities, and the disabled population is diverse. Disabilities can affect an individual's thinking, vision, hearing, learning, movement, mental health, communication, or social relationships.<sup>107</sup> These disabilities can also be genetic or the result of an injury and, while some disabilities are progressive, many are static. This diversity is especially important to consider when creating interventions or programs intended to eliminate the disparities between the disabled and non-disabled populations.

For the purposes of this report, only those indicators that demonstrated disparities faced by disabled individuals are presented.

<sup>&</sup>lt;sup>104</sup> Brault, M.W. (2010). Americans with disabilities: 2010. Current Populations Report, July 2012, p. 70-131.

<sup>&</sup>lt;sup>105</sup> Healthy People 2020. (2017). Disability and health. Retrieved from www.healthypeople.gov/2020/topics-objectives/topic/disability-and-health

<sup>&</sup>lt;sup>106</sup> Centers for Disease Control and Prevention. (2017. Disability inclusion. Retrieved from www.cdc.gov/ncbddd/disabilityandhealth/disability-inclusion.html

<sup>&</sup>lt;sup>107</sup> Centers for Disease Control and Prevention. (2017). Disability overview. Retrieved from www.cdc.gov/ncbddd/disabilityandhealth/disability.html

# Risk Factors for Disabled Nebraskans



# Unable to See a Physician Due to Cost

Approximately one in five disabled Nebraskans were unable to see a physician due to cost, compared to one in ten Nebraskans without a disability.



### Heart Attack

Approximately 11% of the disabled population had ever been diagnosed with a heart attack, compared to only 2.3% of individuals without a disability.

# Depressive Disorder

X

4.7x



Over one-third of the disabled population had been diagnosed with depression, compared to only 13% of the non-disabled population.

# **Perceived Health Status**



Perceived health status is calculated by asking if, in general, individuals perceive their health as: excellent, very good, good, fair, or poor.

Approximately 40% of individuals with a disability reported their health as fair or poor, compared to only approximately 7% of individuals without a disability.

Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska BRFSS 2011-2015





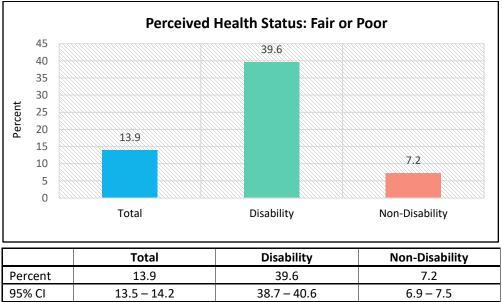
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### **Perceived Health Status**

Perceived health status was calculated by asking individuals if their health, in general, was excellent, very good, good, fair, or poor. Those who answered fair or poor are represented in the chart below.

### **Key Disparities**

- Approximately two out of every five disabled individuals (39.6%) perceived their health as fair or poor.
- The disabled population (39.6%) was 5.5 times more likely than the non-disabled population (7.2%) to rate their general health as fair or poor.



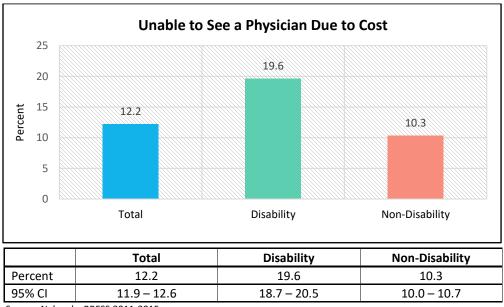
Source: Nebraska BRFSS 2011-2015

# Unable to See a Physician Due to Cost

Respondents were asked: Was there a time in the past 12 months when you needed to see a doctor, but could not because of cost?

### **Key Disparities**

• Approximately one in five disabled individuals (19.6%) was unable to see a physician due to cost, compared to only one in ten non-disabled individuals (10.3%).



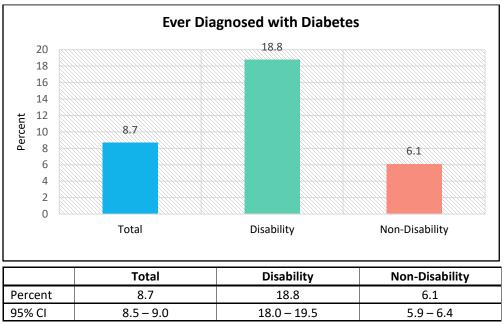
Source: Nebraska BRFSS 2011-2015

# **Diabetes**

Respondents were asked: *Have you ever been told by a doctor that you have diabetes?* Females diagnosed while pregnant are excluded from the chart below.

### **Key Disparities**

• The disabled population (18.8%) was approximately three times as likely to be diagnosed with diabetes in comparison to the non-disabled population (6.1%).



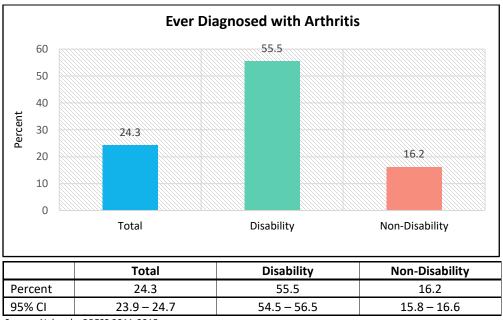
Source: Nebraska BRFSS 2011-2015

# Arthritis

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?* 

### **Key Disparities**

- Over half of the disabled population reported having ever been diagnosed with arthritis.
- Disabled individuals (55.5%) were 3.4 times more likely to have been diagnosed with arthritis than non-disabled individuals (16.2%).



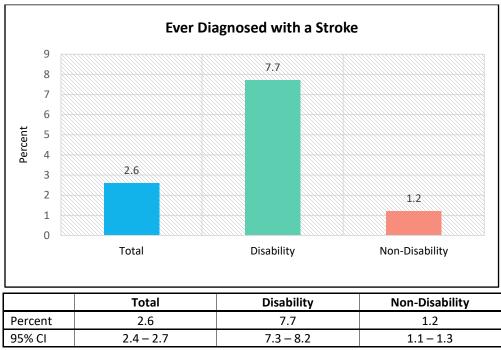
Source: Nebraska BRFSS 2011-2015

# Stroke

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you had a stroke?* 

### **Key Disparities**

• The disabled population (7.7%) was over six times more likely to be diagnosed with a stroke than the non-disabled population (1.2%).



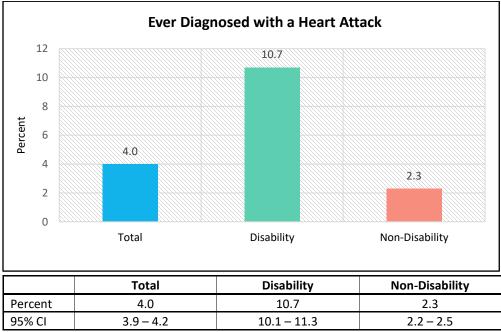
Source: Nebraska BRFSS 2011-2015

### **Heart Attack**

Respondents were asked: *Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?* 

### **Key Disparities**

- Approximately one in ten disabled individuals reported having ever been diagnosed with a heart attack.
- The disabled population (10.7%) was 4.7 times more likely to have been ever diagnosed with a heart attack than the non-disabled population (2.3%)



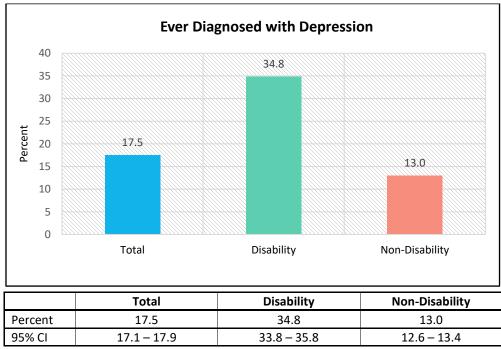
Source: Nebraska BRFSS 2011-2015

### **Depressive Disorder**

Respondents were asked: *Has a doctor or other healthcare provider ever told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?* 

### **Key Disparities**

• Over one-third of the disabled population (34.8%) had ever been diagnosed with depression, compared to only 13% of the non-disabled population.



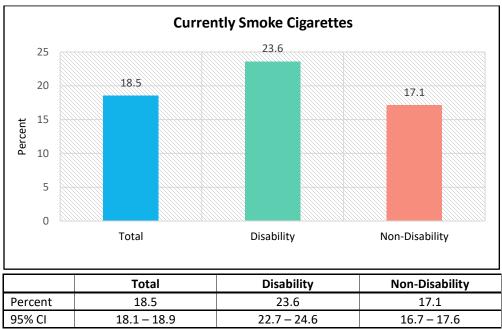
Source: Nebraska BRFSS 2011-2015

# **Current Cigarette Smoking**

Respondents were considered to be current cigarette smokers if they reported smoking at least 100 cigarettes in their lifetime and currently smoke cigarettes every day or some days.

### **Key Disparities**

• The disabled population (23.6%) was more likely to currently smoke cigarettes than the nondisabled population (17.1%).



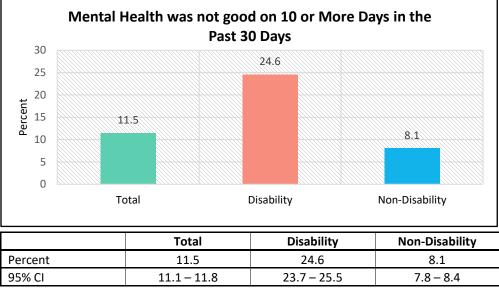
Source: Nebraska BRFSS 2011-2015

# **Mentally Unwell**

Respondents were asked: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days in the past 30 days was your mental health was not good? Those represented in the chart below responded with 10 or more days.

### **Key Disparities**

- A quarter of the disabled population reported to be mentally unwell on 10 or more days in the past 30 days.
- The disabled population (24.6%) was more likely than the non-disabled population (8.1%) to report being mentally unwell on 10 days or more in the past 30 days.



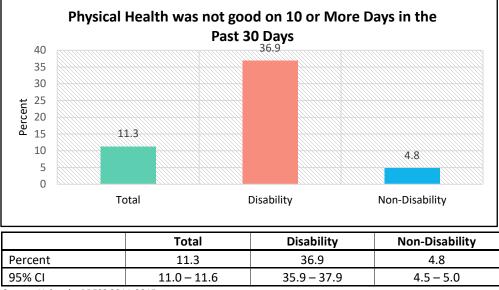
Source: Nebraska BRFSS 2011-2015

# **Physically Unwell**

Respondents were asked: *Thinking about your physical health, which includes physical illness and injury, for how many days in the past 30 days was your physical health not good?* Those represented in the chart below responded with 10 days or more.

### **Key Disparities**

- Just over one-third of disabled population reported being physically unwell on 10 or more days in the past 30 days.
- The disabled population (36.9%) was 7.7 times more likely than the non-disabled population (4.8%) to report being physically unwell on 10 or more days in the past 30 days.



Source: Nebraska BRFSS 2011-2015

# Needs and Risk Factors for Nebraska Refugee

According to Nebraska's Refugee Resettlement Program, a refugee is any person outside of his or her country of nationality who is unable or unwilling to return to that country due to persecution or fear of persecution based on race, religion, nationality, or membership of a particular social group or political opinion.<sup>108</sup> In the past decade, conflict and persecution have forced countless individuals from their homes, causing some of the highest levels of displacement on record.

Health status can affect educational attainment, employment, and economic stability. These elements are all interconnected and can impact one another both positively and negatively. Poor health, for example, can put education at risk by decreasing an individual's attendance or even concentration. Poor health may also make finding suitable employment difficult by limiting an individual's availability and ability to work. Unfortunately, refugees often face many barriers to accessing health care. Improving refugee access to quality health services is the first step towards helping refugees reach their full potential and the highest level of health possible.

In an effort to gain a deeper and more comprehensive understanding of the health needs of refugee communities in the state, the Nebraska Office of Health Disparities and Health Equity conducted its first statewide Refugee Needs Assessment Survey in 2017. A qualitative and quantitative mixed methods approach was used in this project. Qualitative research was first conducted through focus groups and task force meetings with refugee communities and partner organizations. These focus groups and task force meetings served to address survey strategies, including training and other logistics issues, and were fundamental to the creation of the statewide quantitative needs assessment.

Based on the Nebraska 2007-2016 Refugee Resettlement data, the needs assessment primarily targeted the top five refugee populations aged 18 and above from Burma, Bhutan, Iraq, Somalia, and Sudan. The survey contains both state-added questions and questions from the Centers for Disease Control and Preventions (CDC) Behavioral Risk Factor Surveillance System (BRFSS). More than 2,300 surveys were completed in Lincoln, Omaha, Grand Island, Lexington, and other cities and towns across Nebraska.

<sup>&</sup>lt;sup>108</sup> Nebraska Refugee Resettlement Program. (2017). Population definitions. Retrieved from http://dhhs.ne.gov/children\_family\_services/Pages/refugees\_definitions.aspx

# Needs and Risk Factors for Nebraska Refugee

# Limited English Proficiency

Approximately three-quarters of Nebraska refugees reported having limited English proficiency. Female refugees were more likely to have limited English proficiency than male refugees.





# No Health Care Coverage

Approximately 40% of Nebraska refugees reported having no health care coverage. Similar percentage were reported from both male and female refugees.

# Insufficient Sleep

Over one-half of Nebraska refugees reported having less than seven hours sleep daily. Male refugees were slightly more likely than female refugees to report having insufficient sleep.

# **Biggest Challenges and Needs**

Almost three-quarters of Nebraska refugees reported language barriers as their biggest challenge in navigating the new health care system.

One-third of Nebraska refugees reported health care as their most urgent needs, whereas approximately a quarter of them reported education as their most urgent need.



Office of Health Disparities and Health Equity Division of Public Health Nebraska Department of Health and Human Services Source: Nebraska Needs Assessment Survey 2017





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# **Biggest Challenges**

The challenges faced by refugees change as the length of their stay in the United States increases. The chart below represents the biggest challenges of refugees by year of arrival.

### **Key Findings**

- For all groups, language barriers were the top challenge faced by refugees. However, this percentage was less for those who arrived in 2008 and earlier (61.9%) than for those who had arrived in the most recent timeframe (80.2%).
- Documentation and bill pay was the second biggest challenge for refugees arriving in 2011, and earlier while navigating and understanding U.S. systems was the second biggest challenge for refugees arriving in 2012-2017.
- Access to health services appeared among the top five biggest challenges of each group, with refugees arriving in 2012-2014 reporting it as the fourth biggest challenge and all other refugee groups reporting it as the fifth biggest challenge.
- Transportation issues also appeared among the top five biggest challenges for each group.

#### 2008 and Earlier: Top Five Biggest Challenges

Rank	Biggest Challenge	Percent
1	Language Barriers	61.9%
2	Documentation and Bill Pay	14.6%
3	Navigating & Understanding U.S. Systems	12.7%
4	Transportation Issues	10.4%
5	Access to Health Services	8.3%

#### 2009-2011: Top Five Biggest Challenges

Rank	Biggest Challenge	Percent
1	Language Barriers	77.4%
2	Documentation and Bill Pay	9.2%
3	Navigating & Understanding U.S. Systems	8.0%
4	Transportation Issues	5.7%
5	Access to Health Services	5.2%

#### 2012-2014: Top Five Biggest Challenges

Rank	Biggest Challenge	Percent
1	Language Barriers	74.2%
2	Navigating & Understanding U.S. Systems	14.7%
3	Documentation and Bill Pay	13.9%
4	Access to Health Services	8.4%
5	5 Transportation Issues	

#### 2015-2017: Top Five Biggest Challenges

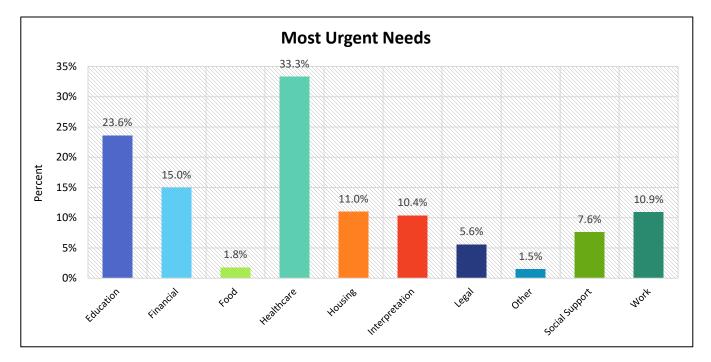
Rank	Biggest Challenge	Percent
1	Language Barriers	80.2%
2	Navigating & Understanding U.S. Systems	12.7%
3	Transportation Issues	9.0%
4	Documentation and Bill Pay	8.4%
5	5 Access to Health Services	

# **Most Urgent Needs**

The chart below represents the most urgent needs reported by refugees surveyed.

#### **Key Findings**

- Healthcare and education were the most urgent needs reported by refugees surveyed. Approximately one-third of refugees surveyed (33.3%) reported healthcare as one of their most urgent needs, and just under one-fourth of refugees surveyed (23.6%) reported education as one of their most urgent needs.
- Financial needs (15.0%) were the third most often cited urgent need of refugees surveyed, followed by housing (11.0%), work (10.9%), and interpretation (10.4%).
- Other urgent needs included social support (7.6%), legal needs (5.6%), and food (1.8%).



### **Most Urgent Needs**

The chart below represents the most urgent needs of refugees by year of arrival.

#### **Key Findings**

- Healthcare was the utmost urgent need, with approximately 30-40% of each group reporting it as an urgent need.
- Education was the second most reported urgent need among all refugee groups.
- While interpretation was the third most reported urgent need among refugees arriving in 2012-2017, it was the fifth most urgent need for those arriving in 2009-2011 and did not make the top five most urgent needs for those arriving in 2008 and earlier.
- Work was also among the top five most urgent needs for refugees arriving in 2014 and earlier.

Rank	Most Urgent Need	Percent	Rank	Most Urgent Need
1	Healthcare	29.1%	1	Healthcare
2	Education	23.8%	2	Education
3	Financial	21.4%	3	Work
4	Housing	15.4%	4	Financial
5	Work	13.5%	5	Interpretation

#### 2008 and Earlier: Top Five Most Urgent Needs

#### 2012-2014: Top Five Most Urgent Needs

**Most Urgent Need** 

#### 2015-2017: Top Five Most Urgent Needs

2009-2011: Top Five Most Urgent Needs

Percent 37.0% 19.2% 12.5% 11.8% 8.2%

Percent	Rank	Most Urgent Need	Percent
36.5%	1	Healthcare	30.3%
26.5%	2	Education	24.8%
12.3%	3	Interpretation	16.1%
12.1%	4	Housing	15.6%
9.5%	5	Financial	10.6%

Source: Nebraska Needs Assessment Survey 2017

Healthcare

Education

Work

Interpretation Financial

1 2

3

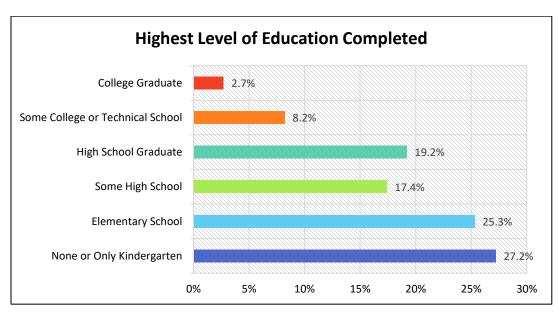
4 5

# **Educational Attainment**

Education has long been positively associated with health. Individuals with higher educational attainment live longer and are generally healthier than are those with fewer years of schooling.

The chart below represents the highest level of education completed by refugees surveyed.

- Over one-fourth of refugees surveyed (27.2%) reported never received a formal education or only attended kindergarten or its equivalent.
- Just over one-fourth of refugees surveyed (25.3%) reported having completed elementary school.
- Approximately 30% of refugees surveyed reported having graduated high school. Of those who had graduated high school, 19.2% had only completed high school, 8.2% had completed some college or technical school, and 2.7% were college graduates.



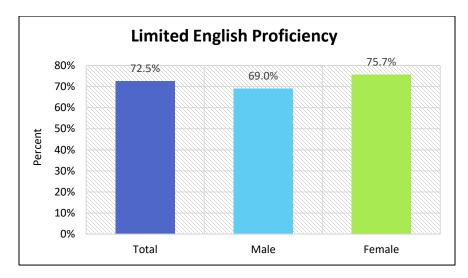
Source: Nebraska Needs Assessment Survey 2017

# **Limited English Proficiency**

In Nebraska, English language knowledge is often essential in navigating the health care system. Research has shown that those with limited English proficiency are more likely to have difficulty understanding medical situations, more likely to have trouble understanding labels, and more likely to have adverse reactions to medications.<sup>109</sup>

The chart below represents the proportion of refugees with limited English proficiency. Refugees considered to have limited English proficiency are those who reported speaking English "not well" or "not at all."

- Approximately 73% of refugees surveyed reported speaking English "not well" or "not all."
- Female refugees (75.7%) were slightly more likely to report limited English proficiency than were male refugees (69.0%).



Source: Nebraska Needs Assessment Survey 2017

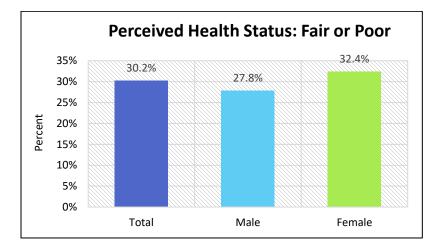
<sup>&</sup>lt;sup>109</sup> Wilson, E., Chen, A.H., Grumbach, K., Wang, F., & Fernandez, A. (2005). Effects of limited English proficiency and physician language on health care comprehension. *Journal of General Internal Medicine*, *20*, 800–806.

### **Perceived Health Status**

A study conducted in Canada found that refugees who had arrived in the past 12 months reported high levels of self-perceived physical and mental health. However, the report concluded that these high levels of self-perceived physical and mental health reported during the first year after resettlement was perhaps in part due to initial resettlement services and support, as well as the provided short-term healthcare.<sup>110</sup> Another study conducted with Iraqi immigrants and refugees in the United States established that both pre- and post-resettlement factors could influence current perceived health status.<sup>111</sup> Pre-resettlement factors can include an individual's exposure to trauma and environment stressors, while post-resettlement factors can include such stressors as unemployment.

The chart below represents the proportion of refugees who considered their health to be "fair" or "poor."

- Approximately 30% of refugees surveyed perceived their health status as fair or poor.
- Almost one-third (32.4%) of female refugees perceived their health status as fair or poor. Male refugees (27.8%) were slightly less likely to perceive their health status as fair or poor.



Source: Nebraska Needs Assessment Survey 2017

<sup>&</sup>lt;sup>110</sup> Oda, A., Tuck, A., Agic, B., Hynie, M., Roche, B., & Kwame, M. (2017). Health care needs and use of health services among newly arrived Syrian refugees: a cross sectional study. *Canadian Medical Association Journal, 5(2),* E354-E358.

<sup>111</sup> Jamil, H., Nassar-McMillan, S., Lambert, R., Wang, Y., Ager, J., & Arnetz, B. (2010). Pre- and post-displacement stressors and time of migration as related to self-rated health among Iraqi immigrants and refugees in Southeast Michigan. *Medicine, Conflict and Survival, 26(3),* 207-222.

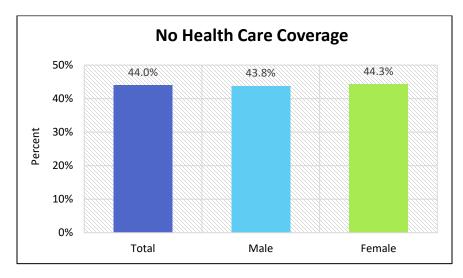
# No Health Care Coverage

Lack of a health care plan or inadequate insurance coverage prevents many individuals from receiving needed care, as they are financially unable to pay for services without the help of insurance. Individuals with health insurance are generally more likely to have a primary care provider and to have received appropriate preventative care, such as early prenatal care, immunizations, or health screenings.

The chart below represents the proportion of refugees surveyed who reported having no health care coverage.

#### **Key Findings**

- Over two-fifths (44.0%) of refugees surveyed reported having no health care coverage.
- Similar percentages of male refugees (43.8%) and female refugees (44.3%) reported having no health care coverage.



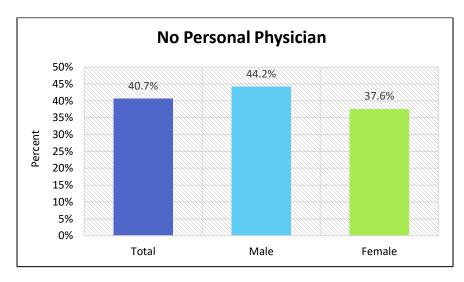
### **No Personal Physician**

Including various specialties in the medical profession, primary care physicians provide a combination of direct care and, as necessary, counsel the patient in the appropriate use of specialists and treatments. Individuals with a medical home are more likely to have routine medical visits and health screenings.<sup>112</sup>

The chart below represents the proportion of refugees surveyed who reported having no personal physician.

### **Key Findings**

- Just over two-fifths (40.7%) of refugees surveyed reported having no personal physician.
- Male refugees (44.2%) were more likely to report having no personal physician, compared to female refugees (37.6%).



<sup>&</sup>lt;sup>112</sup> National Institutes of Health. (2015). Choosing a primary care provider. Retrieved from https://medlineplus.gov/ency/article/001939.htm

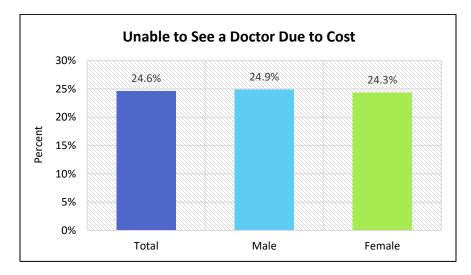
### Unable to See a Doctor Due to Cost

For people with no insurance and limited financial resources, the decision of whether or not to see a doctor is often a financial choice rather than a medical one. Even when health benefits are available, they may not be sufficient to ensure access to needed health care services. Individuals with health insurance may still be confronted with significant financial hardships in paying for or obtaining health services or products.

The chart below represents the proportion of refugees surveyed who reported being unable to see a doctor due to cost in the past 12 months.

#### **Key Findings**

- Approximately one-fourth of all refugees surveyed (24.6%) reported being unable to see a doctor due to cost in the past 12 months.
- Similar proportions of male refugees (24.9%) and female refugees (24.3%) reported being unable to see a doctor due to cost in the past 12 months.

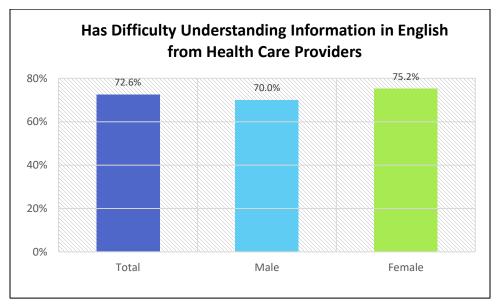


# **Understanding Health Information**

Health literacy is defined as "the degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions."<sup>113</sup> Having the ability to understand spoken health information in English is essential to receiving necessary and adequate health services in Nebraska.

The chart below represents the proportion of refugees who reported having difficulty understanding spoken health information in English. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand information in English from health care providers.

- Just under three-fourths of refugees surveyed (72.6%) reported having difficulty understanding information in English from health care providers.
- Female refugees (75.2%) were approximately five percentage points more likely than were male refugees (70.0%) to report having difficulty understanding information in English from health care providers.



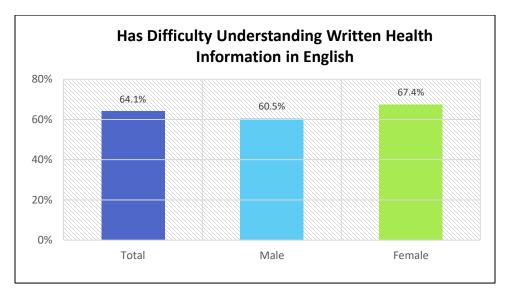
Source: Nebraska Needs Assessment Survey 2017

<sup>&</sup>lt;sup>113</sup> Title V of the Patient Protection and Affordable Care Act, 42 U.S.C. § 5002 (2010).

# **Understanding Written Health Information**

The chart below represents the proportion of refugees who reported having difficulty understanding written health information in English. Refugees were considered to have difficulty if they responded that it was "somewhat difficult" or "very difficult" to understand written health information in English.

- Approximately 64% of refugees surveyed reported having difficulty understanding written health information in English.
- Female refugees (67.4%) were approximately seven percentage points more likely than were male refugees (60.5%) to report having difficulty understanding written health information in English.

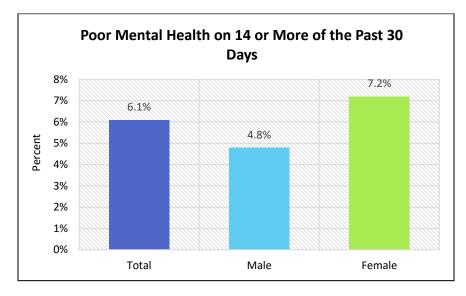


Source: Nebraska Needs Assessment Survey 2017

## **Poor Mental Health**

The chart below represents the proportion of refugees who reported that their mental health was not good on 14 or more the past 30 days.

- Of all refugees surveyed, 6.1% reported that their mental health was not good on 14 or more of the past 30 days.
- Female refugees (7.2 %) were 1.5 times more likely than were male refugees (4.8%) to report poor mental health on 14 or more of the past 30 days.



Source: Nebraska Needs Assessment Survey 2017

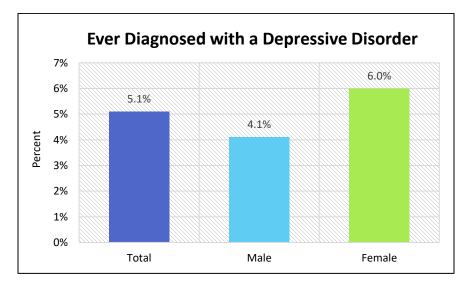
### **Depressive Disorder**

Depressive disorders are often characterized by feelings of sadness and hopelessness, though individuals with a major depressive disorder may also experience loss of interest in activities, changes in weight or activity, insomnia, and difficulties concentrating. Depression is a major cause of illness and injury worldwide for both men and women. If not treated, individuals with depression face a higher risk of suicide, heart disease, and other mental disorders.<sup>114</sup>

The chart below represents the proportion of refugees who reported having ever been diagnosed with a depressive disorder.

### **Key Findings**

- Approximately 5% of refugees surveyed reported having ever been diagnosed with a depressive disorder.
- Female refugees (6.0%) were 1.5 times more likely than were male refugees (4.1%) to report having ever been diagnosed with a depressive disorder.



<sup>&</sup>lt;sup>114</sup> Centers for Disease Control and Prevention. (2016). Depression. Retrieved from www.cdc.gov/mentalhealth/basics/mental-illness/depression.htm

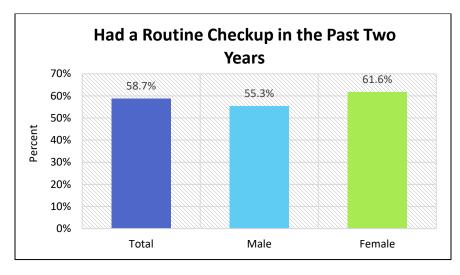
# **Routine Checkup**

Routine checkups are helpful in finding problems before they become a cause for concern. Finding problems earlier makes the chance for treatment better. Scheduling regular checkups with a physician is an important step in maintaining a long, healthy life.

The chart below represents the proportion of refugees surveyed who reported having had a routine checkup in the past two years.

#### **Key Findings**

- Approximately 59% of refugees surveyed reported having had a routine checkup in the past two years.
- Female refugees (61.6%) were more likely than were male refugees (55.3%) to report having had a routine checkup in the past two years.



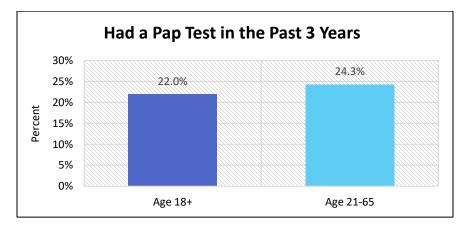
### **Pap Test**

The American Cancer Society recommends that women begin receiving a Pap test, a screening procedure for cervical cancer, at age 21.<sup>115</sup> Women should continue to get a Pap test every three to five years until age 65.

The chart below represents the proportion of female refugees surveyed (age 21 to 65) who reported having had a Pap test in the past three years.

#### **Key Findings**

• Just under one-fourth of female refugees ages 21 to 65 (24.3%) reported having had a pap test in the past three years.



<sup>&</sup>lt;sup>115</sup> American Cancer Society. (2018). The American Cancer Society guidelines for the prevention and early detection of cervical cancer. Retrieved from www.cancer.org/cancer/cervical-cancer/prevention-and-early-detection/cervical-cancer-screening-guidelines.html

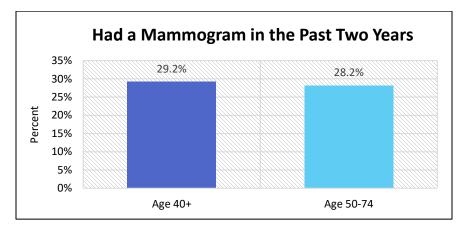
### Mammogram

A mammogram is x-ray of the breast used to look for signs of breast cancer. The American Cancer Society recommends that women age 45 and older should get mammograms every one or two years and women ages 40 to 44 should have the choice to start annual mammograms.<sup>116</sup>

The chart below represents the proportion of female refugees surveyed (age 40 and older) who reported having had a mammogram in the past two years.

#### **Key Findings**

• Approximately 29% of female refugees ages 40 and older reported having had a mammogram in the past two years.



<sup>&</sup>lt;sup>116</sup> American Cancer Society. (2018). American Cancer Society Guidelines for the early detection of cancer. Retrieved from www.cancer.org/healthy/find-cancer-early/cancerscreening-guidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer.html

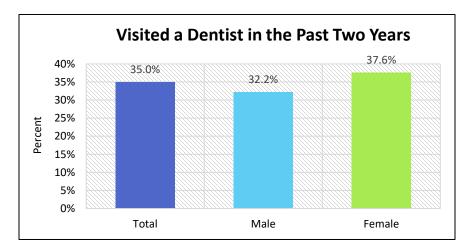
### Dentist

Regular visits to the dentist are an important part of maintaining good oral health. Several of the most common oral health problems include untreated tooth decay (cavities) and gum disease. In fact, it has been reported that more than one in four adults in the United States have untreated tooth decay.<sup>117</sup> While factors such as aging and chronic disease can increase the chance of poor oral health, visiting a dentist on a regular basis can help to decrease and prevent the likelihood of oral health problems in the future.

The chart below represents the proportion of refugees surveyed who reported having visited a dentist in the past two years.

### **Key Findings**

- Of all refugees surveyed, 35.0% reported having visited a dentist in the past two years.
- Female refugees (37.6%) were approximately five percentage points more likely than were male refugees (32.2%) to report having visited a dentist in the past two years.



<sup>&</sup>lt;sup>117</sup> Centers for Disease Control and Prevention. (2015). Dental Caries and Tooth Loss in Adults in the United States, 2011-2012. Retrieved from www.cdc.gov/nchs/data/databriefs/db197.htm

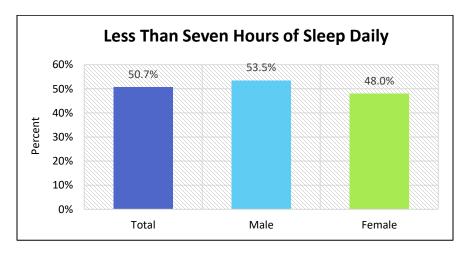
## **Insufficient Sleep**

Insufficient sleep has been linked to numerous chronic diseases, including diabetes, obesity, depression, and cardiovascular disease.<sup>118</sup> Additionally, insufficient sleep can be responsible for motor vehicle crashes, causing considerable injury each year.

The chart below represents the proportion of refugees surveyed who reported sleeping less than seven hours daily.

#### **Key Findings**

- Just over half of all refugees surveyed (50.7%) reported sleeping less than seven hours daily.
- Male refugees (53.5%) were somewhat more likely than were female refugees (48.0%) to report sleeping less than seven hours daily.



<sup>&</sup>lt;sup>118</sup> Centers for Disease Control and Prevention. (2016). Sleep and sleep disorders. Retrieved from www.cdc.gov/sleep/index.html

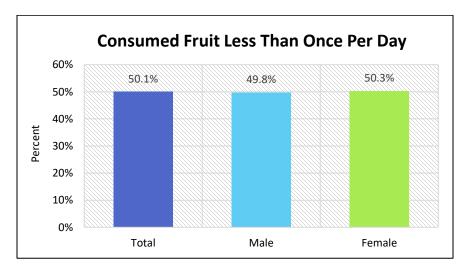
### **Fruit Consumption**

Diets high in fruits and vegetables can reduce the risk of cancer and chronic disease.<sup>119</sup> Fruits and vegetables are a good source of essential vitamins and minerals. They also provide fiber, while remaining low in fat and calories. Half of one's dinner plate should consist of fruits and vegetables.

The chart below represents the proportion of refugees surveyed who reported eating fruit less than once daily.

#### **Key Findings**

- Half of the refugees surveyed (50.1%) reported consuming fruit less than once per day.
- Similar proportions of male (49.8%) and female refugees (50.3%) reported consuming fruit less than once daily.



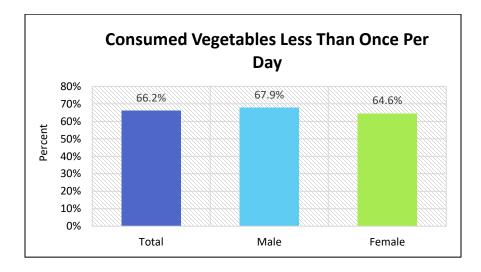
<sup>&</sup>lt;sup>119</sup> Centers for Disease Control and Prevention. (2015). Adults meeting fruit and vegetable intake recommendations. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm

# **Vegetable Consumption**

In the United States, only 9.3% of adults meet the recommendation for daily vegetable intake.<sup>120</sup> This number is much higher among refugees.

The chart below represents the proportion of refugees surveyed who reported eating vegetables less than once daily.

- Approximately two-thirds (66.2%) of refugees surveyed reported consuming vegetables less than once daily.
- Male refugees (67.9%) were more likely than were female refugees (64.6%) to report consuming vegetables less than once per day.



<sup>&</sup>lt;sup>120</sup> Centers for Disease Control and Prevention. (2018). State indicator report on fruits and vegetables. Retrieved from www.cdc.gov/nutrition/downloads/fruits-vegetables/2018/2018-fruit-vegetable-report-508.pdf

# Conclusion

Health disparities result from a complex interplay of genetics, individual behavior, socioeconomic status, environment, and access to health care. While health disparities are often examined through race and ethnicity, they also occur across gender, income level, educational attainment, immigration status, language, and disability status.

It is essential to recognize the changing demographics in Nebraska and the effects they have across all dimensions of our society. Nebraska has seen shifting immigration patterns and continuous growth among minority populations in recent decades. The Hispanic and Asian populations are currently the fastest growing in Nebraska. Both of these populations were more likely than Whites to be living in poverty, and both were well over twice as likely as Whites to have not completed high school. As Nebraska becomes increasingly diverse, it is imperative to work towards eliminating health disparities among all populations.

Although there is still much work to be done, Nebraska has seen progress on numerous health indicators among racial and ethnic minorities in past years. For instance, chronic disease mortality rates for particular populations declined steadily over the past 15 years. The African American population saw a consistent decline in heart disease mortality, and the African American, American Indian, and Hispanic populations all saw declines in diabetes mortality. Progress was also made in maternal, infant, and child health. The American Indian, Hispanic, and African American populations reported a decrease in the teen birth rate. Additionally, the American Indian and African American populations reported a decrease in infant mortality rate over the past 15 years.

Despite the progress made, disparities between racial and ethnic minorities and the White population persist. Though African Americans saw a consistent decline in heart disease mortality, the rate was still higher than that of Whites. The diabetes mortality rate of African Americans and American Indians also remains well above that of Whites, despite the decline seen in diabetes mortality among minority populations. Additionally, though the teen birth rate among American Indians, Hispanics, and African Americans decreased significantly, that rate continues to be notably higher than that of Whites.

Disparities are particularly visible when examining minority access to health care. Almost half of the Hispanic population had no health care coverage, and the African American population was more than twice as likely as the White population to have no health care coverage. African Americans, Hispanics, and American Indians were all more than twice as likely as Whites to be unable to see a physician due to cost. The African American, American Indian, Asian, and Hispanic populations were all less likely to have a personal physician than the White population.

Lifestyle choices also play an important role in preventing certain diseases. As minority populations often see disparities in indicators related to prevention, promoting healthy behaviors is an essential component of achieving health equity. All minority populations were more likely to have no leisure-time physical activity than Whites, and all, except the Asian population, were more likely than Whites to be overweight or obese. African Americans and Hispanics were less likely to have had a flu shot in the past year and Hispanics were less likely to have had a routine check-up in the past year than Whites.

An increasing number of Nebraska's minority and White populations are immigrants and may have limited English proficiency. These populations often face additional barriers to accessing health care. The foreign-born population was over three times as likely as the native-born population to have no health insurance. The limited English-speaking population was over twice as likely as the English proficient population to have no health insurance. Additionally, both the foreign-born population and the limited English-speaking population were notably more likely to perceive their health status as fair or poor than the native-born population and English proficient population, respectively.

Social determinants of health, such as socioeconomic status and educational attainment, also have a substantial impact on an individual's health. In general, individuals with higher incomes and education levels report better health outcomes. Nebraskans in the lowest income bracket were over six times as likely to report their health as fair or poor, compared to Nebraskans in the highest income bracket. Nebraskans who did not finish high school were over five times as likely as college graduates to report their health as fair or poor. Nebraskans with higher incomes and higher education levels were also less likely to have ever been diagnosed with diabetes, a heart attack, or a stroke.

Disability is another major determinant of health and affects every community. Though the disabled population is exceedingly diverse, substantial disparities can be seen between those with and without disabilities. The disabled population is more likely to be unable to see a physician due to cost and over twice as likely as the non-disabled population to perceive their health as fair or poor. Additionally, over one-third of the disabled population reported having a depressive disorder.

Identifying and understanding where disparities exist is the first step towards achieving health equity. Addressing health disparities will require a multifaceted approach and the combined efforts of communities, health care providers, partner organizations, and government agencies across various sectors. Through the acknowledgment of the barriers faced by particular populations and the elimination of disparities, we can ensure that every individual has an equal and fair opportunity to be healthy.



Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES