

Nebraska Health Data Reporter

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Health Status of Nebraskans

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Executive Summary

This Data Reporter describes how the health of Nebraska residents compares to national objectives and data in measures of public health. We use the most recent data available along with historical data to show trends. We compare the United States and Nebraska, and within Nebraska, we compare rural and urban areas and racial and ethnic minority population groups.

Key Findings

Nebraska rates are better than national rates in the following:

- Mental health problems Nebraska 25% U.S. 34%
(percentage of population reporting symptoms)
- Heart disease mortality rate Nebraska 215 U.S. 248
(per 100,000)

Nebraska rates are worse than national rates in the following:

- Adolescent tobacco use Nebraska 31% U.S. 29%
- Adolescent alcohol use Nebraska 83% U.S. 78%

Nebraska's rural/urban areas differ significantly in the following:

- Mental health problems Rural 22% Urban 28%
(percentage of population reporting symptoms)
- Cancer mortality rate Rural 179 Urban 198
(per 100,000)
- Heart disease mortality rate Rural 222 Urban 202
(per 100,000)
- Diabetes mortality rate Rural 19 Urban 23
(per 100,000)
- Primary care providers Rural 61 Urban 78
(per 100,000)
- People who have lost Rural 21% Urban 13%
six or more teeth
- People with dental Rural 45% Urban 63%
insurance

Nebraska minority groups differ significantly among one another, and when compared to the state as a whole, in the following:

- Mental health problems NE 25% African American 44% Hispanic 19%
(percentage of population reporting symptoms)
- Regular physical activity NE 34% African American 48% Hispanic 28%
- Health insurance Nebraska 88% Hispanic 63%
- Having a personal doctor Nebraska 86% Hispanic 60%
or health care provider

Leading Health Indicators

The Leading Health Indicators that we discuss in this section are from *Healthy People 2010*, a publication of the U.S. Department of Health and Human Services that includes objectives for each Leading Health Indicator along with data to indicate the status of each objective. The Leading Health Indicators were selected because of their relevance to public policies, the availability of data to measure progress, and their importance as public health issues. These ten Leading Health Indicators reflect the major health concerns in the United States at the beginning of the 21st century.

In this section, we describe the status of these Leading Health Indicators in Nebraska. We compare Nebraska and the nation, rural and urban areas in Nebraska, and White and minority people in Nebraska.

Notes to Tables 1, 2, and 3

Physical Activity

The percentage of people aged 18 and over who engaged in 20 minutes of vigorous physical activity three or more times per week and/or 30 minutes of moderate physical activity five or more times per week

Overweight and Obesity

Overweight: The percentage of students in grades 9 through 12 (adolescents) and the percentage of people aged 18 and over (adults) whose body mass index is greater than or equal to 25 and less than 30 (body mass index equals weight in kilograms divided by height in meters squared, or weight in pounds divided by height in inches squared, multiplied by 703). For example, a person who weighs 220 pounds and is 6 feet 3 inches tall has a body mass index of 27.5.

Obesity: The percentage of people aged 18 and over whose body mass index is greater than or equal to 30 (body mass index equals weight in kilograms divided by height in meters squared, or weight in pounds divided by height in inches squared, multiplied by 703). For example, a person who weighs 260 pounds and is 6 feet 3 inches tall has a body mass index of 32.5.

Tobacco Use

Adolescents: The percentage of students in grades 9 through 12 who smoked cigarettes on one or more of the past 30 days; *Adults:* Healthy People 2010 Target: The percentage of people aged 18 and over who have smoked more than 100 cigarettes in their life or who smoked on some or all days in the past month; U.S. and Nebraska data in this report: The percentage of people aged 18 and over who are at risk for smoking-related illnesses (current smokers)

Substance Abuse

Adolescents: The percentage of students in grades 9 through 12 who had at least one drink of alcohol on one or more days during their life; the percentage of students in grades 9 through 12 who reported using marijuana one or more times during their life; *Adults:* The percentage of people aged 18 and over who engaged in binge drinking in the past 30 days, where binge drinking is defined as consuming five or more drinks on one occasion

Responsible Sexual Behavior

The percentage of students in grades 9 through 12 who have never had sexual intercourse, who have had sexual intercourse but not during the past three months, or who used a condom the last time they had sexual intercourse during the past three months

Mental Health

The percentage of people aged 18 and over who reported that their mental health was not good on at least one day during the past month

Injury and Violence

The number of motor vehicle deaths and homicides per 100,000 people

Environmental Quality

The percentage of people exposed to air that did not meet the U.S. Environmental Protection Agency's health-based standards

Immunization

The percentage of people aged 65 and over who received an influenza vaccination and/or a pneumonia vaccination

Access to Health Care

The percentage of people who have health insurance, have a personal doctor or health care provider, and/or received prenatal care in the first trimester

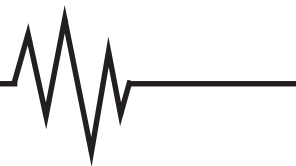


Table 1. Comparison of Leading Health Indicators, Nebraska and United States

Leading Health Indicator	Nebraska 2002	Nebraska 2001	United States 2001 ^a	Healthy People 2010 Target
Physical activity	*	34%	32%	50%
Overweight and obesity				
Overweight (adolescents)	H	9%	11%	5%
Obesity (adults)	23%	21%	21%	15%
Tobacco use				
Adolescents	H	31%	29%	16%
Adults	23%	20%	23% ^b	12%
Substance abuse				
Alcohol use (adolescents)	H	83%	78%	§
Marijuana use (adolescents)	H	35%	42%	§
Binge drinking (adults)	18%	15%	22%	6%
Responsible sexual behavior (adolescents)	H	90% ^c	86%	95%
Mental health	#	25%	34%	**
Injury and violence				
Motor vehicle deaths ^d	19	16	15	9
Motor vehicle homicides ^d	3	3	7	3
Environmental quality (ozone exposure)	#	0	41%	0
Immunization (aged 65 and over)				
Influenza vaccination	68%	70%	68% ^b	90%
Pneumonia vaccination	61%	61%	63% ^b	90%
Access to health care				
Health insurance	88%	86%	86% ^b	100%
Personal health care provider ^e	86%	84%	88%	96%
Prenatal care in first trimester	83%	83%	83%	90%

SOURCES: U.S. Department of Health and Human Services, *Healthy People 2010*, January 2001, Volume 1; Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System, 2001, 2002; National Center for Chronic Disease Prevention & Health Promotion, Behavioral Risk Factor Surveillance System, <http://apps.nccd.cdc.gov/brfss/index.asp>; Nebraska Health and Human Services System, *Nebraska 2010 Healthy Goals & Objectives*; Nebraska Health and Human Services System, *Nebraska Adolescents: Major Causes of Premature Death and Disability*, 2001 Data Report; and Youth Risk Behavior Surveillance System, <http://apps.nccd.cdc.gov/YRBSS/ListV.asp?site1=XX>; Nebraska Health and Human Services System, *Nebraska Adolescents and Their Risks*.

^aExcept as noted, data for 2002 are not available.

^bData are for 2002.

^cPercentage is for 1999; data for 2001 are not available.

^dAge-adjusted rate per 100,000 population.

^eU.S. percentage and Healthy People 2010 targets are for all age groups; Nebraska percentages are for people aged 18 and over.

*The survey question in 2002 was different from that in 2001; therefore, no comparable data are available.

HThe Youth Behavioral Risk Factor Surveillance System survey is done every two years and was done in 2001; therefore, no data are available for 2002.

§Healthy People 2010 does not identify a target.

#Data for 2002 are not available.

**The Healthy People 2010 objective is for treatment of depression; we do not have corresponding data for Nebraska and the U.S.

Table 2. Comparison of Selected^a Leading Health Indicators, Rural and Urban Areas, Nebraska 2002 (Adults Only)

Leading Health Indicator	Nebraska (%)	Rural Nebraska (%)	Urban Nebraska (%)
Physical activity ^b	33.9	32.9	35.6
Overweight and obesity			
Overweight	37.1	37.9	36.4
Obesity	23.2	23.3	23.0
Tobacco use	22.7	21.4	24.1
Substance abuse (binge drinking)	17.6	15.8	19.4
Mental health ^b	24.6	21.9	27.5
Immunization (aged 65 and over)			
Influenza vaccination	68.3	68.9	67.3
Pneumonia vaccination	61.3	60.8	62.1
Access to health care			
Health insurance	88.2	87.3	89.1
Personal health care provider	85.6	88.0	83.2
Prenatal care in first trimester	83.1	83.1	83.1

SOURCES: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (2001 and 2002); and Office of Rural Health, Department of Health & Human Services and Nebraska Hospital Association, *Nebraska Rural Health Plan for the Critical Access Hospital Program*.

^aRural and urban data are not available for Injury and Violence or Environmental Quality.

^bPercentages are for 2001; data for 2002 are not available.

Table 3. Comparison of Selected^a Leading Health Indicators Across Population^b Characteristics, Nebraska 2002 (Adults Only)

Leading Health Indicator	Nebraska (%)	White (%)	African American ^c (%)	Hispanic ^d (%)
Physical activity ^e	34.0	33.7	48.3	28.3
Overweight and obesity				
Overweight	37.1	37.3	36.0	37.7
Obesity	23.2	22.8	33.1	27.2
Tobacco use	22.7	22.4	30.9	24.9
Substance abuse (binge drinking)	17.6	17.7	11.2	19.3
Mental health ^e	24.6	24.8	43.5	19.4
Immunization (aged 65 and over)				
Influenza vaccination	68.3	69.2	47.6	69.5
Pneumonia vaccination	61.3	61.6	62.8	61.0
Access to health care				
Health insurance	88.2	89.8	92.2	62.7
Personal health care provider ^e	85.6	87.5	87.7	60.1

SOURCE: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (2001 and 2002).

^aRacial- and ethnic-specific data are not available for Injury and Violence, Environmental Quality, or Prenatal Care in the First Trimester.

^bAmerican Indians are not included because the number surveyed was too small.

^cOnly 103 African Americans were interviewed in 2002; only 88 African Americans were interviewed in 2001.

^dOnly 168 Hispanics were interviewed in 2002; only 202 Hispanics were interviewed in 2001.

^ePercentages are for 2001; data for 2002 are not available.



Rural Health Priorities

Compared with urban areas, rural areas usually pose different and greater challenges in addressing residents' health needs. For example rural areas have fewer health care resources per 100,000 persons than do urban areas, including primary care providers, hospital beds, mental health providers, and dental health providers. About one-half (47.4%) of Nebraska's residents live in rural areas (defined as outside of the metropolitan counties of the state as of the 2000 census), as compared to 20% of the U.S. population. In this section, we describe the status of 10 rural health priorities¹ in Nebraska, compare Nebraska data with the nation, and describe the rural-urban disparities of rural health priorities in Nebraska.

¹The Southwest Rural Health Research Center of the School of Rural Public Health at Texas A&M University System Health Science Center (funded by the Federal Office of Rural Health Policy) surveyed rural health stakeholders and identified Healthy People 2010 focus areas that are priorities in rural communities.

Table 4. Comparison of Differences in 10 Rural Health Priorities Between U.S., Nebraska, and Rural and Urban Areas in Nebraska (Adults Only)

Priorities	U.S. 2001 (2002 ^a)	Nebraska 2001	Nebraska 2002	Rural Nebraska 2002	Urban Nebraska 2002
Access to quality health services					
Insurance	85.9 ^a %	86.1%	88.2%	87.3%	89.1%
Primary care providers per 100,000 residents ^a	*	69	70	61	78
Cancer (mortality rate) ^b	195.8	186.2	186.6	179.0	197.8
Diabetes (mortality rate) ^b	25.2	21.5	20.7	18.8	23.3
Heart disease (mortality rate) ^b	247.7	212.2	214.8	221.8	202.2
Maternal, infant, and child health					
Prenatal care	83%	82.8%	83.1%	83.1%	83.1%
Infant mortality rate ^c	6.9	6.8	7.0	6.3	7.6
Mental health and mental disorders	34.2%	24.6%	*	21.9% ^d	27.5% ^d
Nutrition and overweight					
Overweight	37%	38.5%	37.1%	37.9%	36.4%
Obesity	21%	20.7%	23.3%	23.3%	23.0%
Oral health					
Losing at least six teeth	17.6%	17.1%	16.8%	20.6%	13.2%
Annual dental visits	69.2%	74.0%	73.3%	68.0%	78.4%
Dental insurance	*	54.0%	*	45.3% ^d	63.1% ^d
Substance abuse	22%	14.6%	17.6%	15.8%	19.4%
Tobacco use	23%	20.4%	22.7%	21.4%	24.1%

SOURCES: U. S. Department of Health and Human Services. *Healthy People 2010*, January 2001, Volume 1; Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System of Nebraska (2001 and 2002); National Center for Chronic Disease Prevention & Health Promotion, Behavioral Risk Factor Surveillance System, <http://apps.nccd.cdc.gov/brfss/index.asp>; Office of Rural Health, Department of Health and Human Services, Nebraska Health & Human Services System and Nebraska Hospital Association, *Nebraska Rural Health Plan for the Critical Access Hospital Program*; Nebraska Health & Human Services System, *2002 Vital Statistics Report*; U.S. Department of Health & Human Services, *National Vital Statistics Reports* Volume 51, Number 5; and Healthy People 2010 database, <http://wonder.cdc.gov/script>.

*No data are available.

^aIncluding children.

^bAge-adjusted rate per 100,000 population.

^cPer 1,000 live births.

^dPercentages are for 2001; data for 2002 are not available.

Notes to Table 4

Access to Quality Services

Insurance: The percentage of people who had health insurance; Primary care: The number of primary care providers per 100,000 people

Cancer Mortality Rate

The number of people per 100,000 who died from cancer

Diabetes Mortality Rate

The number of people per 100,000 who died where diabetes was listed as the underlying cause of death

Heart Disease Mortality Rate

The number of people per 100,000 who died from heart disease

Maternal, Infant, and Child Health

Prenatal care: The percentage of pregnant women who received prenatal care in the first trimester; *Infant mortality rate*: The number of childhood deaths in the first year of life per 1,000 live births

Mental Health and Mental Disorders

The percentage of people aged 18 and over who reported that their mental health was not good on at least one day during the past month

Nutrition and Overweight

The percentage of people aged 18 and over who are overweight (body mass index is greater than or equal to 25 and less than 30) or obese (body mass index is greater than or equal to 30). Body mass index equals weight in kilograms divided by height in meters squared, or weight in pounds divided by height in inches squared, multiplied by 703). For example, a person who weighs 220 pounds and is 6 feet 3 inches tall has a body mass index of 27.5.

Oral Health

The percentage of people who have lost at least six teeth

The percentage of people who had a dental visit at least once in the past year

The percentage of people who have dental insurance

Substance Abuse

The percentage of people who engaged in binge drinking in the past 30 days (binge drinking is defined as consuming five or more drinks on one occasion)

Tobacco Use

The percentage of people who have smoked more than 100 cigarettes in their life and/or smoked on some days or all days in the past month



Health Status of Racial and Ethnic Minorities^a in Nebraska

In this section, we show the disparities in health status and prevalence of risk factors that exist between White and minority population groups in Nebraska. Information contained in a 2001 report entitled *Health Status of Racial and Ethnic Minorities in Nebraska*¹ shows many of these striking disparities.

¹Nkwocha, O. G. (2001). *Health status of racial and ethnic minorities in Nebraska*. Lincoln, Nebraska: Nebraska Health and Human Services System, Department of Health and Human Services, Preventive & Community Health, Office of Minority Health and Human Services.

Table 5. Disparity in Selected Health Status Indicators of Nebraska's Racial/Ethnic Minority Residents' Risk of Mortality or Infection Compared to White Population^b for Five-Year Period 1994-1998 or 1995-1999

Population Group	Rate Increased for	Relative Risk	Rate Remained Stable for	Relative Risk	Rate Decreased for	Relative Risk
African Americans	Homicides	12.0	Low birth weight	2.0	STD incidence	16.6
	HIV/AIDS incidence	8.1			Cirrhosis deaths	2.4
	HIV/AIDS deaths	4.8			Post-neonatal mortality	2.2
	Diabetes-related deaths	2.5			Infant mortality	2.1
	Prostate cancer deaths	1.9			Cancer deaths (males)	1.6
	Stroke deaths	1.7			Heart disease deaths (females)	1.5
	Colorectal cancer deaths	1.5				
Native Americans	Diabetes-related deaths	4.0			Cirrhosis deaths	14.5
	Stroke deaths (males)	2.1			STD incidence	5.6
	Heart disease deaths	1.7			Homicides	3.9
	HIV/AIDS incidence	1.7			Post-neonatal mortality	2.8
					Unintentional injury deaths	2.1
Hispanic Americans ^c					Motor vehicle fatalities	1.9
	HIV/AIDS incidence	4.0			Diabetes-related deaths (female)	1.6
	Homicides	3.9				
	STD incidence	3.4				
Asian Americans	Cirrhosis deaths	2.5				
	STD incidence	3.6				

SOURCE: From *Health Status of Racial and Ethnic Minorities in Nebraska* (p. 6), by O. G. Nkwocha, 2001, Lincoln, Nebraska: Nebraska Health and Human Services System, Nebraska Department of Health and Human Services, Preventive & Community Health, Office of Minority Health and Human Services. Reprinted with permission.

^aRacial and ethnic categories for this data are based on 1990 U.S. Census Bureau definitions of race and ethnicity.

^bRelative risk for Whites is 1.0 throughout this table. For example, African Americans in Nebraska are twelve times more likely than are Whites to die from homicide.

^cComparison is to White non-Hispanics.

Trends for Selected Leading Health Indicators, 1998-2002

In this section, we display the trends for the status of selected Leading Health Indicators in Nebraska during the past five years. For certain indicators, Nebraska measures are compared with national Healthy People 2010 targets.

Table 6. Trend of Leading Health Indicators in Nebraska Comparing 1998 and 2002 (Adults Only) and Risk Rate for Leading Health Indicators Comparing Nebraska (2002) and the United States (2001) (Adults Only)

	Above U.S. Rate	Similar to U.S. Rate	Below U.S. Rate
Rising Trend	Rising and Above	Rising and Similar <ul style="list-style-type: none"> • Percentage who are overweight or obese • Percentage who have a personal health care provider • Percentage who received a pneumonia vaccination^a • Percentage who engaged in physical activity^b 	Rising and Below
Stable Trend	Stable and Above	Stable and Similar <ul style="list-style-type: none"> • Percentage who use tobacco • Percentage who received an influenza shot^a • Percentage who have lost at least six teeth^a • Percentage who had an annual dental visit^a 	Stable and Below <ul style="list-style-type: none"> • Percentage who engaged in binge drinking^a
Falling Trend	Falling and Above	Falling and Similar <ul style="list-style-type: none"> • Percentage who have health insurance 	Falling and Below <ul style="list-style-type: none"> • Percentage who have a mental health problem^c

SOURCES: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (1998, 1999, 2001 and 2002); National Center for Chronic Disease Prevention & Health Promotion, Behavioral Risk Factor Surveillance System, <http://apps.nccd.cdc.gov/brfss/index.asp> and Healthy People 2010 database, <http://wonder.cdc.gov/script>.

Notes:

Trend (Comparing Nebraska 1998 and 2002 data)

Rising when 95% confidence interval of risk rate change is above 0.

Stable when 95% confidence interval of risk rate change includes 0.

Falling when 95% confidence interval of risk rate change is below 0.

Rate (Comparing Nebraska 2002 data with United States 2001 data)

Above when 95% confident the risk rate is above and rate ratio >1.10.

Similar when unable to conclude above or below with confidence.

Below when 95% confident the risk rate is below and rate ratio <0.9.

^aNebraska data are for 1999 and 2002; data for 1998 are not available.

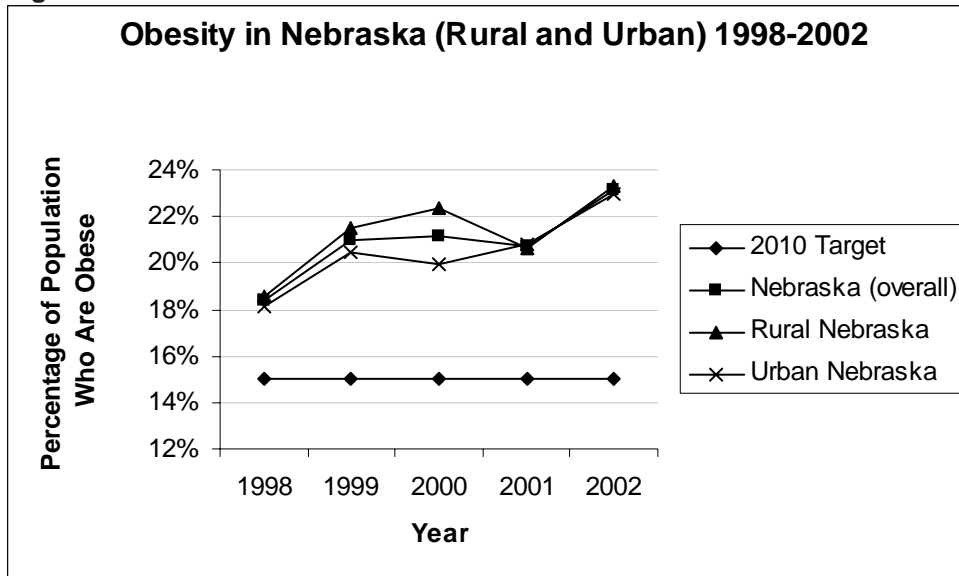
^bNebraska data are for 1999 and 2001; data for 1998 and 2002 are not available. Data for 1999 are for the percentage who engaged in regular vigorous activity or who engaged in physical activity for 30 or more minutes, five or more times per week, regardless of intensity. Data for 2001 are for the percentage who engaged in moderate activity for 30 or more minutes five or more times per week or who engaged in vigorous physical activity for 20 or more minutes three or more times per week.

^cNebraska data are for 1998 and 2001; data for 2002 are not available.



Figure 1 shows that in Nebraska, the obesity rate has increased in the past five years in both rural and urban areas.

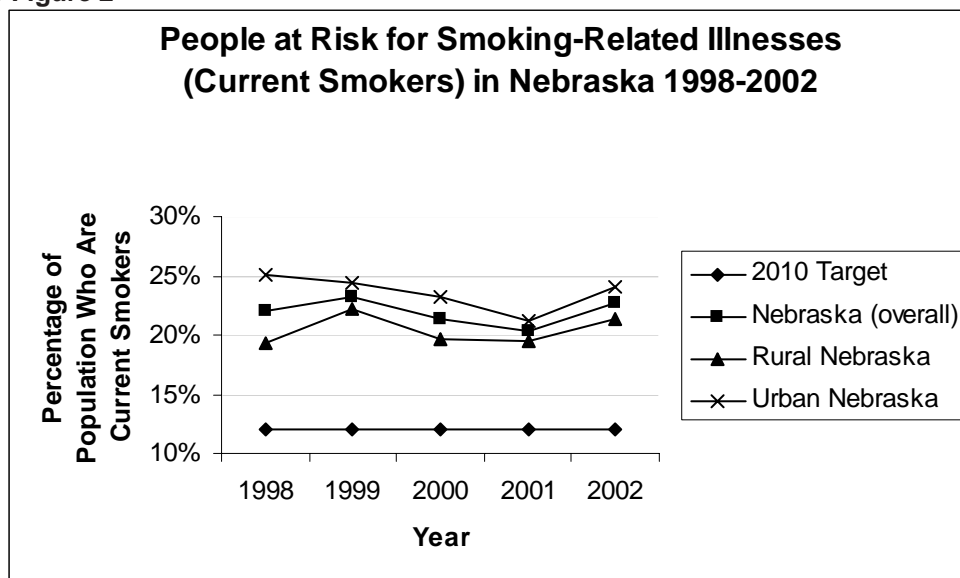
Figure 1



SOURCES: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (1998-2002); and U. S. Department of Health and Human Services, Healthy People 2010, <http://wonder.cdc.gov/data2010/obj.htm>

Figure 2 shows that the percentage of people who smoke did not decrease significantly in the past five years in Nebraska. Smoking rates in urban areas are higher than in rural areas.

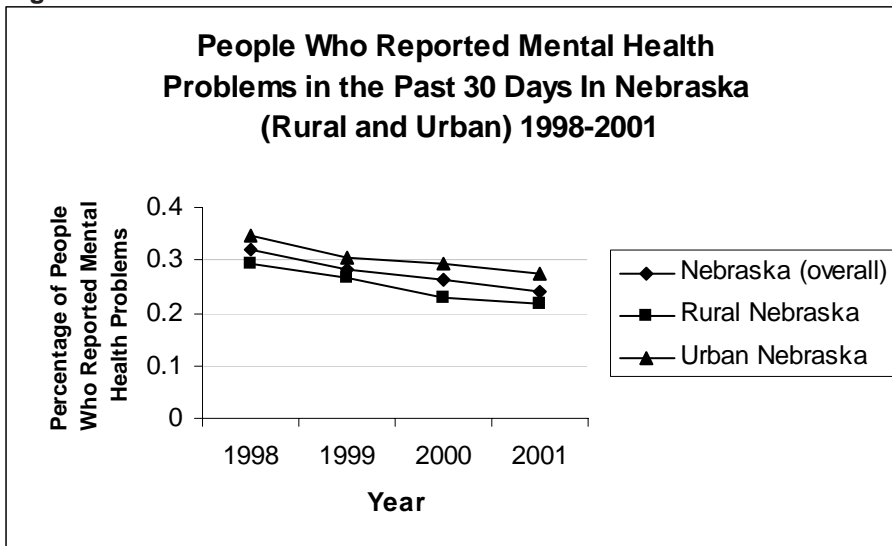
Figure 2



SOURCES: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (1998-2002); and U. S. Department of Health and Human Services, Healthy People 2010, <http://wonder.cdc.gov/data2010/obj.htm>

Figure 3 shows that the percentage of people who have mental health problems has decreased in the past four years in Nebraska. It also shows that mental health problems occur in rural areas less frequently than in urban areas.

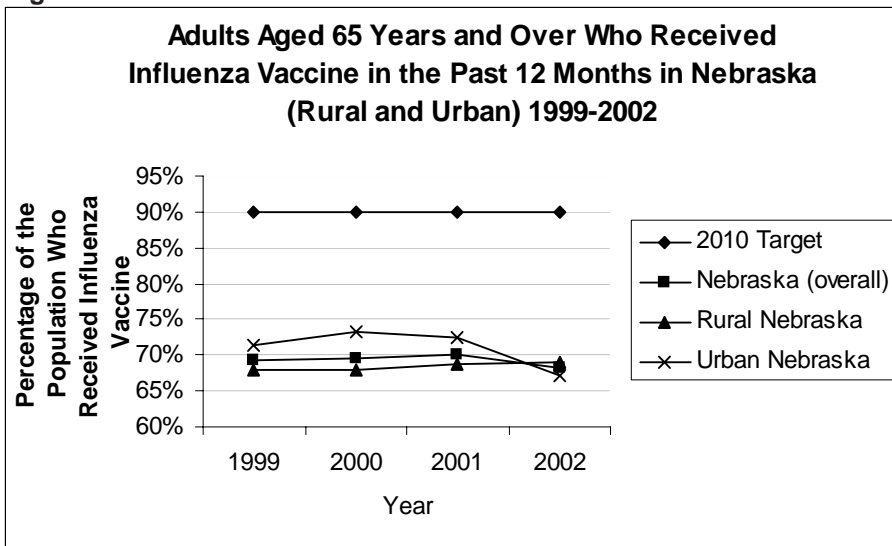
Figure 3



SOURCE: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (1998-2001).

Figure 4 shows that the percentage of people aged 65 and over who received a flu shot in the past 12 months in Nebraska did not change significantly in the past four years.

Figure 4

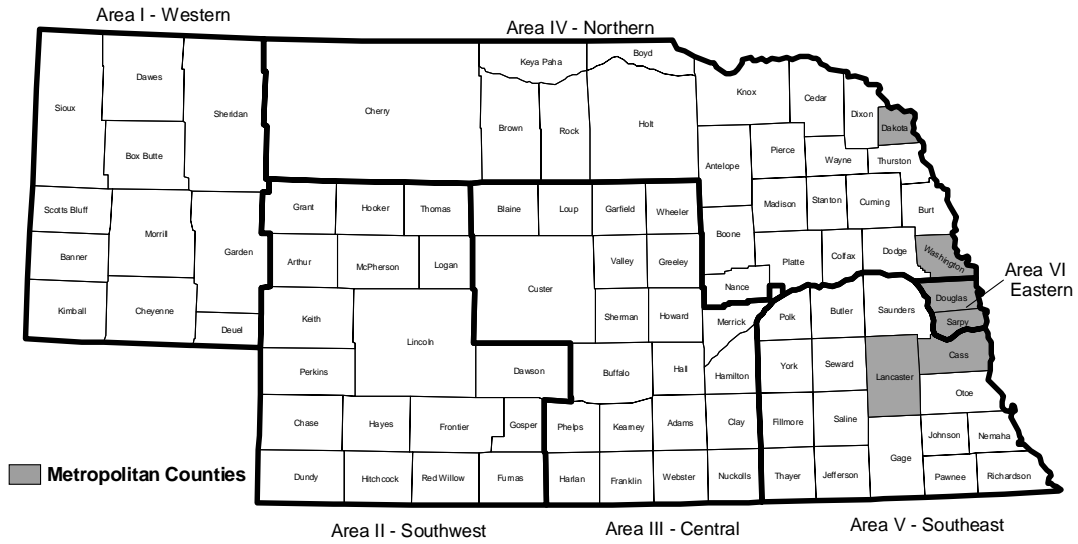


SOURCES: Nebraska Health and Human Services System, Behavioral Risk Factor Surveillance System (1999-2002); and U. S. Department of Health and Human Services, Healthy People 2010, <http://wonder.cdc.gov/data2010/obj.htm>



Appendix

Metropolitan Counties. Metropolitan area boundaries and names are those defined by the Federal Office of Management and Budget on June 30, 1993.



About the Nebraska Health Information Project

The Nebraska Health Information Project is a partnership project made possible with the financial support of the State of Nebraska and through additional personal and other resources provided by the University of Nebraska Medical Center. While initiated by Nebraska Unicameral, the ongoing success of the project results from cooperation and collaboration among a number of organizations and individuals, particularly those involved in delivering health care services, financing health care and analyzing health related data.

Other reports have been published by the Nebraska Health Information Project, including biennial databooks which present Nebraska health and demographic data at the county, area and state levels. To find out more about these reports and future reports visit our homepage at: <http://www.unmc.edu/nebraska>

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