



# 2016 Community Health Needs Assessment

## Memorial Community Hospital and Health System

This report identifies and assesses the health needs of the service area served by Memorial Community Hospital and Health System. Submitted in fiscal year ended December 31, 2016 to comply with federal tax law requirements set forth in Internal Revenue Code section 501(r) and to satisfy the requirements set forth in IRS Notice 2011-52 and the Affordable Care Act for hospital facilities owned and operated by an organization described in Code section 501(c)(3).

Adopted by Board Resolution on November 29, 2016.

To our Customers and Residents of our Community,

Every three years, Memorial Community Hospital and Health System (MCH&HS) goes through a process of assessing the health needs of the community in which we serve. As we strive to continually meet the needs of the community, we welcome you to review the 2016 Community Health Needs Assessment (CHNA). All not-for-profit hospitals are required to produce this report to be in compliance of the Affordable Care Act.

Addressing needs of community health goes far beyond the work of hospitals and the public health department. This assessment was conducted in partnership with multiple agencies and individuals in the Three Rivers Public Health District and the Burt/Washington County areas. It will be the basis for the Community Health Improvement Plan (CHIP). The goal of the assessment is to describe the health status of the population, identify areas for health improvement, determine factors that contribute to health issues, and identify assets and resources that can be used to address public health improvement.

Most information presented in this report is for Washington County, Three Rivers Public Health District and the State of Nebraska. Frequently there will be information included from Dodge and Saunders County which will always be in table form. The reason is because the original data source was not available to alter the data tables to include only Washington County.

As an added note, Burt County is under the Elkhorn Logan Valley Public Health District, which is in a separate health district from Washington County. Because the Health Departments of each county are heavily involved in the data coordination effort to complete a CHNA, Burt and Washington Counties have separate CHNA's. The vast difference in how the data was gathered, when it was recorded, and how it was recorded has somewhat prohibited the use of comparable data in this report. Most data that was available as a comparison was from the demographic section and is reflected in the comments section under each table or figure.

Thank you for taking the time to read this report. We hope it serves you well.

Laura Willey  
Community Development Coordinator  
MCH&HS

### Community Served by the Hospital

Memorial Community Hospital and Health System is comprised of one hospital in Blair and three Rural Health Clinics in Blair, Ft. Calhoun, and Tekamah, Nebraska. MCH&HS serves patients from primarily Burt and Washington Counties. Blair, the county seat, is a city located in Washington County, along the Missouri River, just north of the metropolitan area of Omaha, Nebraska. As of the 2010 census, the population of Washington County was 20,234 and the population of Blair was 7,990.

MCH&HS currently employs 10 physicians, 14 Physician Assistants, 1 APRN, 8 CRNA's and has approximately 300 employees. The Specialty Clinic also provides space for 24 specialty doctors. In 2002, MCH entered into a sponsorship with Alegen Health Immanuel Medical Center, which was bought by Catholic Health Initiatives (CHI) in 2014. The community retains 60% ownership and CHI has a 40% sponsorship. The Board of Directors includes 4 local representatives, including the medical staff president, and 3 representatives from CHI with a supermajority needed to pass any key decision.

### Overview of the Community Health Needs Assessment

Under the direction of the Three Rivers Public Health Department, the 2016 *Community Health Needs Assessment* was created for Washington County in the Three Rivers Health District which includes Dodge, Saunders, and Washington Counties in Nebraska. This assessment will be the basis for the Community Health Improvement Plan (CHIP) written by MCH&HS. The purpose of this assessment is to inform all interested parties about the health status of the population within the service area and to provide community partners with a wide array of data that can be used to educate and mobilize the community and its resources to improve the health of the population.

The *Community Health Needs Assessment* process is collaborative and is intended to serve as a single data report for multiple organizations. It is the goal of the *Community Health Needs Assessment* to describe the health status of the population and identify areas for health improvement, with the hope that the data from this report will be used to target strategic initiatives focused on the areas of highest public health need in Washington and Burt Counties. This assessment will be updated and revised every three years, thus providing communities with up to date data to evaluate progress made towards identified health priorities, and for the selection of new ones.

Memorial Community Hospital and Health System is unique in that it covers two counties, each under a different Public Health Department. Washington County falls under the Three Rivers Public Health Department and Burt County, which houses Tekamah's Cottonwood Clinic, is under the Elkhorn Logan Valley Public Health Department. For the purpose of this report we have primarily used information from the Three Rivers CHNA and have added in data from the Elkhorn Logan Valley CHNA where appropriate.

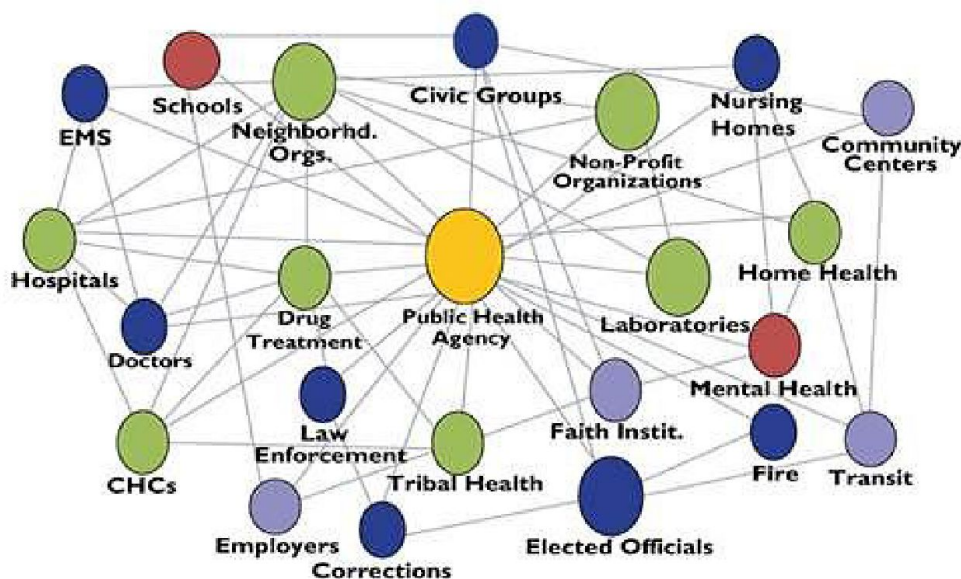
Schmeeckle Research of Lincoln, NE assembled this assessment of public health and community well-being information under the direction of the Three Rivers District Health Department.

## ***Community Health and the Local Public Health System***

Community health includes a broad array of issues addressed by numerous agencies. Topics that fall under community health include such things as access to health care, child welfare, crime, alcohol and tobacco use, drug use, poverty, obesity, diabetes, teen pregnancy, teen sexual activity, healthy children, environmental factors affecting health, cancer, heart disease, and a broad array of other epidemiological topics.

Addressing needs of community health goes far beyond the work of hospitals and the public health department. A broad network of agencies must work in collaboration to meet the diverse health needs of the community. An example of the local public health system network is shown in Figure 1 below, in which over 20 agencies collaborate in various ways in order to form a multi-connected network of public, private, faith based, non-profit, and for-profit agencies that effectively addresses the health needs of the community.

**Figure 1: The Local Public Health System (an example)**



## Description of Data Sources

The CHNA is a follow-up to and expansion of similar reports conducted by MCH&HS in 2003, 2007, and 2012. Data for the CHNA brings together a wide array of community health indicators, gathered from both primary and secondary data sources. See Figure 2.

Figure 2

Frequently Cited Data Sources	
Data Source	Description
<b>Behavioral Risk Factor Surveillance System (BRFSS)</b>	- A comprehensive, annual health survey of adults ages 18 and over on risk factors such as alcohol use, tobacco use, obesity, physical activity, health screening, economic stresses, access to health care, mental health, physical health, cancer, diabetes, and many other areas impacting public health. <b>Note that all BRFSS data are age-adjusted, except for indicators keying on specific age groups. The data are also weighted by other demographic variables according to an algorithm defined by the CDC.</b>
<b>County Health Rankings</b>	- A wide array of data from multiple sources combined to give an overall picture of health in a county. Examples of data include premature deaths, access to locations for physical activity, ratio of population to health care professionals, violent crimes, and many other indicators. County Health Rankings provides health outcomes and health factors rankings for 78 counties in Nebraska.
<b>Nebraska Crime Commission</b>	- Annual counts on arrests (adult and juvenile) by type submitted voluntarily by local and state-level police departments.
<b>Nebraska Department of Education</b>	- Data contained in Nebraska's annual State of the Schools Report, including graduation and

	dropout rates, student characteristics, and student achievement scores.
<b>Nebraska Department of Health and Human Services (DHHS)</b>	- A wide array of data around births, mortality, child abuse and neglect, health professionals, and other areas. <b>Note that all mortality data are age-adjusted.</b>
<b>Nebraska Risk and Protective Factor Student Survey (NRPFSS)</b>	- A survey of youth in grades 8, 10, and 12 on risk factors such alcohol, tobacco, and drug use, and bullying.
<b>U.S. Census/American Community Survey</b>	- U.S. Census Bureau estimates on demographic elements such as population, age, race/ethnicity, household income, poverty, health insurance, single parent families, and educational attainment. Annual estimates are available through the American Community Survey.

## Demographics

The total population of Washington County is 20,234 (Figure 3). The total population of Burt County is 6,690.

<b>Figure 3</b>	<b>Population (2013)</b>	
	<b>Washington County</b>	<b>Three Rivers</b>
	20,234	77,709

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

Washington County is 95.7% White, Non-Hispanic (Figure 4). No specific minority data was recorded for Burt County.

<b>Figure 4</b>	<b>Race/Ethnicity (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers Total</b>	<b>Nebraska</b>
<b>White (Non-Hispanic)</b>	95.7%	91.7%	81.7%

<b>Minority</b>	4.3%	8.3%	18.3%
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Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

Washington County has a median age of 40.8, which is higher than the median age of 36.3 for the state (Figure 5). The median age for Burt County is 47.9.

<b>Figure 5</b>	<b>Median age (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers*</b>	<b>Nebraska</b>
	40.8	40.7	36.3

\*An average weighted by the population in each county.

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

In Washington County, 14.5% of the population is 65 or older (compared to 13.7% for the state) (Figure 6).

<b>Figure 6</b>	<b>Number and percentage of the population age 65 and over (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers</b>	<b>Nebraska</b>
	2,944 (14.5%)	13,104 (16.9%)	252,585 (13.7%)

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

Just under one-fourth (24.2%) of the Washington County population is under the age of 18 (Figure 7), which is comparable to Burt County at 24.7%.

<b>Figure 7</b>	<b>Number and percentage of the population under the age of 18 (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers</b>	<b>Nebraska</b>
	4,890 (24.2%)	18,863 (24.3%)	460,116 (25.0%)

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

From 2010 to 2013, the birth rate was lower for Washington County than it was for the state. In 2013, there were 239 births in the county, which makes for a rate of 11.8 births per 1,000 population (compared to a rate of 14.0 per 1,000 for the state).

**Figure 8. Number of births and birth rate per 1,000 population**

	2010	2011	2012	2013
<b>Washington County</b>	210 (10.4)	213 (10.5)	182 (9.0)	239 (11.8)
<b>Three Rivers</b>	<b>971 (12.5)</b>	<b>896 (11.5)</b>	<b>917 (11.8)</b>	<b>941 (12.1)</b>
<b>Nebraska</b>	<b>25,916 (14.2)</b>	<b>25,722 (14.0)</b>	<b>25,939 (14.0)</b>	<b>26,094 (14.0)</b>

Source: Nebraska DHHS, Vital Records (2013)

Washington County stands out as having a notably higher median household income and per capita income as compared to the state and health district (Figure 9). No comparable data for Burt County however most commonly reported was having income between \$50,000-\$75,000.

<b>Figure 9</b>	<b>Income (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers*</b>	<b>Nebraska</b>
<b>Median household income</b>	\$76,170	\$67,844	\$67,023
<b>Per capita income</b>	\$29,328	\$27,281	\$26,899

\*An average weighted by the population in each county.

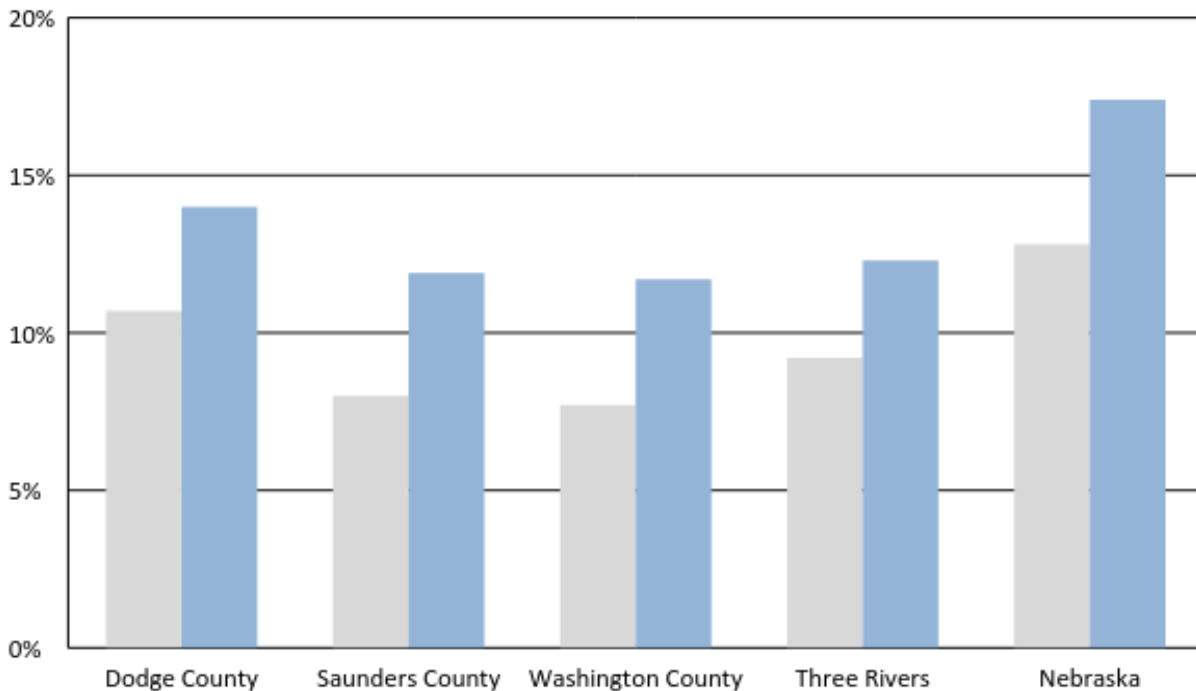
Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

## Poverty

Having a higher median household income and per capita income as compared to the state (see Figure 9 directly above), Washington County has lower rates of poverty as compared to the state. According to the U.S. Census, 9.2% of the total Three Rivers population is in poverty (compared to 12.8% for the state), and 12.3% of the under 18 population in the Three Rivers District is in poverty (compared to 17.4% for the state) (Figure 10).



**Figure 10. Individuals in poverty (2013)**



Source:  
U.S. Census/American Community Survey 5-Year Estimates (2013)

An estimated total of 1,517 individuals are in poverty in Washington County (Figure 11). Burt County has approximately 611 people living in poverty or 9.27% of the population.

Figure 11	Number of individuals in poverty (2013)	
	Washington County	Three Rivers
	1,517	6,966

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

Unemployment is slightly higher in Washington County than the state but overall is very low. The state sits at 3% and Washington County is at 3.1% (Figure 16).

Figure 12	Unemployment (July, 2015)		
	Washington County	Three Rivers*	Nebraska
	3.1%	3.1%	3.0%

\*An average weighted by the population in each county.

Source: Nebraska Department of Labor (2015)

In 2012-2013 there was a substantial increase in the percentage of children in the State eligible for free and reduced school meals. The increase may be due to a change in the guidelines for determining eligibility. In 2012-2013, 20.7% of the children in Washington County were eligible for free and reduced school meals, which is noticeably lower than the state's percentage of 44.2% (Figure 13).

**Figure 13. Number and percentage of children eligible for free and reduced school meals**

	<b>2008-2009</b>	<b>2012-2013</b>
<b>Washington County</b>	709 (16%)	763 (20.7%)
<b>Three Rivers</b>	<b>3,597 (28%)</b>	<b>4,863 (38.4%)</b>
<b>Nebraska</b>	<b>93,575 (36%)</b>	<b>133,972 (44.2%)</b>

Nebraska Dept. of Education, contained in Kids Count (2015)

In 2013, 803 children from Washington County were enrolled in Medicaid or the Children's Health Insurance Plan (CHIP). This was a .8 increase from 2009 in Washington County versus a 4% increase for the state (Figure 14). Although the data cannot be correlated, roughly 20% of the people surveyed in Burt County use Medicaid for their children.

**Figure 14. Number and percentage of children enrolled in Medicaid or CHIP**

	<b>2009</b>	<b>2013</b>
<b>Washington County</b>	774 (15.4%)	803 (16.2%)
<b>Three Rivers</b>	<b>4,766 (25.6%)</b>	<b>5,482 (28.9%)</b>
<b>Nebraska</b>	<b>140,281 (31.5%)</b>	<b>161,729 (35.5%)</b>

Nebraska DHHS, Financial & Program Services, contained in Kids Count (2015)

## Access to Health Services

Approximately 3.6 % of the under 18 population in Washington County is without health insurance coverage (Figure 15). Of those surveyed in Burt County, 1.6% are without health insurance.

<b>Figure 15</b>	<b>Percentage of the population under 18 without health insurance coverage (2013)</b>		
	<b>Washington County</b>	<b>Three Rivers</b>	<b>Nebraska</b>
	3.6%	4.9%	5.9%

Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

Among the total population under the age of 65 in Washington County, there were an estimated 1,396 individuals without health insurance in 2012, accounting for 8.3% of the total population under the age of 65 (Figure 16).

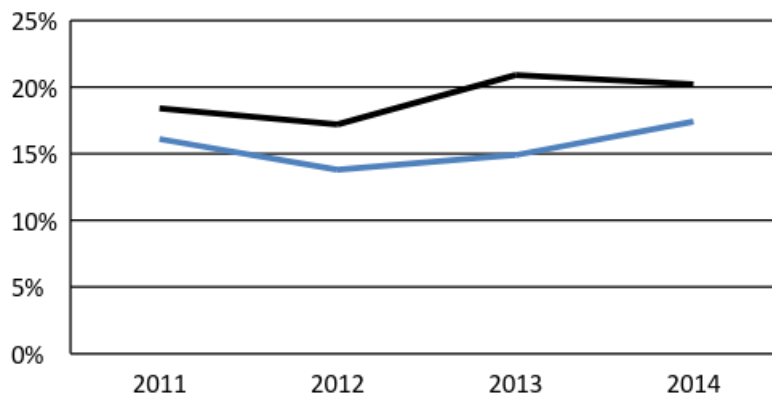
**Figure 16. Number and percentage of the population under age 65 without health insurance**

	2010	2011	2012
<b>Washington County</b>	1,545 (9.1%)	1,512 (8.9%)	1,396 (8.3%)
<b>Three Rivers</b>	<b>7,339 (11.5%)</b>	<b>7,564 (11.9%)</b>	<b>7,158 (11.4%)</b>
<b>Nebraska</b>	<b>206,100 (13.4%)</b>	<b>205,574 (13.3%)</b>	<b>200,265 (12.9%)</b>

Source: Small Area Health Insurance Estimates, contained in County Health Rankings (2015)

In 2014, 17.4% of the Three Rivers population reported not having a personal doctor or health care provider, which represented an increase from 14.9% in 2013, but was still lower than the 2014 rate of 20.2% for the state (Figure 17).

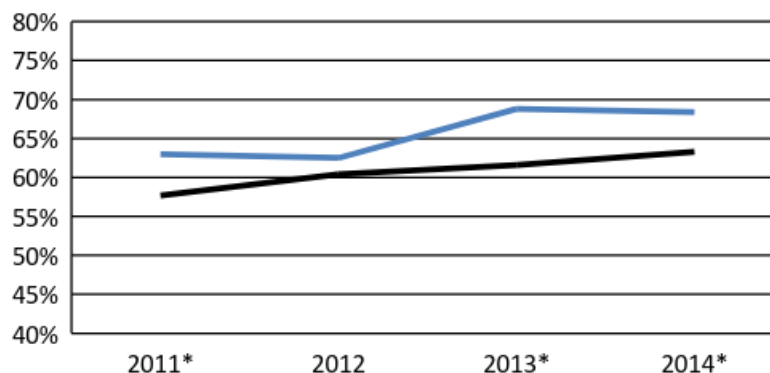
**Figure 17. No doctor or personal health care provider among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 68.4% of Three Rivers adults reported having a routine checkup in the past year (compared to 63.3% for the state) (Figure 18).

**Figure 18. Had a routine checkup in the past year among adults 18 and over**

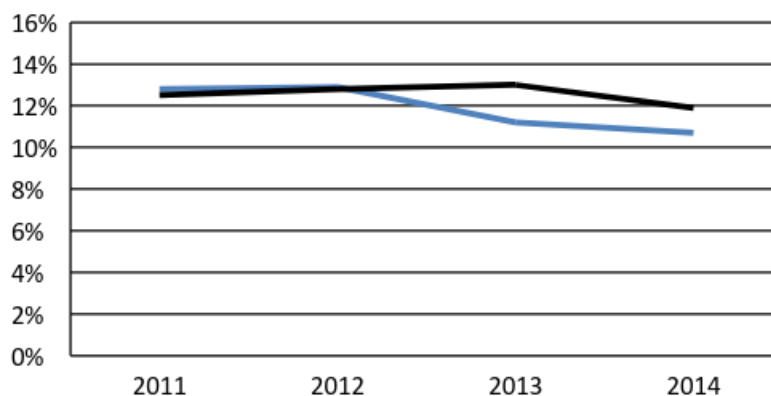


\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

**Figure 19. Needed to see a doctor but could not due to cost in the past year among adults 18 and over**

In 2014 among adults in the Three Rivers District, 10.7% reported needing to see a doctor but could not due to cost in the past year (compared to 11.9% for the state) (Figure 19).



Source: Behavioral Risk Factors Surveillance System (2014)

Compared to the state, Washington County has a higher ratio of population to primary care physicians, dentists, and mental health providers (Figure 20).

**Figure 20. Ratio of population to health care professionals**

	Ratio of population to <u>primary care</u> <u>physicians</u> (2012)	Ratio of population to <u>dentists</u> (2013)	Ratio of population to <u>mental health</u> <u>providers</u> (2014)
<b>Washington County</b>	<b>3,375:1</b>	<b>3,371:1</b>	<b>5,056:1</b>
<b>Three Rivers</b>	<b>2,280:1</b>	<b>2,352:1</b>	<b>1,194:1</b>
<b>Nebraska</b>	<b>1,405:1</b>	<b>1,450:1</b>	<b>435:1</b>

Source: Area Health Resource File/American Medical Association; CMS, National Provider Identification file, contained in County Health Rankings (2015)

Figure 21 displays the number of primary care physicians, dentists, and mental health providers for Washington County and Figure 22 displays a larger range of medical professionals.

Figure 21	Number of health care professionals		
	Number of <u>primary care</u> <u>physicians</u> (2012)	Number of population to <u>dentists</u> (2013)	Number of population to <u>mental health</u> <u>providers</u> (2014)
<b>Washington County</b>	6	6	4
<b>Three Rivers</b>	<b>34</b>	<b>33</b>	<b>65</b>

Source: Area Health Resource File/American Medical Association; CMS, National Provider Identification file, contained in County Health Rankings (2015)

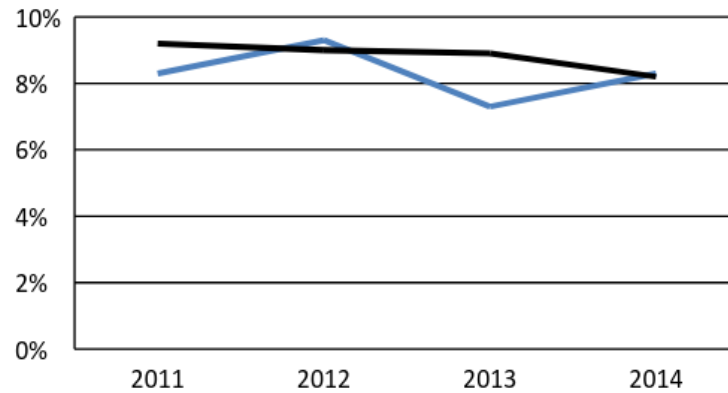
Figure 22	Number of health professionals in area (2012)	
	Washington County	Three Rivers

<b>Physicians</b>	12	76
<b>FM/GP</b>	8	20
<b>Internal Medicine</b>	1	8
<b>Pediatrics</b>	0	4
<b>OB/GYN</b>	0	5
<b>Psychiatrists</b>	0	0
<b>Dentists</b>	5	30
<b>Pharmacists</b>	10	64
<b>Physical Therapists (2010)</b>	25	43
<b>Physician Assistants</b>	9	26
<b>Nurse Practitioners</b>	1	8
<b>RN's (2010)</b>	313	941
<b>LPN's (2010)</b>	62	277

## ***Mental Health***

In 2014, 8.3% of adults in the Three Rivers District reported that their mental health was not good on 14 or more of the past 30 days (i.e., frequent mental distress) (Figure 23).

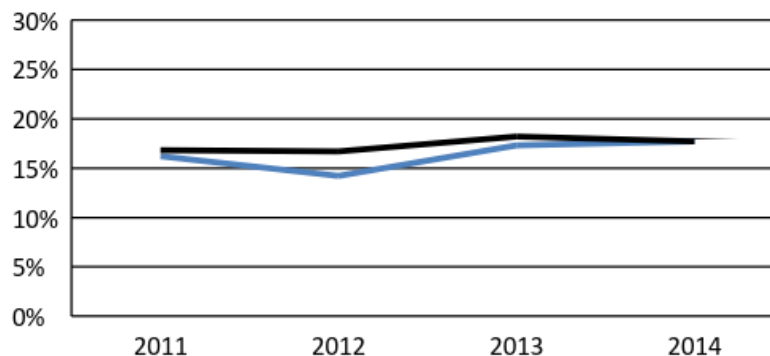
**Figure 23. Mental health was not good on 14 or more of the past 30 days among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 17.7% of adults in the Three Rivers District reported that they have ever been told by a mental health or medical professional that they have depression (Figure 24).

**Figure 24. Ever told they have depression among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2012, 10.9% of adults in the Three Rivers District reported that they are currently taking medication or receiving treatment for a mental health condition, and 3.9% responded to a series of questions that indicated symptoms of a serious mental health illness in the past 30 days (Figure 25).

**Figure 25. Mental health indicators among adults 18 and over (2012)**

	Three Rivers	Nebraska
<b>Currently taking medication or receiving treatment for a mental health condition</b>	10.9%	11.0%
<b>Symptoms of serious mental health illness in past 30 days*</b>	3.9%	3.2%

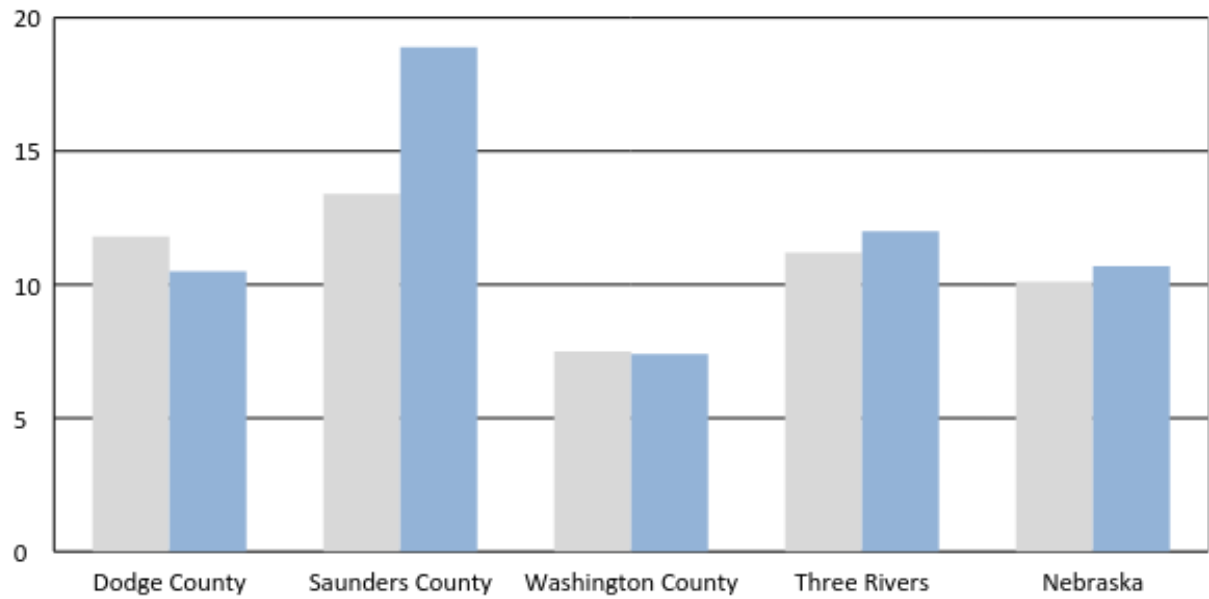
\*Percentage reporting answers to six questions measuring risk for serious psychological distress during the past 30 days based on the Kessler 6 (KS) instrument that generate a score of 13 or higher, suggesting serious mental illness.

Source: Behavioral Risk Factors Surveillance System (2014)

Washington County is visible as having the lowest rate of suicide in the health district from 2009-2013. There were 7 suicides in Washington County during this five-year period and 47 in the Three Rivers District as a whole (Figures 26 and 27).



**Figure 26. Death rate due to suicide per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

Figure 27	Number of deaths due to suicide (2009-2013)		
	Washington County	Three Rivers	Nebraska
	7	47	992

Source: Nebraska DHHS, Vital Records (2013)

Figure 28 presents four indicators of bullying among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders. In 2014, 41.8% of 8<sup>th</sup> graders, 40.2% of 10<sup>th</sup> graders, and 30.9% of 12<sup>th</sup> graders in the Three Rivers District reported some form of being bullied in the past year (either on school property, away from school property, or electronically) (Figure 28).

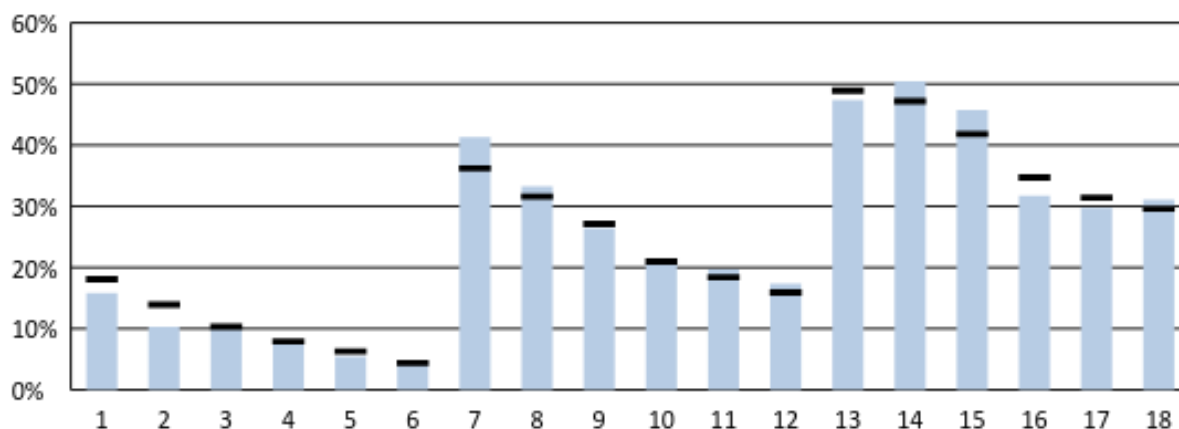
Figure 28		Bullying among 8 <sup>th</sup> , 10 <sup>th</sup> , and 12 <sup>th</sup> graders in the past year (2014)		
		8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Any bullying	Three Rivers	41.8%	40.2%	30.9%
	Nebraska	41.4%	34.3%	27.2%
Bullied on school property	Three Rivers	32.3%	32.6%	20.0%
	Nebraska	33.3%	27.4%	20.4%
Bullied away from school property	Three Rivers	27.5%	26.0%	21.6%
	Nebraska	25.8%	21.7%	18.3%
Electronically bullied (e-mail, text, chat, etc.)	Three Rivers	22.3%	24.2%	20.8%
	Nebraska	21.0%	19.3%	17.1%

Source: Nebraska Risk and Protective Factors Student Survey (2014)

## Youth Substance Abuse

Past 30-day alcohol use among youth has generally been on the decline in both the Three Rivers District and the state as a whole from 2003 to 2014 (Figure 29).

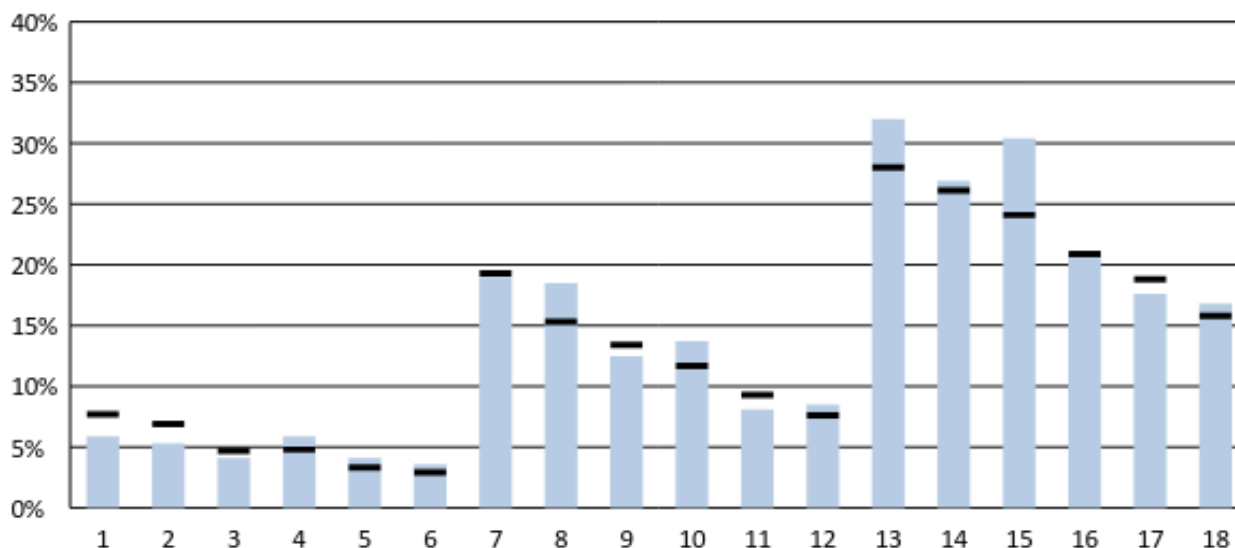
**Figure 29. Past 30-day alcohol use among 8th, 10th, and 12th graders**



Source: Nebraska Risk and Protective Factors Student Survey (2014)

As with alcohol use, past 30-day cigarette use among youth has generally been on the decline in both the Three Rivers District and the state as a whole from 2003 to 2014 (Figure 30).

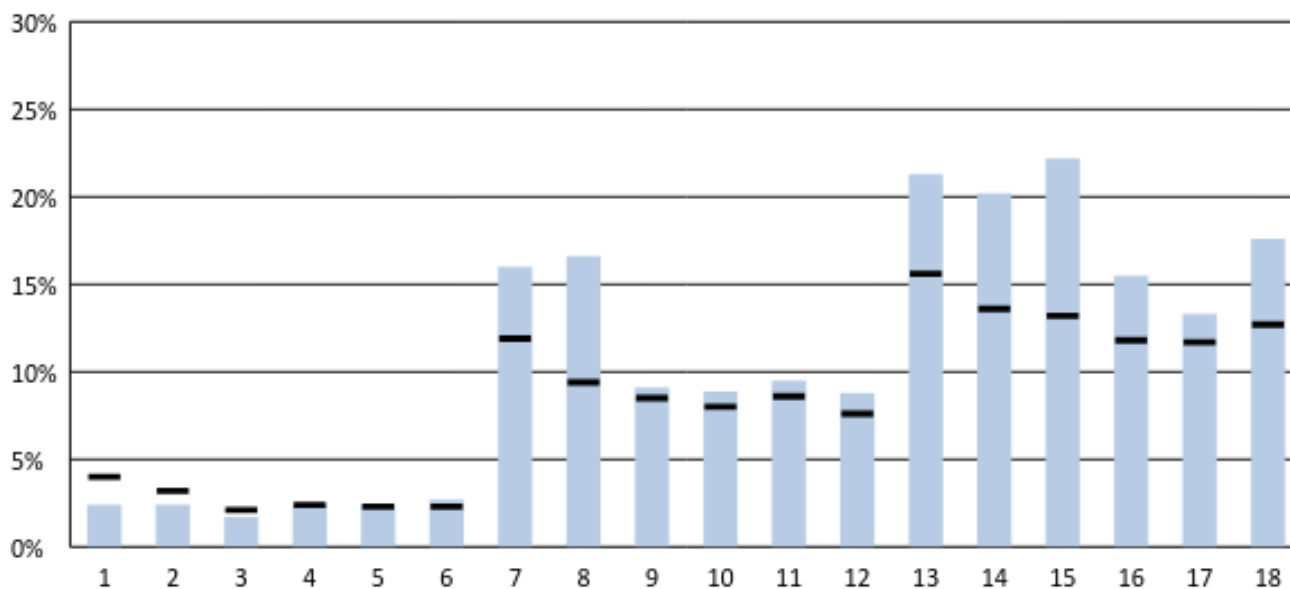
**Figure 30. Past 30-day cigarette use among 8th, 10th, and 12th graders**



Source: Nebraska Risk and Protective Factors Student Survey (2014)

In 2014, 8.8% of 10<sup>th</sup> graders and 17.6% of 12<sup>th</sup> graders in the Three Rivers District reported marijuana use in the past 30 days. Both of these rates are higher than the state (Figure 31).

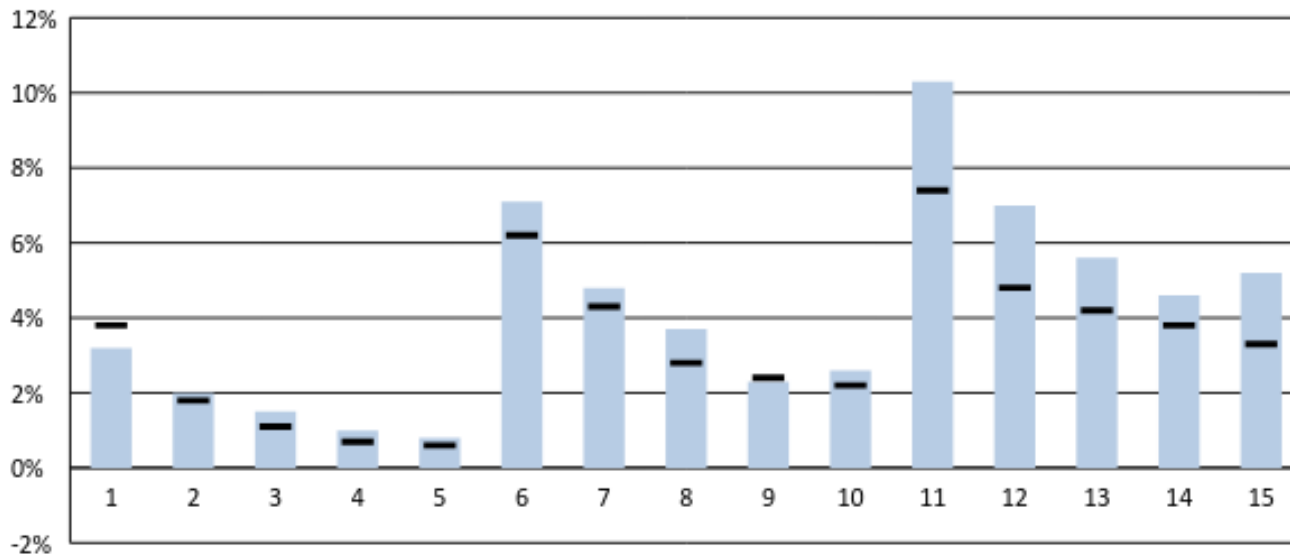
**Figure 31. Past 30-day marijuana use among 8th, 10th, and 12th graders**



Source: Nebraska Risk and Protective Factors Student Survey (2014)

Past 30-day prescription drug use has been declining in both the Three Rivers District and the state as whole since 2005. However, past 30-day prescription drug use has been consistently higher among Three Rivers youth than in the state (Figure 32).

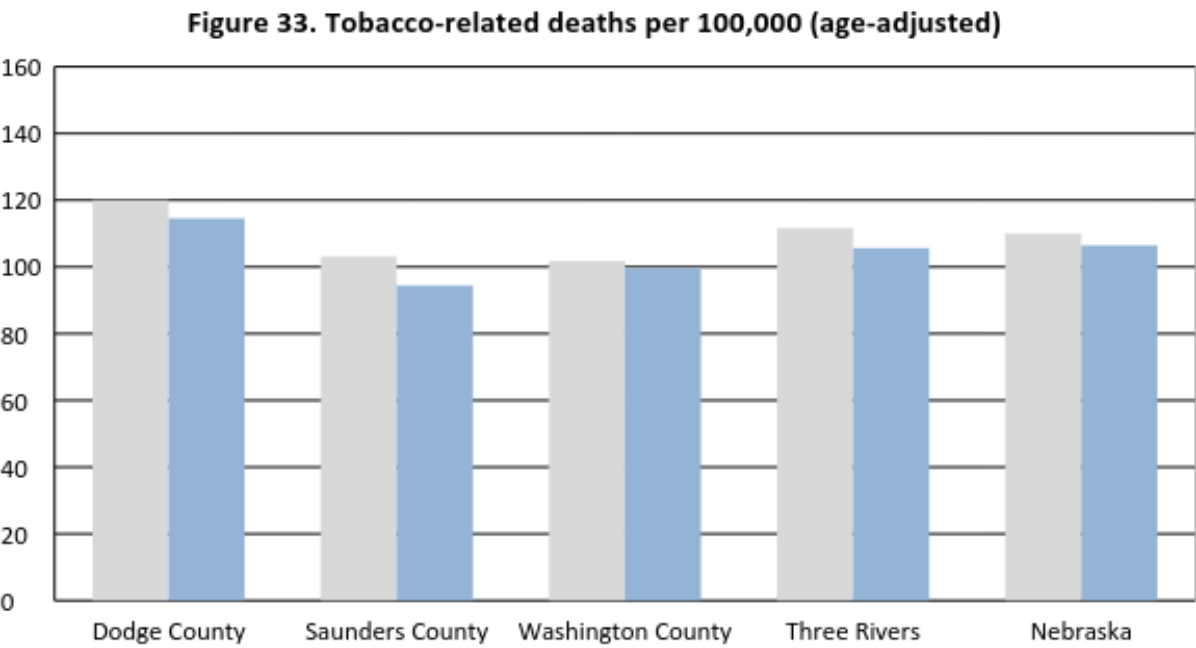
**Figure 32. Past 30-day prescription drug use among 8th, 10th, and 12th graders**



Source: Nebraska Risk and Protective Factors Student Survey (2014)

## ***Adult Alcohol and Tobacco Use***

Rates of tobacco-related deaths in the Three Rivers District are basically on par with the rest of the state. However, Washington County has a lower rate of tobacco-related deaths compared to the district and the state. There were 125 such deaths in Washington County from 2009-2013 (Figures 33 and 34).



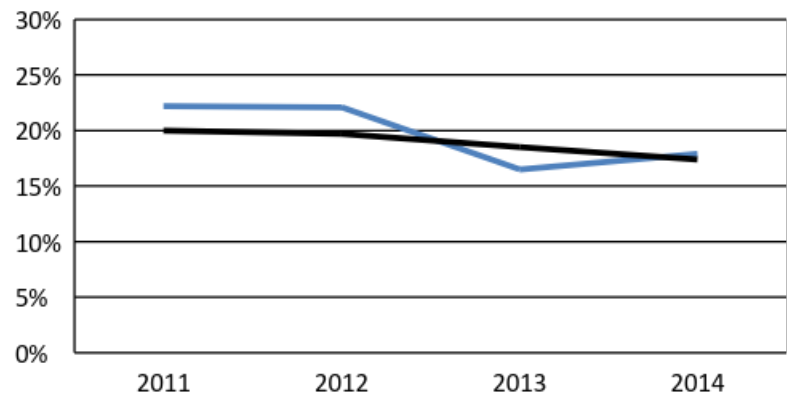
Source: Nebraska DHHS, Vital Records (2013)

Figure 34	Number of tobacco-related deaths (2009-2013)			
Dodge County	Saunders County	Washington County	Three Rivers	Nebraska
316	129	125	570	11,183

Source: Nebraska DHHS, Vital Records (2013)

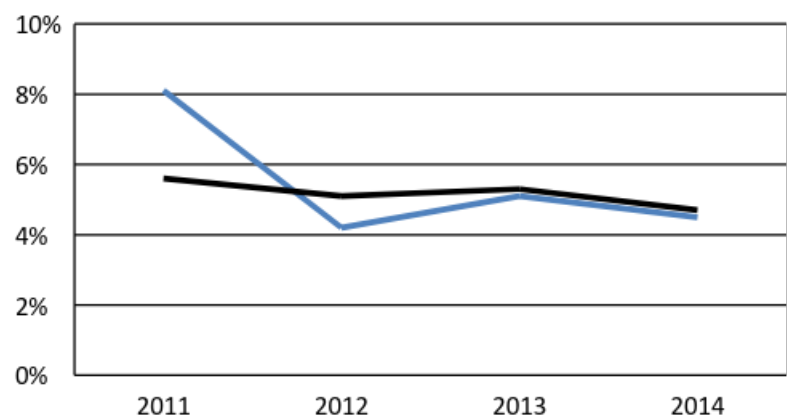
Both cigarette smoking and tobacco use appear to be on the decline since 2011 in the Three Rivers District. In 2014, 17.9% of adults reported currently smoking cigarettes and 4.5% reported current smokeless tobacco use (Figures 35 and 36).

**Figure 35. Currently smoke cigarettes among adults 18 and over**



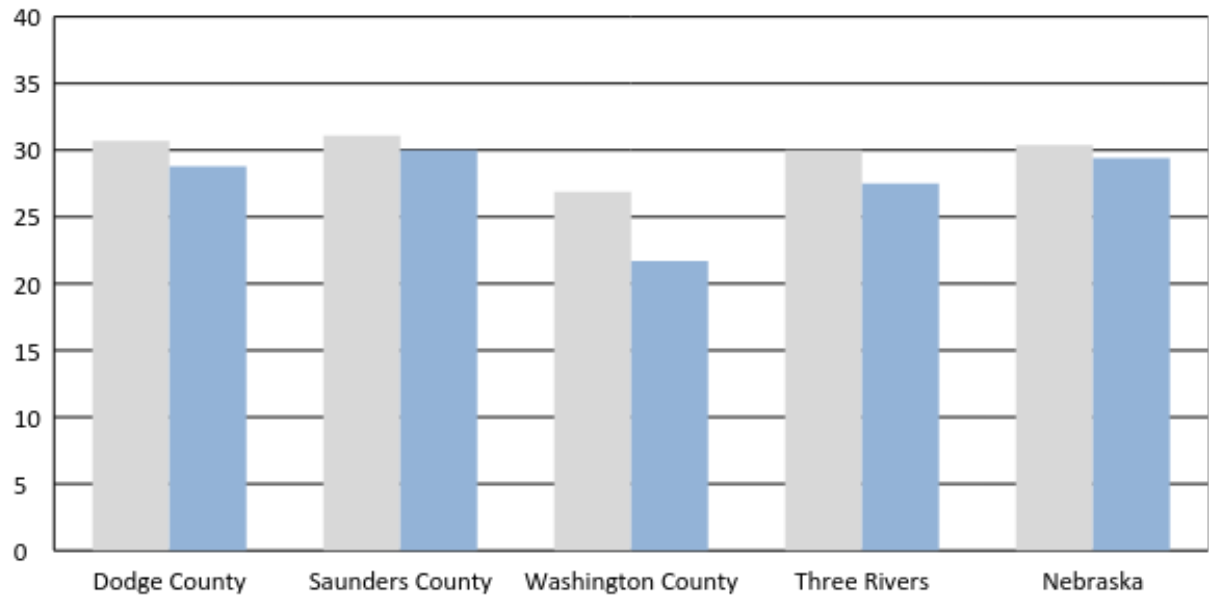
In addition, in the Three Rivers District in 2014, 63.6% of current smokers reported that they attempted to quit smoking in the past year (state comparison: 58.2%) (Source: Behavioral Risk Factors Surveillance System, 2014).

**Figure 36. Current smokeless tobacco use among adults 18 and over**



Rates of alcohol-related deaths are lower in Washington County than the rest of the district and state. There were 30 such deaths in Washington County from 2009-2013 (Figures 37 and 38).

**Figure 37. Alcohol-related deaths per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

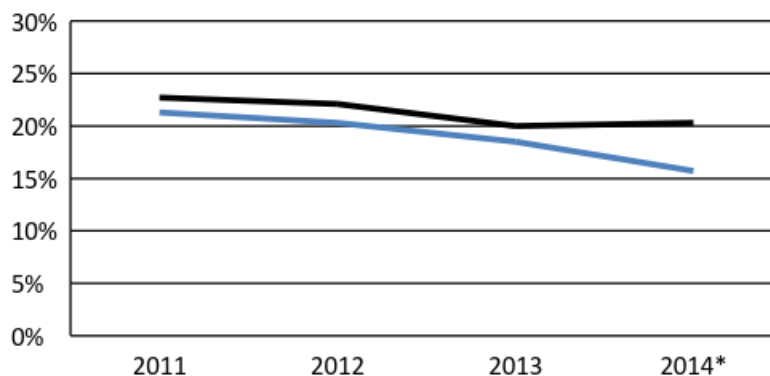
Figure 38    Number of alcohol-related deaths (2009-2013)		
Washington County	Three Rivers	Nebraska
30	145	3,042

Source: Nebraska DHHS, Vital Records (2013)



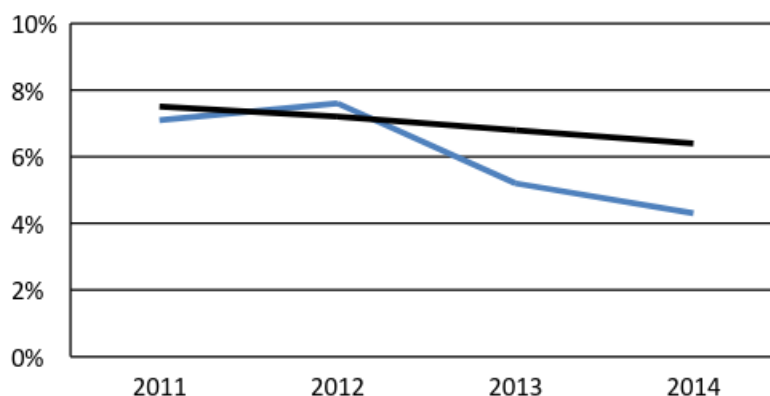
In 2014, 15.7% of adults in the Three Rivers District reported binge drinking in the past 30 days (compared to 20.3% for the state). This rate of binge drinking has been declining in the Three Rivers District every year since 2011. (Figure 39)

**Figure 39. Binge drank (5 or more drinks in one occasion for men, 4 for women) in the past 30 days among adults 18 and over**



Heavy drinking (see the note below the figure for the definition) was reported by 4.3% of Three Rivers adults in 2014 (compared to 6.4% for the state). This rate has also been declining since 2014 (Figure 40).

**Figure 40. Heavy drinking\* in the past 30 days among adults 18 and over**



\*Percentage of men who report drinking more than 60 alcoholic drinks during the past 30 days and percentage of women who report drinking more than 30 alcoholic drinks in the past 30 days.

Source: Behavioral Risk Factors Surveillance System (2014)



## Alcohol-Impaired Driving

From 2009-2013, there were 4 alcohol-impaired driving deaths in Washington County, accounting for 28.6% of all driving deaths in the district (Figure 41).

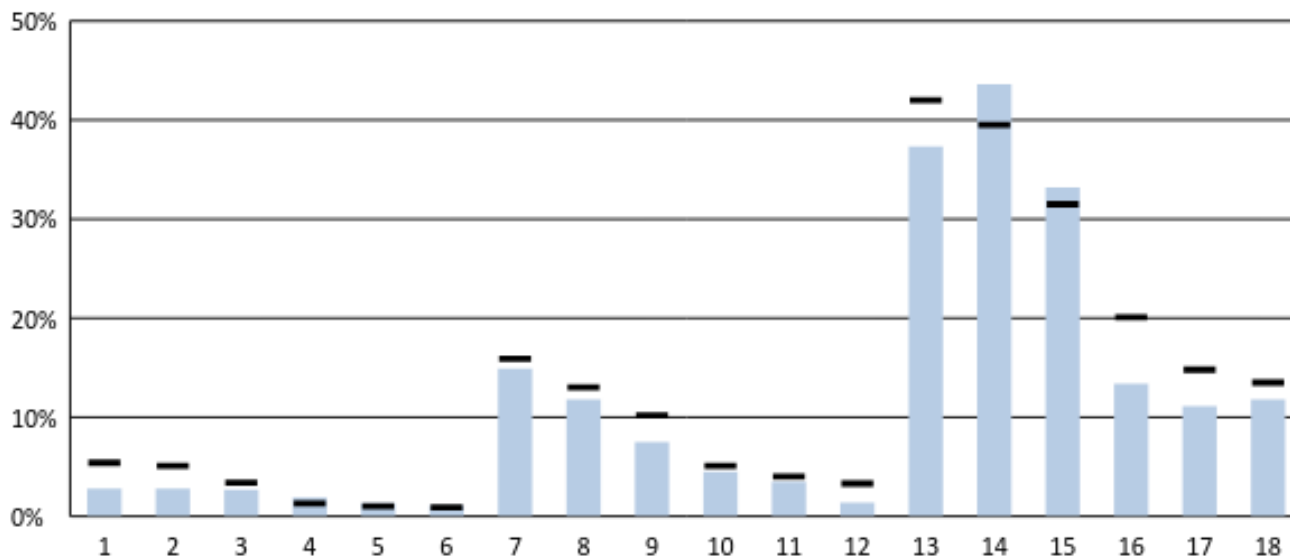
**Figure 41. Alcohol-impaired driving deaths (2009-2013)**

	Number of alcohol-impaired driving deaths	Number of driving deaths	Alcohol-impaired driving deaths as a percentage of all driving deaths
<b>Washington County</b>	4	14	28.6%
<b>Three Rivers</b>	<b>10</b>	<b>47</b>	<b>21.3%</b>
<b>Nebraska</b>	<b>360</b>	<b>1,017</b>	<b>35.4%</b>

Fatality Analysis Reporting System, contained in County Health Rankings (2015)

In 2014, 1.4% of 10<sup>th</sup> graders and 11.8% of 12<sup>th</sup> graders reported driving under the influence of alcohol in the past year. The rates of youth reporting driving under the influence have been declining considerably across the state (Figure 42).

**Figure 42. Drove a vehicle under the influence of alcohol in the past year among 8th, 10th, and 12th graders**



Source: Nebraska Risk and Protective Factors Student Survey (2014)

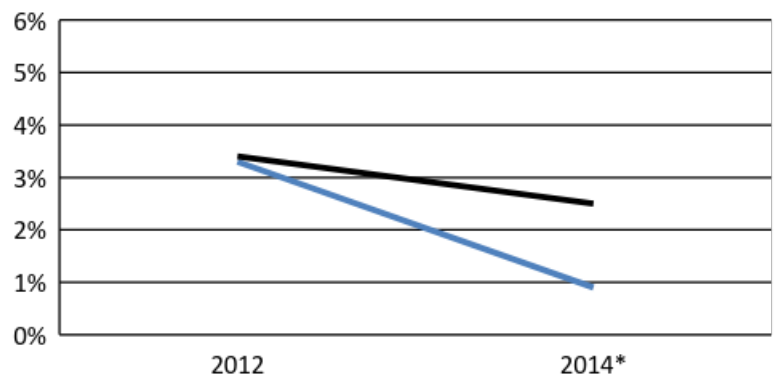
In 2014, 15.5% of 8<sup>th</sup> graders, 14.8% of 10<sup>th</sup> graders, and 13.0% of 12<sup>th</sup> graders reported riding in a vehicle driven by someone who had been drinking alcohol in the past 30 days (Figure 43).

Figure 43	Rode in a vehicle driven by someone who had been drinking alcohol in the past 30 days among 8 <sup>th</sup> , 10 <sup>th</sup> , and 12 <sup>th</sup> graders (2014)		
	8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Three Rivers	15.5%	14.8%	13.0%
Nebraska	13.3%	15.7%	15.9%

Source: Nebraska Risk and Protective Factors Student Survey (2014)

In 2014, 0.9% of adults in the Three Rivers District reported alcohol impaired driving in the past 30 days (compared to 2.5% for the state) (Figure 44).

**Figure 44. Alcohol impaired driving in the past 30 days among adults 18 and over**



\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

Unintentional Injury

Unintentional injury includes a broad array of injuries including motor vehicle accidents, falls, drug poisoning, fires and burns, drowning, suffocation, work-related accidents, and other similar types of unintentional injuries. See also the previous two sections for data on alcohol-impaired driving and motor vehicle safety. From 2009 to 2013 the rate of unintentional injury deaths was 36.3 per 100,000 in Washington County (compared to 35.9 per 100,000 for the state). Over this five-year period, there were 40 unintentional injury deaths in the district (Figures 45-46).

Figure 45. Unintentional injury deaths per 100,000 (age-adjusted)



Source: Nebraska DHHS, Vital Records (2013)

Figure 46	Number of deaths due to unintentional injury (2009-2013)		
	Washington County	Three Rivers	Nebraska
	40	180	3,541

Source: Nebraska DHHS, Vital Records (2013)

One-in-ten (10.1%) of Three Rivers adults age 45 and over reported being injured due to a fall in the past year in 2014 (Figure 47).

**Figure 47. Falls among adults 45 and over (2014)**

	<b>Three Rivers</b>	<b>Nebraska</b>
<b>Had a fall in the past year</b>	28.3%	26.1%
<b>Injured due to a fall in the past year</b>	10.1%	8.8%

Source: Behavioral Risk Factors Surveillance System (2014)

## ***Foster Care and Child Abuse/Neglect***

The rate of substantiated cases of child abuse and neglect declined in Washington County from 2013 to 2014 to almost half of what it was in the prior year. There were a total of 7 cases of substantiated child abuse and neglect in Washington County and 89 in the Three Rivers District in 2014 (Figure 48).

**Figure 48. Number of substantiated cases of child abuse and neglect and rate per 1,000**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Washington County</b>	8 (1.6)	15 (2.9)	15 (2.9)	7 (1.4)
<b>Three Rivers</b>	<b>73 (3.7)</b>	<b>79 (4.0)</b>	<b>74 (3.8)</b>	<b>89 (4.5)</b>
<b>Nebraska</b>	<b>3,410 (6.9)</b>	<b>2,723 (5.5)</b>	<b>2,892 (5.9)</b>	<b>2,575 (5.2)</b>

Source: Nebraska DHHS Child Abuse and Neglect Reports (2014)

While the rate of youth in foster care in Washington County is significantly lower than the state from 2012 to 2014, there was a notable decrease in the number of youth in foster care in Washington County from 2013 (25 youth in foster care) to 2014 (9 youth in foster care) (Figure 49).

**Figure 49. Number in foster care and rate per 1,000**

	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Washington County</b>	23 (4.5)	25 (4.9)	9 (1.7)
<b>Three Rivers</b>	<b>122 (6.2)</b>	<b>117 (6.0)</b>	<b>132 (6.7)</b>
<b>Nebraska</b>	<b>4,320 (8.8)</b>	<b>3,892 (7.9)</b>	<b>3,026 (6.2)</b>

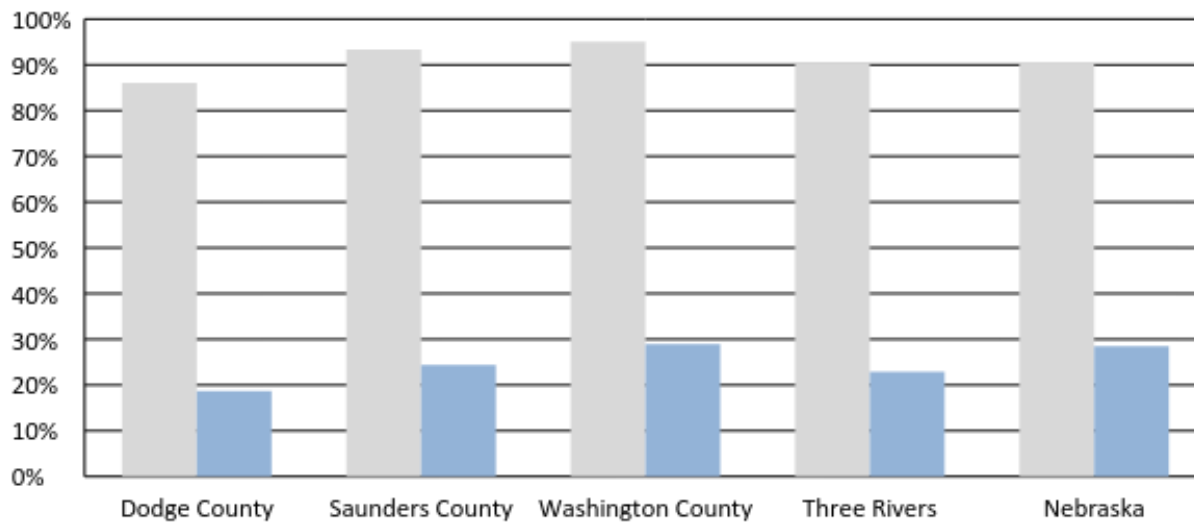
Source: Nebraska Foster Care Review Board (2014)



## Education

95.0% of the residents in Washington County have at least a high school diploma, which is 5% higher than the rest of the state. Nearly 30% of the residents in Washington County have a Bachelor's degree or higher, which is just slightly higher than the state of Nebraska (Figure 50).

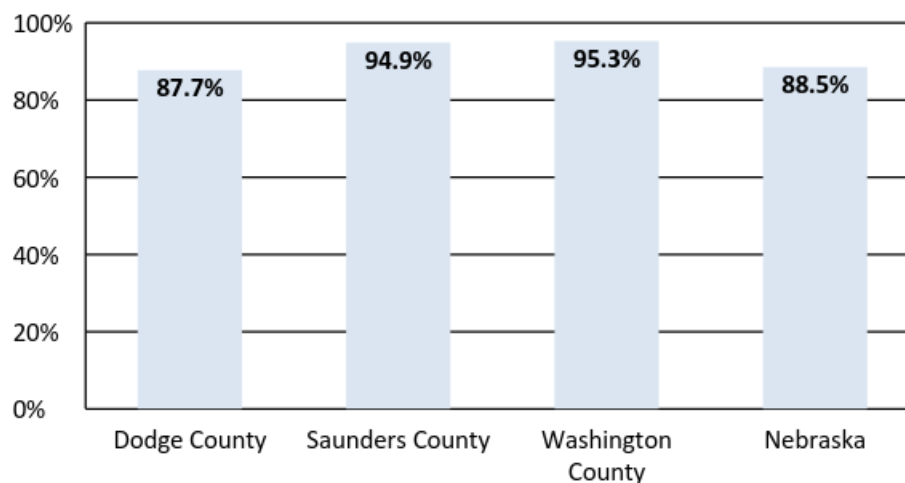
**Figure 50. Educational attainment of the population ages 25 and over (2013)**



Source: U.S. Census/American Community Survey 5-Year Estimates (2013)

High school graduation rates are presented below in Figure 51.

**Figure 51. High School Graduation Rate (2012-2013)**





Source: Nebraska Department of Education, data provided by the Nebraska Children and Families Foundation  
(2012-2013)

<b>Figure 52</b>		<b>Education Statistics for Public Schools Districts in <u>Washington County</u> (2013-2014)</b>			
		<b>Arlington Public Schools</b>	<b>Blair Communi ty Schools</b>	<b>Fort Calhoun Communi ty Schools</b>	<b>Nebraska Public Schools</b>
<b>Neb ras ka Acc oun tabi lity Scor es</b>	<b>% Proficient in reading</b>	90%	83%	92%	77%
	<b>% Proficient in mathematics</b>	82%	79%	86%	71%
	<b>% Proficient in science</b>	86%	85%	89%	72%
	<b>% Proficient in writing (2012-2013)</b>	79%	74%	69%	68%
<b>Stu den t Cha ract eris tics</b>	<b>Enrollment</b>	582	2,311	607	307,398
	<b>% Receiving free/reduced lunch</b>	21.7%	25.8%	20.1%	44.9%
	<b>% of ELL students</b>	-*	-*	-*	6.0%
	<b>% School mobility rate</b>	7.2%	4.7%	4.1%	12.1%
	<b>% of Students in special education</b>	11.7%	14.0%	16.7%	15.7%

\*Data has been masked to protect the identity of students if there are fewer than 10 students in a group.

Source: Nebraska Department of Education (2013-2014)

<b>Figure 53</b>		<b>Four-Year Graduation Rates for Public Schools Districts in <u>Washington County</u> (2013-2014)</b>			
		<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Arlington Public Schools</b>		94.7%	94.8%	94.0%	98.1%
<b>Blair Community Schools</b>		89.7%	93.9%	94.0%	97.2%
<b>Fort Calhoun Community Schools</b>		89.4%	98.1%	-*	100%
<b>Nebraska Public Schools</b>		86.1%	87.6%	88.5%	89.7%

\*Data has been masked to protect the identity of students.

Source: Nebraska Department of Education (2013-2014)

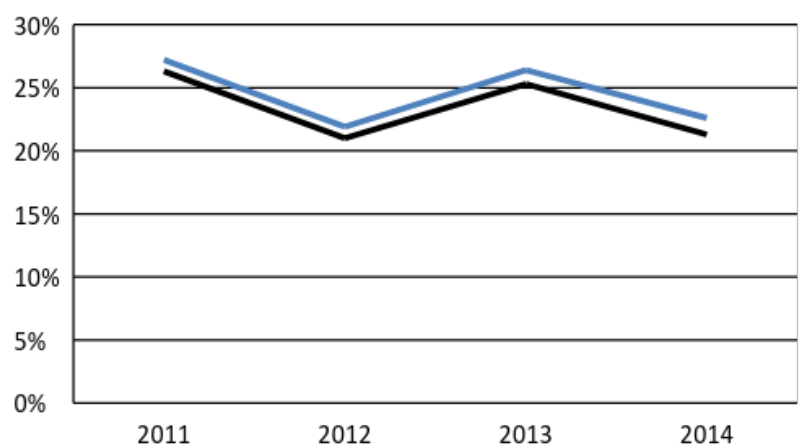
## Physical Activity

**Figure 54. Percentage of the population with adequate access to locations for physical activity (2010 & 2013)**

<b>Washington County</b>	<b>48.0%</b>
<b>Nebraska</b>	<b>81.4%</b>

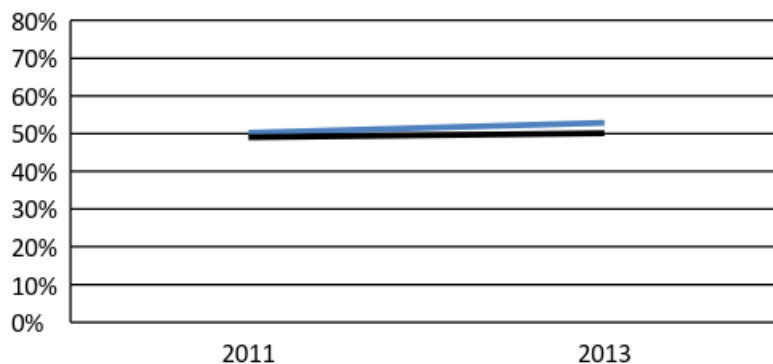
Source: Business Analyst, Delorme map data, ESRI, and US Census Tigerline Files, contained in County Health Rankings (2015)

**Figure 55. No leisure-time physical activity in the past 30 days among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

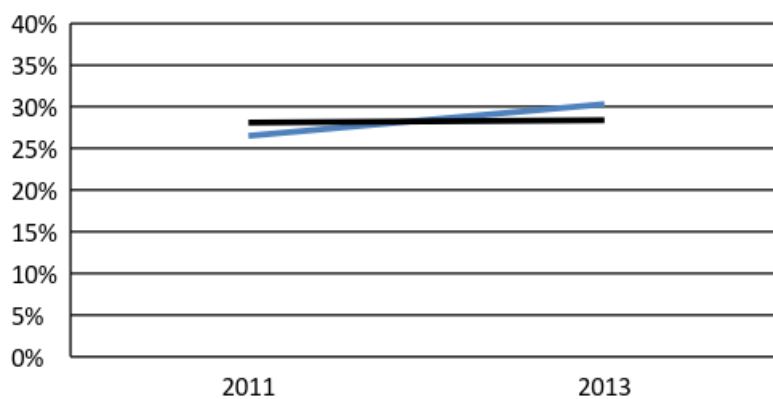
**Figure 56. Met aerobic physical activity recommendation\* among adults 18 and over in the past 30 days**



\*At least 150 minutes of moderate-intensity physical activity, or at least 75 minutes of vigorous-intensity physical activity, or an equivalent combination of moderate and vigorous-intensity aerobic activity per week during the past month.

Source: Behavioral Risk Factors Surveillance System (2014)

**Figure 57. Met muscle strengthening recommendation\* among adults 18 and over in the past 30 days**

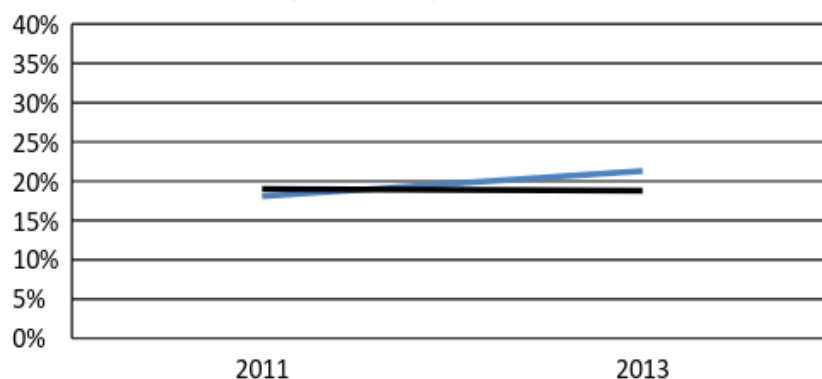


\*Engaged in physical activities or exercises to strengthen their muscles two or more times per week during the past month.

Source: Behavioral Risk Factors Surveillance System (2014)

One-in-five (21.3%)  
Three Rivers adults  
reported meeting  
both the aerobic  
physical activity and  
muscle  
strengthening  
recommendations in  
the past 30 days in  
2013 (see the  
definition below the  
figure) (Figure 58).

**Figure 58. Met both aerobic physical activity and muscle strengthening recommendations\* among adults 18 and over in the past 30 days**



\*At least 150 minutes of moderate-intensity physical activity, or at least 75 minutes of vigorous-intensity physical activity, or an equivalent combination of moderate and vigorous-intensity aerobic activity per week during the past month and engaged in physical activities or exercises to strengthen their muscles two or more times per week during the past month.

Source: Behavioral Risk Factors Surveillance System (2014)

## Nutrition

Figure 59 below contains nutrition indicators among adults 18 and over.

**Figure 59. Nutrition indicators among adults 18 and over (2013)**

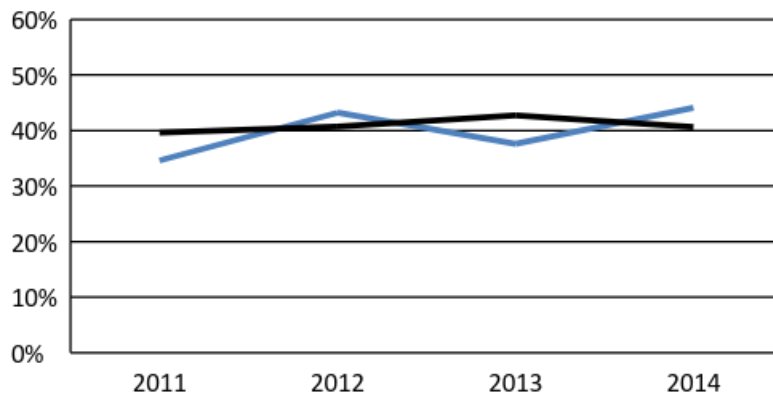
	Three Rivers	Nebraska
Consumed sugar-sweetened beverages 1 or more times per day in past 30 days	23.5%	28.5%
Currently watching or reducing sodium or salt intake	51.1%	46.3%
Consumed fruits less than 1 time per day in past 30 days	37.8%	39.7%
Consumed vegetables less than 1 time per day in past 30 days	23.0%	23.3%

Source: Behavioral Risk Factors Surveillance System (2014)

## Obesity

In 2014, 44.1% of Three Rivers adults reported a height and weight that computed to a body mass index (BMI) of 30 or higher, and thus are considered obese (state comparison: 40.6%) (Figure 60).

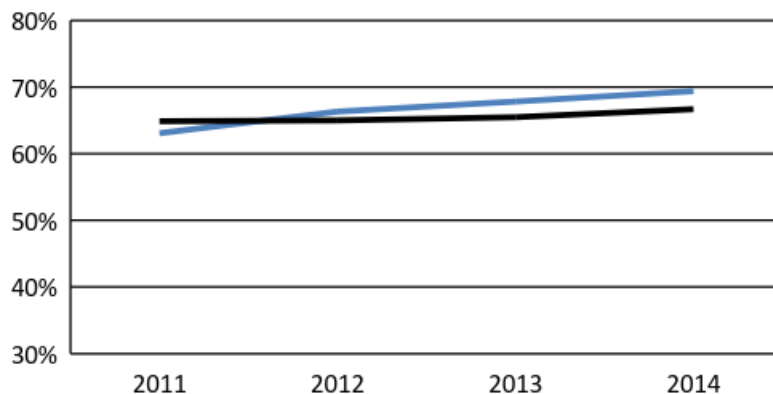
**Figure 60. Obesity (BMI of 30 or higher) among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 69.4% of Three Rivers adults reported a height and weight that computed to a body mass index (BMI) of 25 or higher, and thus are considered overweight or obese (state comparison: 66.7%) (Figure 61).

**Figure 61. Overweight or Obese (BMI of 25 or higher) among adults 18 and over**



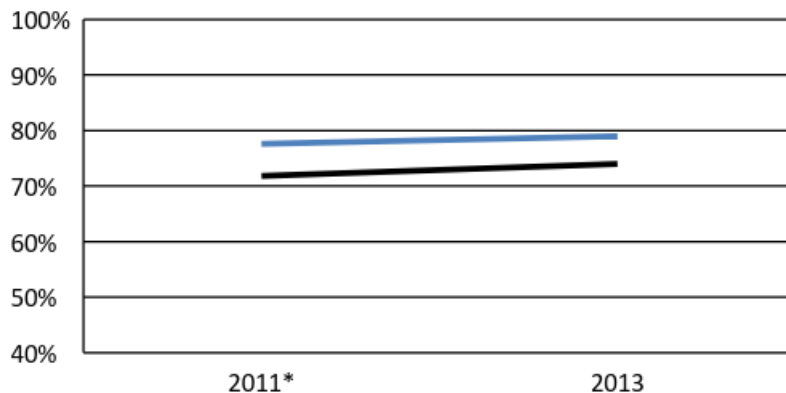
Source: Behavioral Risk Factors Surveillance System (2014)



## Health Screening

In the most recent year of available data 79.0% reported having their cholesterol checked in the past five years, and 66.1% reported being up to date on colon cancer screening. Each of these indicators was higher than the state (Figures 62 through 63).

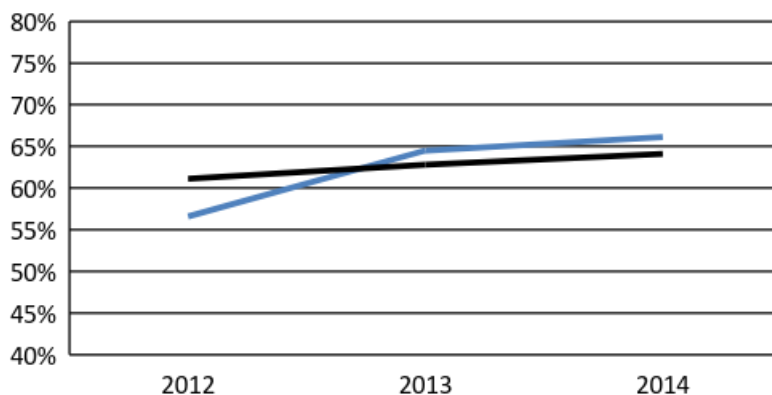
**Figure 62. Had cholesterol checked in the past 5 years among adults 18 and over**



\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

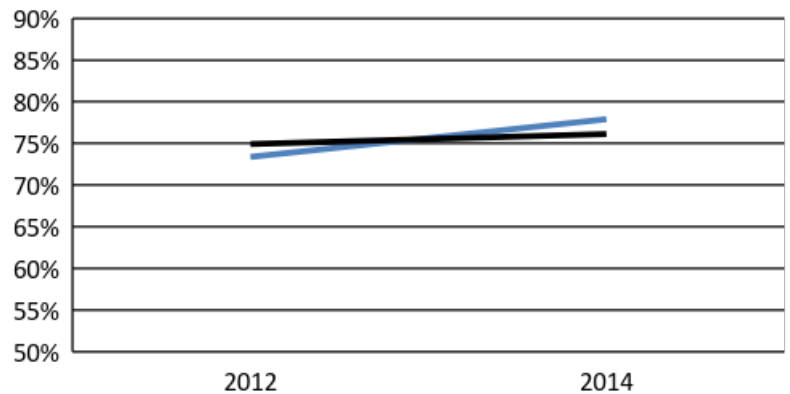
**Figure 63. Up to date on colon cancer screening among adults 50-75 years old**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 77.9% of women age 50 to 74 years old in the Three Rivers District reported being up to date on breast cancer screening (Figure 64).

**Figure 64. Up to date on breast cancer screening among women 50-74 years old**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 85.5% of women age 21 to 65 years old in the Three Rivers District reported being up to date on cervical cancer screening (Figure 65).

**Figure 65. Up to date on cervical cancer screening among women 21-65 years old**



Source: Behavioral Risk Factors Surveillance System (2014)



## General Health Metrics

County Health Rankings provides *health outcomes* rankings at the county-level for every state in the country. There are two primary sub-categories that comprise the health outcomes ranking: length of life and quality of life. The county that is ranked first is considered the healthiest county in the state. Washington County has consistently had high rankings on this metric (Figure 66).

Figure 66	<b>Health Outcomes (length and quality of life) County Health Rankings</b>			
	<b>2012 (out of 79)</b>	<b>2013 (out of 79)</b>	<b>2014 (out of 79)</b>	<b>2015 (out of 78)</b>
<b>Washington County</b>	3	7	8	6

Source: County Health Rankings (2015)

County Health Rankings also provides *health factors* rankings at the county-level for every state in the country. The sub-categories that comprise the health factors rankings include health behaviors, clinical care, social & economic factors, and physical environment. Washington County has also consistently had high rankings on this metric (Figure 67).

Figure 67	<b>Health Factors (health behaviors, clinical care, social and economic factors, and the physical environment) County Health Rankings</b>			
	<b>2012 (out of 79)</b>	<b>2013 (out of 79)</b>	<b>2014 (out of 79)</b>	<b>2015 (out of 78)</b>
<b>Washington County</b>	9	9	5	10

Source: County Health Rankings (2015)

From 2010 to 2012, there were 174 premature deaths (a death of an individual under the age of 75) in Washington County. Washington County has a high rate of years of potential lost per 100,000 population compared to the state (Figure 68).

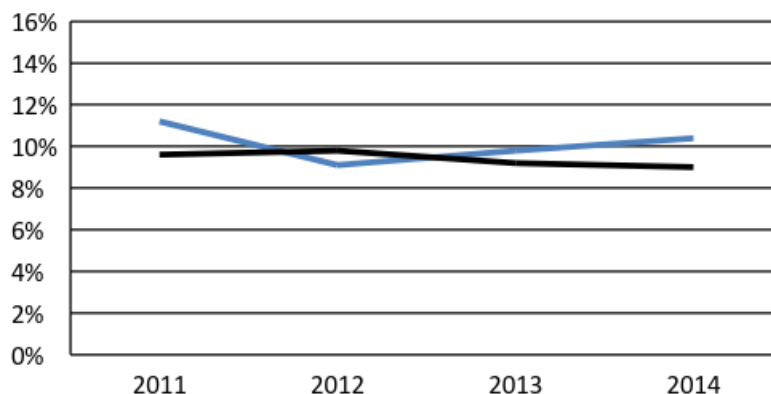
**Figure 68. Premature deaths (deaths under age 75) and years of potential life lost**

	2008-2010		2010-2012	
	Number of deaths under age 75	Years of potential life lost per 100,000 population (age-adjusted)	Number of deaths under age 75	Years of potential life lost per 100,000 population (age-adjusted)
<b>Washington County</b>	174	4,819	170	4,844
<b>Nebraska</b>	<b>16,746</b>	<b>5,904</b>	<b>17,223</b>	<b>5,792</b>

Source: National Center for Health Statistics, contained in County Health Rankings (2015)

In 2014, one-in-ten (10.4%) adults in the Three Rivers District reported that their physical health was not good on 14 or more of the past 30 days (Figure 69).

**Figure 69. Physical health was not good on 14 or more of the past 30 days among adults 18 and over**

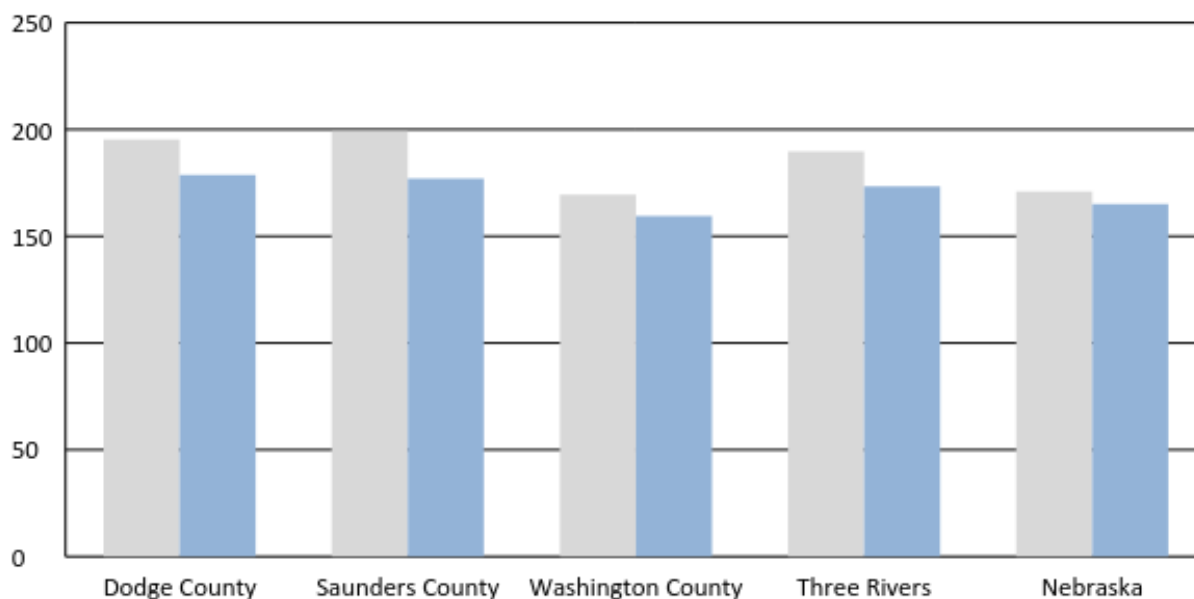


Source: Behavioral Risk Factors Surveillance System (2014)

## Cancer

Overall, Washington County had a slightly lower rate of deaths due to cancer compared to the state over the five-year period of 2009 to 2013. From 2009 to 2013 there were 194 deaths due to cancer in Washington County. The leading cause of cancer mortality was lung cancer, accounting for 50 deaths (Figures 70 through 72).

**Figure 70. Deaths due to cancer per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

Figure 71	Number of deaths due to cancer (2009-2013)		
	Washington County	Three Rivers	Nebraska
Lung Cancer	50	251	4,491
Breast Cancer	15	59	1,133
Cervical Cancer	0	6	99
Colorectal Cancer	17	90	1,712
Prostate Cancer	12	53	933
Melanoma	4	14	311

Lymphoma	8	37	685
Leukemia	10	41	704
All other types of cancer	78	350	7,047
<b>All types of cancer</b>	<b>194</b>	<b>901</b>	<b>17,115</b>

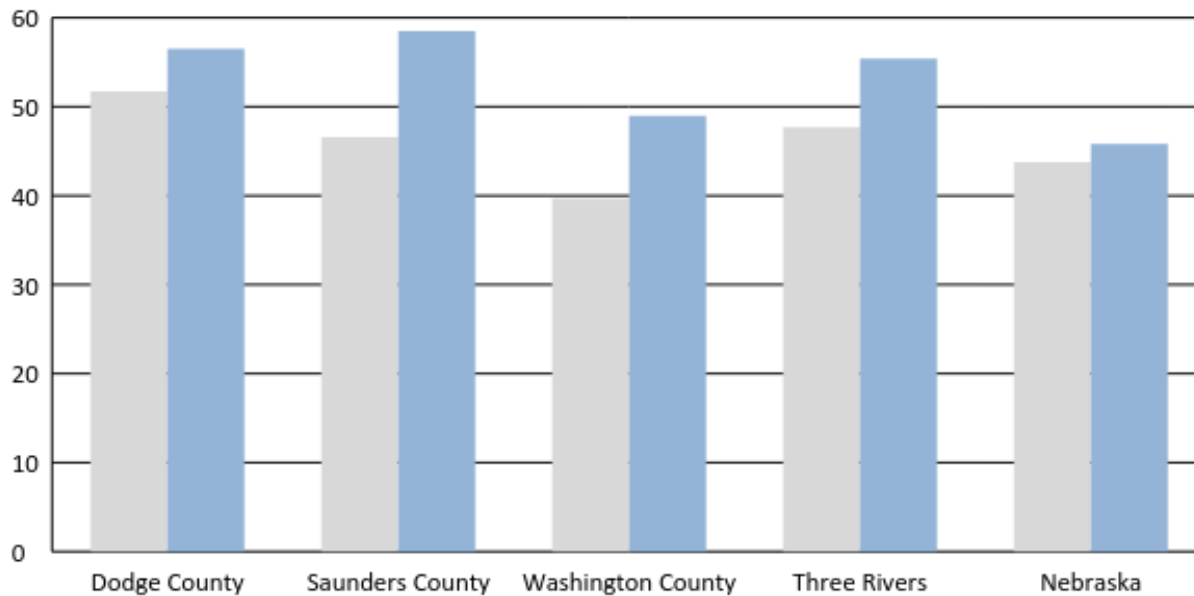
Source: Nebraska DHHS, Vital Records (2013)

<b>Figure 72</b>	<b>Percentage of deaths due to cancer by age (2009-2013)</b>				
	<b>0-29</b>	<b>30-44</b>	<b>45-59</b>	<b>60-74</b>	<b>75 and over</b>
<b>Dodge County</b>	0.2%	1.9%	12.8%	30.4%	54.7%
<b>Saunders County</b>	1.7%	0.4%	16.5%	37.6%	43.9%
<b>Washington County</b>	0.0%	3.1%	19.1%	35.1%	42.8%
<b>Three Rivers</b>	0.6%	1.8%	15.1%	33.3%	49.3%

Source: Nebraska DHHS, Vital Records (2013)

Rates of mortalities due to various types of cancer are presented in Figures 73 through 80.

**Figure 73. Deaths due to Lung Cancer per 100,000 (age-adjusted)**



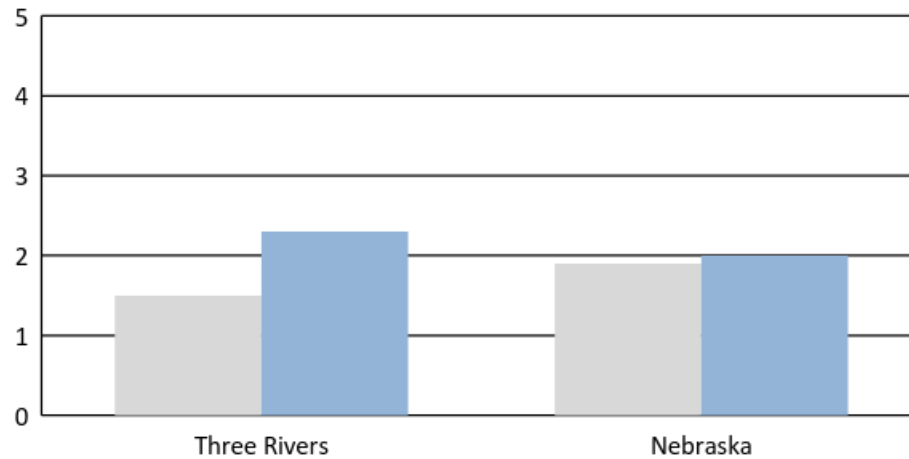
Source: Nebraska DHHS, Vital Records (2013)

**Figure 74. Deaths due to Breast Cancer per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

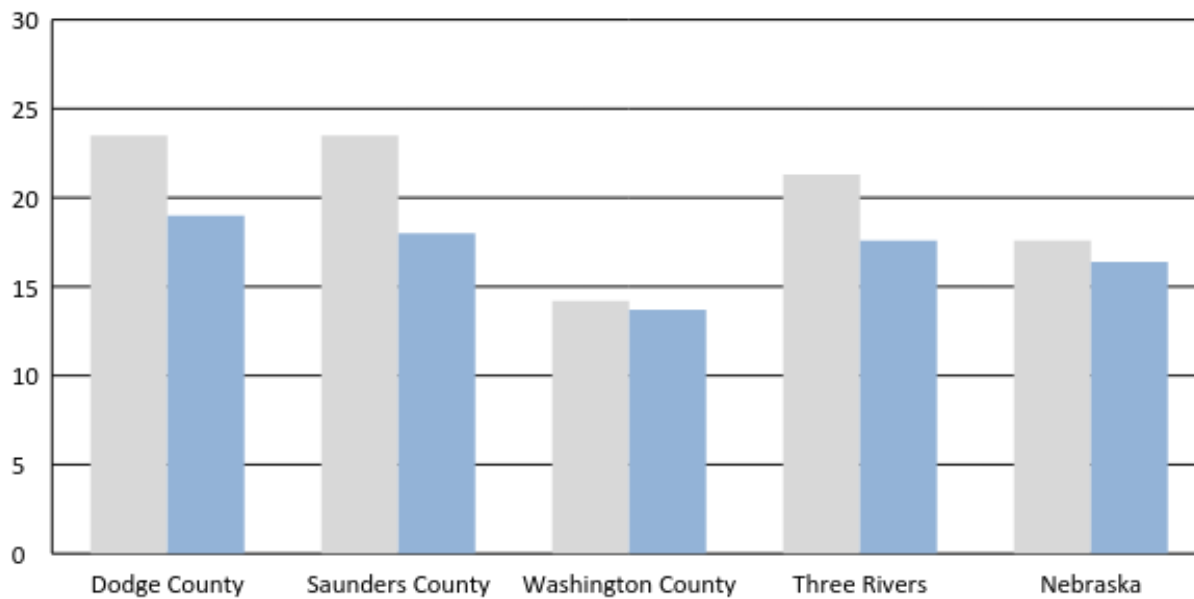
**Figure 75. Deaths due to Cervical Cancer per 100,000  
(age-adjusted)**



Note: numbers of deaths are too small to present rates by county

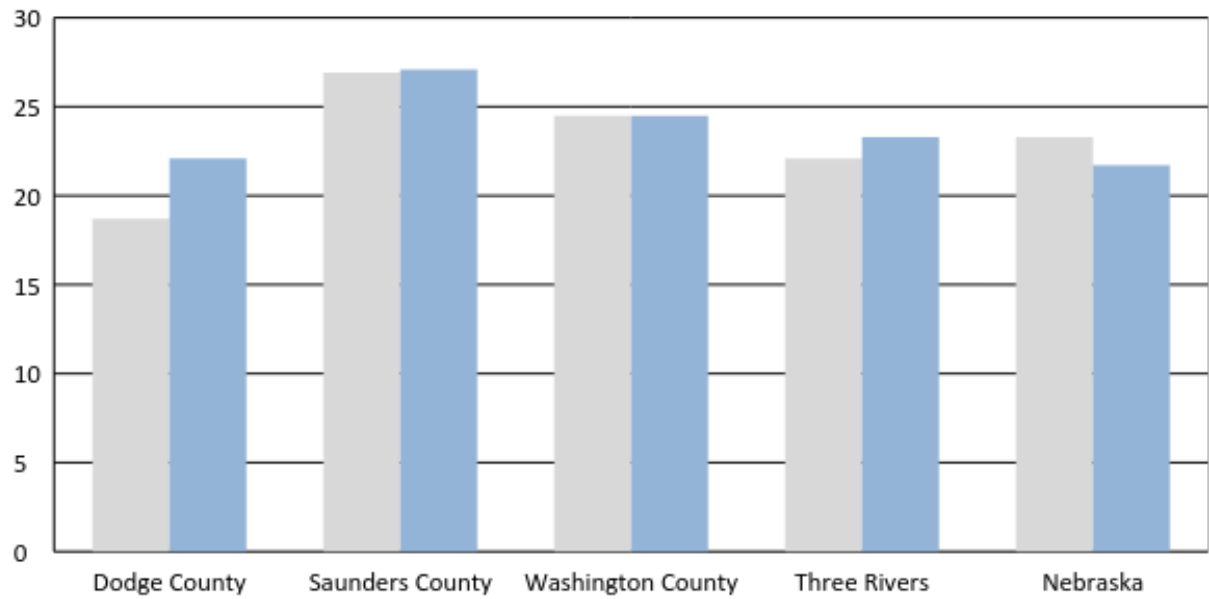
Source: Nebraska DHHS, Vital Records (2013)

**Figure 76. Deaths due to Colorectal Cancer per 100,000 (age-adjusted)**



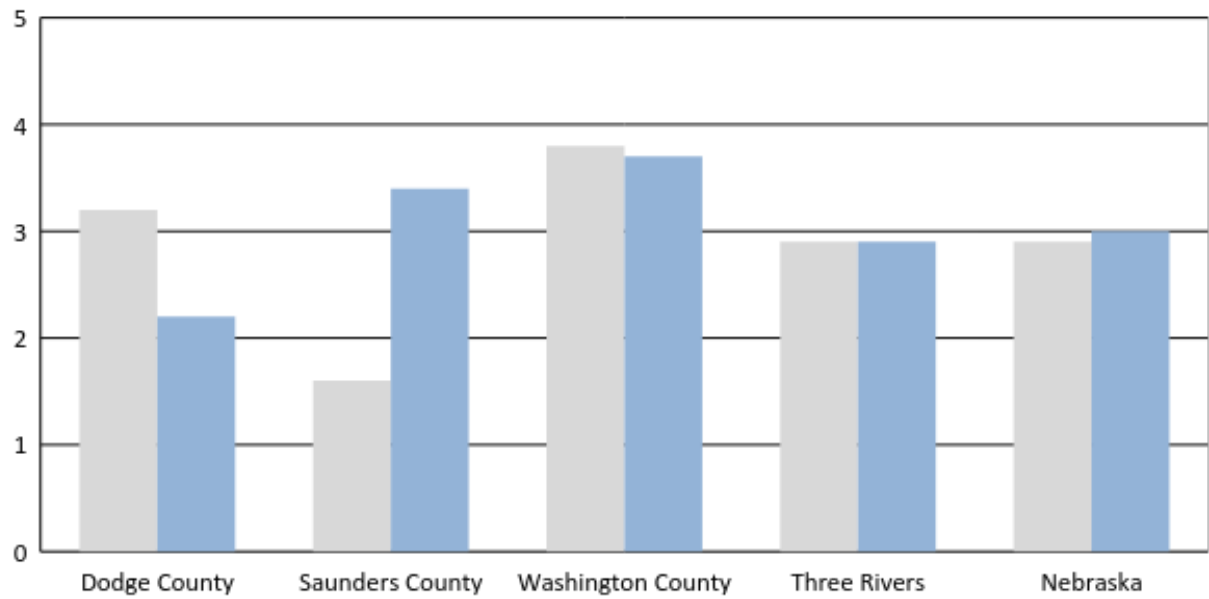
Source: Nebraska DHHS, Vital Records (2013)

**Figure 77. Deaths due to Prostate Cancer per 100,000 (age-adjusted)**



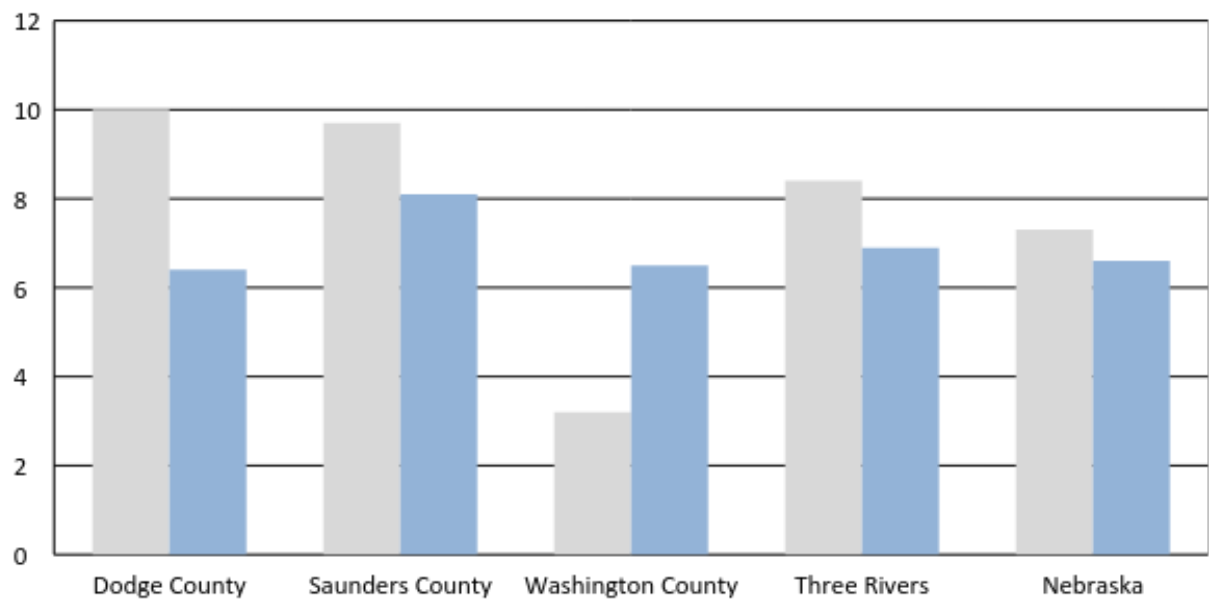
Source: Nebraska DHHS, Vital Records (2013)

**Figure 78. Deaths due to Melanoma per 100,000 (age-adjusted)**



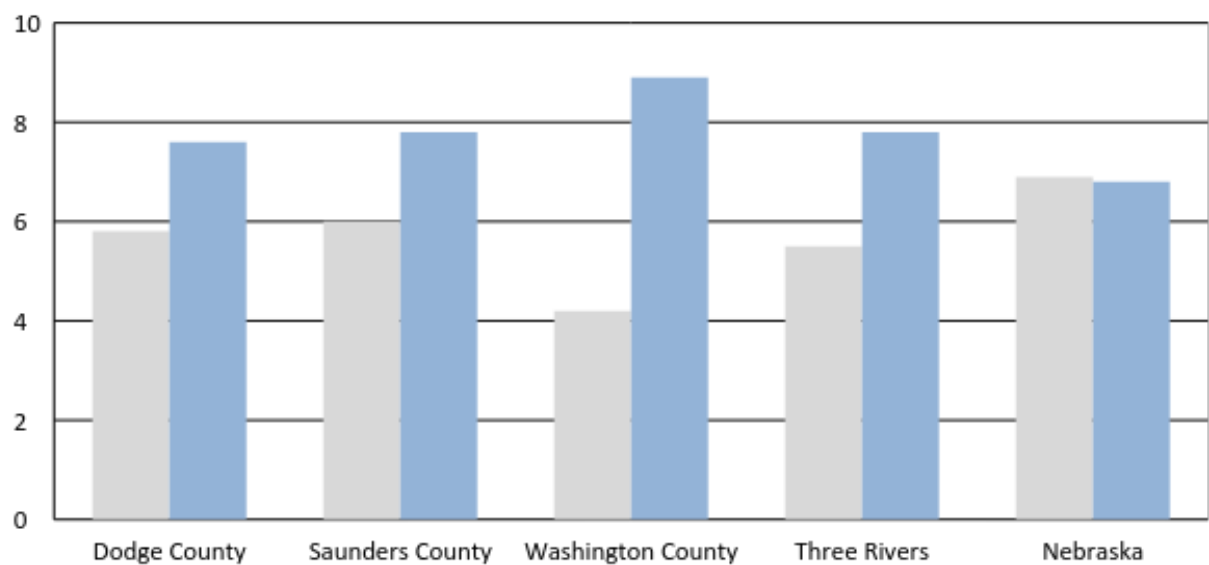
Source: Nebraska DHHS, Vital Records (2013)

**Figure 79. Deaths due to Lymphoma per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

**Figure 80. Deaths due to Leukemia per 100,000 (age-adjusted)**

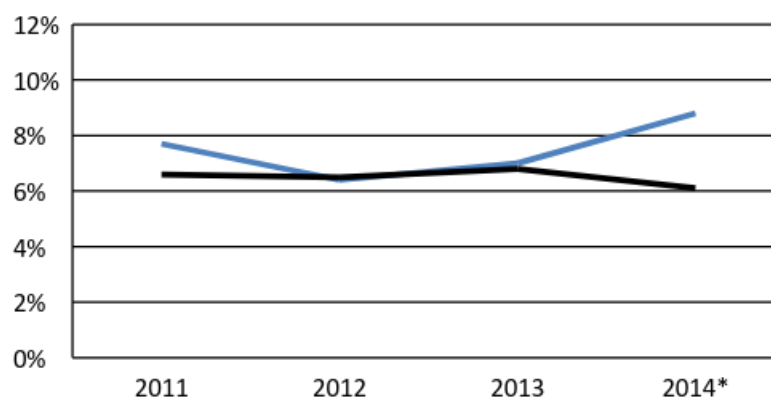


Source: Nebraska DHHS, Vital Records (2013)



In 2014, 8.8% of Three Rivers adults reported ever being told that they have cancer other than skin cancer (compared to 6.1% for the state) and 13.6% reported ever being told they have cancer in any form (compared to 10.7% for the state). There is a statistically significant difference between the Three Rivers and the state on both of these indicators (Figures 81 and 82).

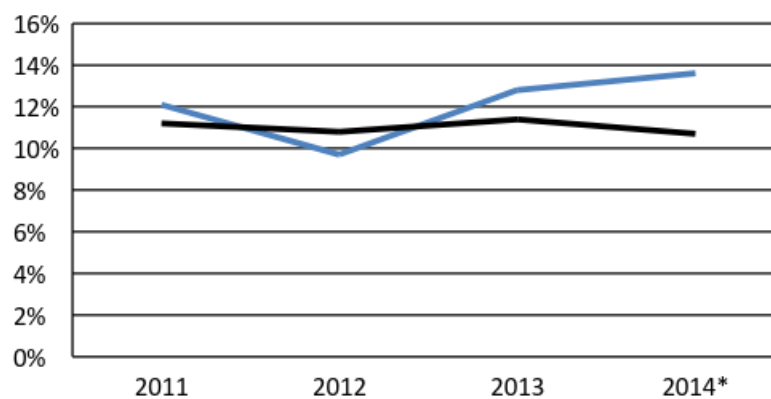
**Figure 81. Ever told they have cancer other than skin cancer among adults 18 and over**



\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

**Figure 82. Ever told they have cancer in any form among adults 18 and over**



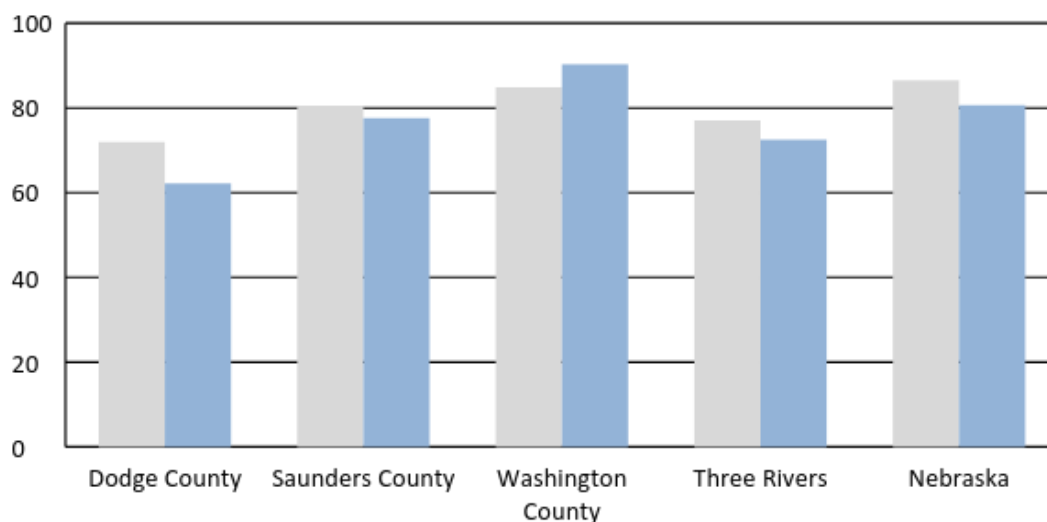
\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

## Heart Disease

As a whole the Three Rivers District has a lower rate of deaths due to Coronary Heart Disease compared to the state. However, Washington County has a higher rate than the state. From 2009 to 2013 there were 90.3 deaths due to Coronary Heart Disease in Washington County (Figures 83 through 85).

**Figure 83. Deaths due to Coronary Heart Disease per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

Figure 84	Number of deaths due to coronary heart disease (2009-2013)		
Washington County	Three Rivers	Nebraska	
117	417	8,843	

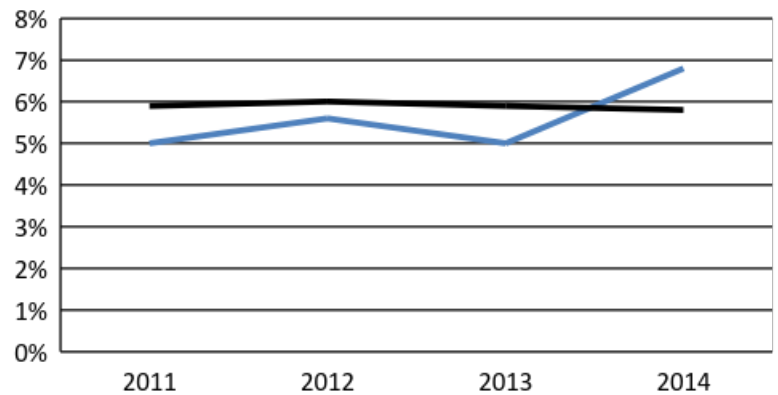
Source: Nebraska DHHS, Vital Records (2013)

Figure 85	Percentage of deaths due to coronary heart disease by age (2009-2013)				
	0-29	30-44	45-59	60-74	75 and over
Washington County	0.6%	1.7%	12.2%	14.4%	71.3%
Three Rivers	0.5%	1.0%	7.4%	16.4%	74.6%

Source: Nebraska DHHS, Vital Records (2013)

**Figure 86. Ever told they had a heart attack or coronary heart disease among adults 18 and over**

In 2014, 6.8% of Three Rivers adults reported that they have ever been told by a medical professional that they had a heart attack or coronary heart disease (Figure 86).

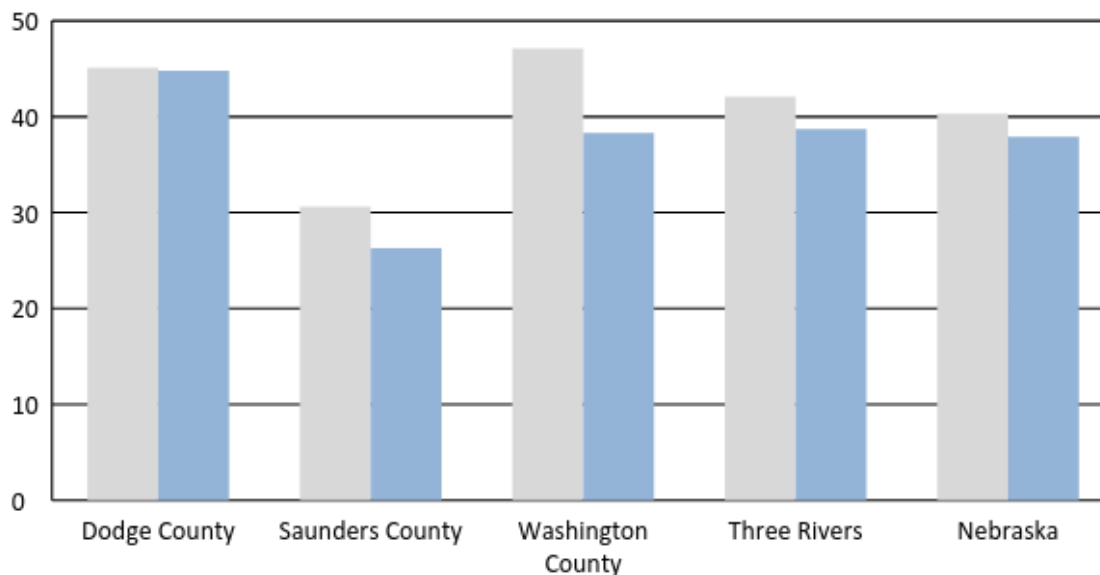


Source: Behavioral Risk Factors Surveillance System (2014)

## Stroke

The rate of death due to stroke is basically comparable between the Three Rivers District and the state. However, Washington County has a slightly higher rate than the state. From 2009 to 2013, there were 46 deaths due to stroke in Washington County (Figures 87 through 89).

**Figure 87. Deaths due to Stroke per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

Figure 88	Number of deaths due to Stroke (2009-2013)		
	Washington County	Three Rivers	Nebraska
	46	222	4,143

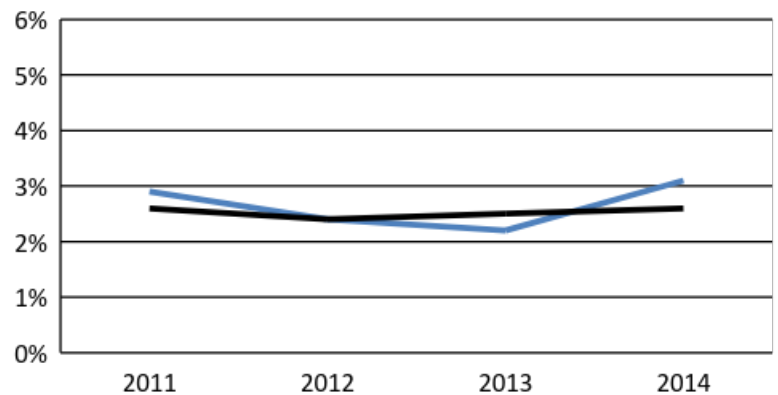
Source: Nebraska DHHS, Vital Records (2013)

Figure 89	Percentage of deaths due to Stroke by age (2009-2013)				
	0-29	30-44	45-59	60-74	75 and over
Washington County	0.0%	0.0%	2.2%	23.9%	73.9%
Three Rivers	0.0%	0.5%	3.6%	15.8%	80.2%

Source: Nebraska DHHS, Vital Records (2013)

In 2014, 3.1% of Three Rivers adults reported that they have ever been told by a medical professional that they had a stroke (Figure 90).

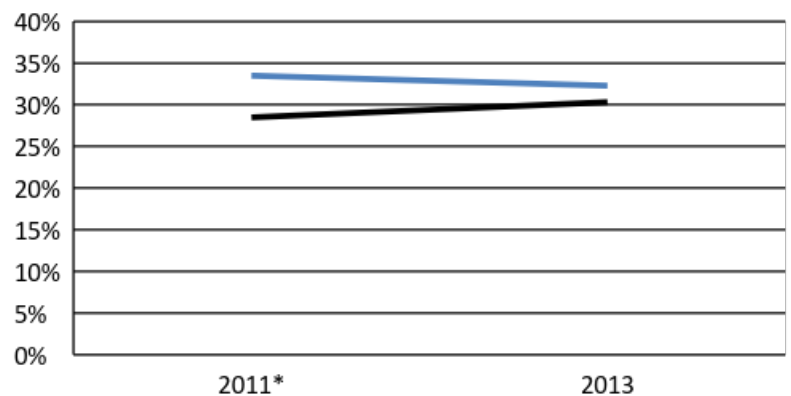
**Figure 90. Ever told they had a stroke among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

## ***High Blood Pressure and Cholesterol***

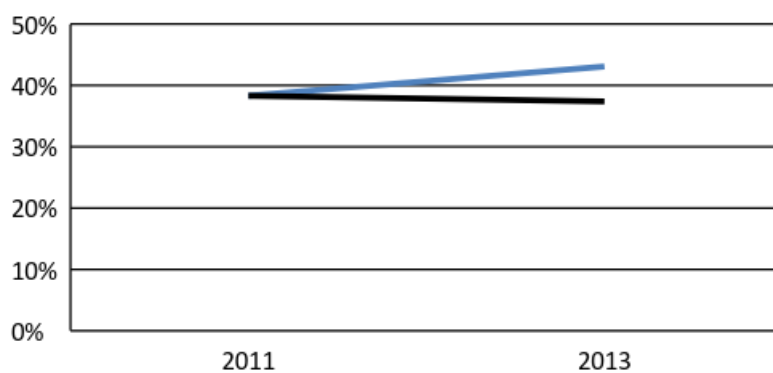
**Figure 91. Ever told they have high blood pressure (excluding pregnancy) among adults 18 and over**



\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

**Figure 92. Ever told they have high cholesterol among those who have ever had it checked among adults 18 and over**

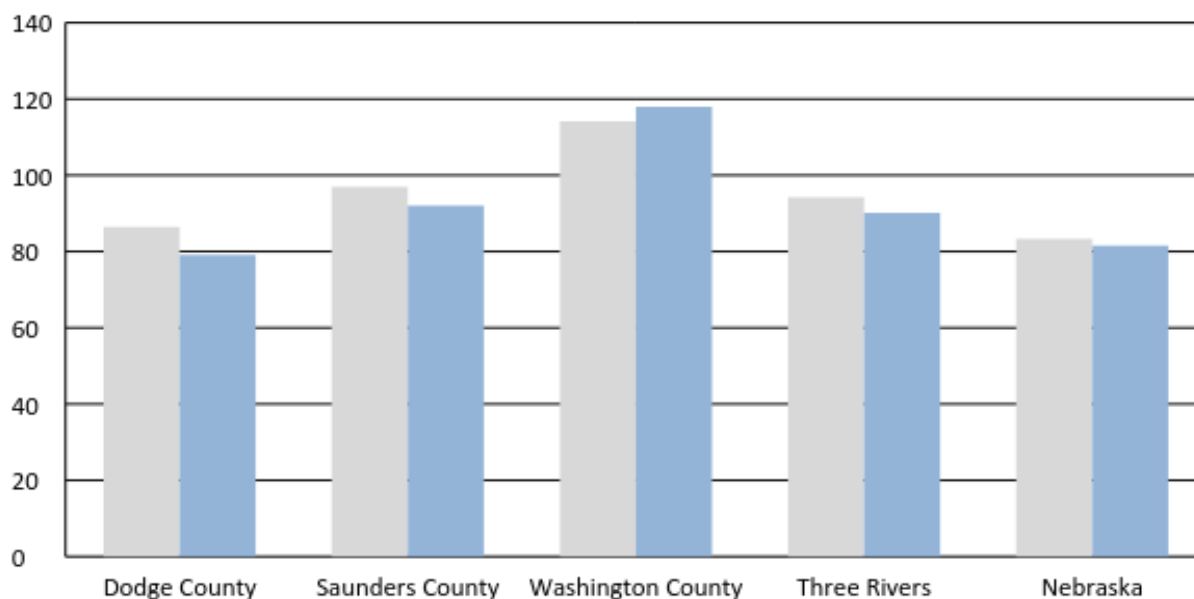


Source: Behavioral Risk Factors Surveillance System (2014)

## Diabetes

As a whole, Washington County has a much higher rate of diabetes-related deaths compared to the district and the state. The rate of deaths due to diabetes in Washington County is rather alarming at 117.9 per 100,000 population (compared to 81.6 per 100,000 for the state). From 2009 to 2013, there were 145 diabetes-related deaths in Washington County (Figures 93 through 95).

**Figure 93. Diabetes-related deaths per 100,000 (age-adjusted)**



Source: Nebraska DHHS, Vital Records (2013)

Figure 94	Number of diabetes-related deaths (2009-2013)		
	Washington County	Three Rivers	Nebraska
	145	498	8,656

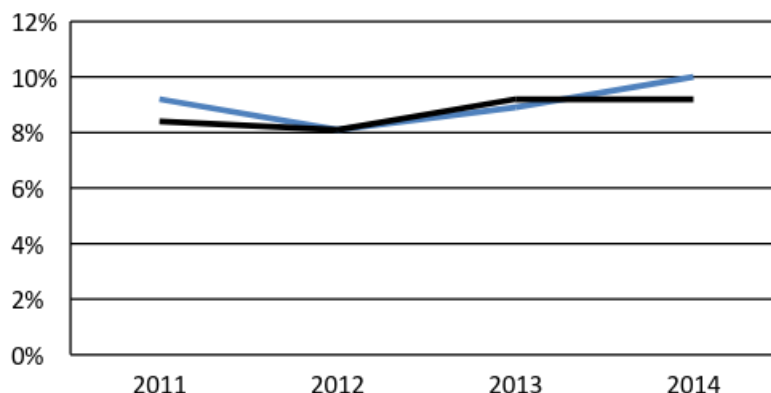
Source: Nebraska DHHS, Vital Records (2013)

Figure 95	Percentage of deaths due to diabetes by age (2009-2013)				
	0-29	30-44	45-59	60-74	75 and over
Washington County	0.0%	0.0%	21.7%	26.1%	52.2%
Three Rivers	1.0%	0.0%	9.1%	33.3%	56.6%

Source: Nebraska DHHS, Vital Records (2013)

In 2014, 10.0% of Three Rivers adults reported that they have ever been told by a doctor that they have diabetes (Figure 96).

**Figure 96. Ever told they have diabetes (excluding pregnancy) among adults 18 and over**

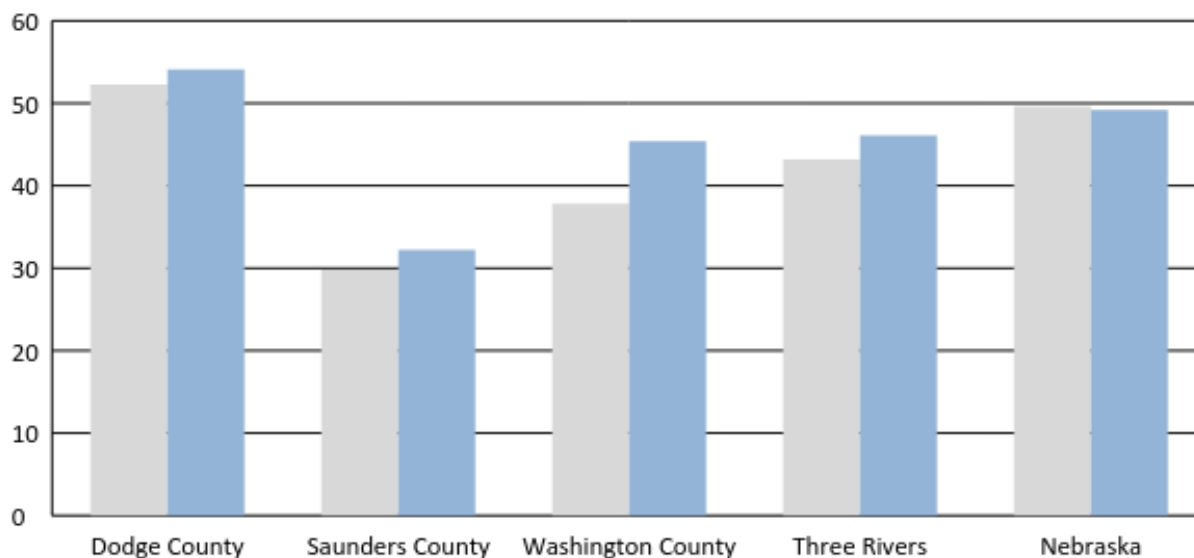


Source: Behavioral Risk Factors Surveillance System (2014)

## Respiratory and Pulmonary Illnesses

The rate of deaths due to Chronic Obstructive Pulmonary Disease (COPD) in the Three Rivers District is basically on par with the state, though the rate in Washington County is lower than the state. From 2009 to 2013, there were 55 deaths due to COPD in Washington County (Figures 97 and 98).

**Figure 97. Deaths due to Chronic Obstructive Pulmonary Disease per 100,000 (age-adjusted)**





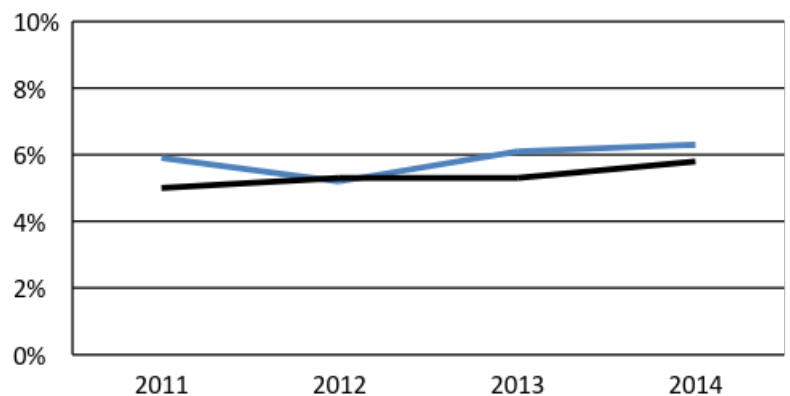
Source: Nebraska DHHS, Vital Records (2013)

<b>Figure 98</b>	<b>Number of deaths due to Chronic Obstructive Pulmonary Disease (2009-2013)</b>		
	<b>Washington County</b>	<b>Three Rivers</b>	<b>Nebraska</b>
	55	252	5,160

Source: Nebraska DHHS, Vital Records (2013)

Approximately 6% of adults reported that they have ever been told by a medical professional that they have COPD (Figure 99).

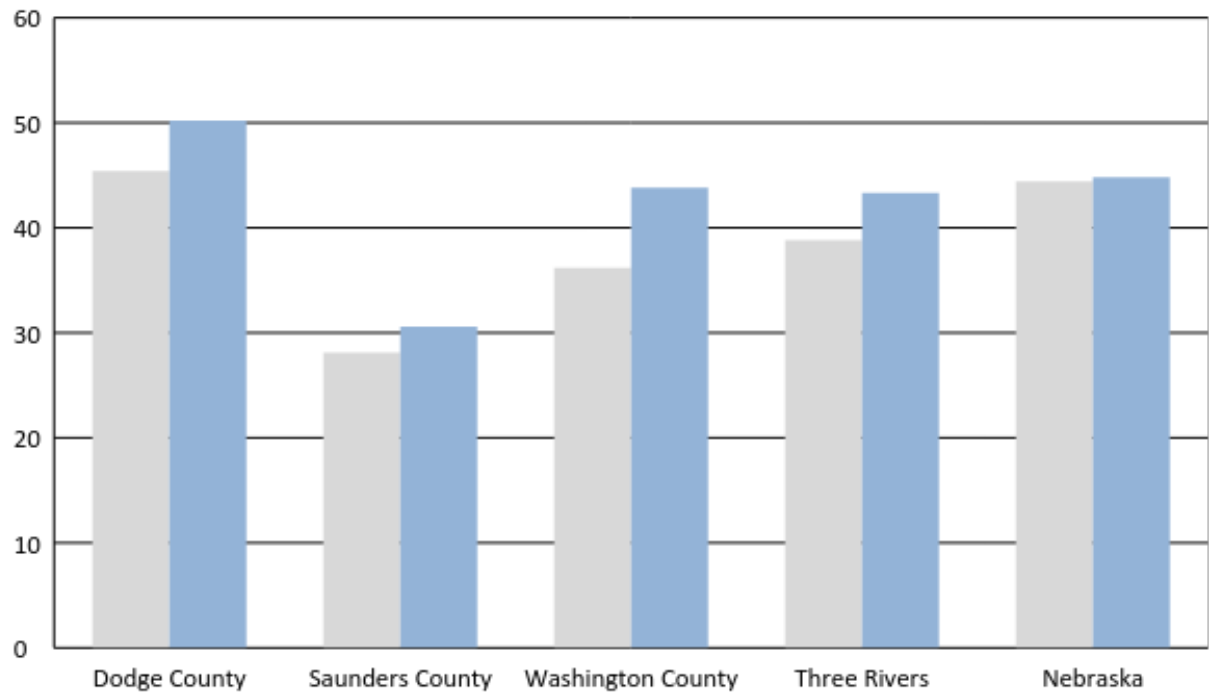
**Figure 99. Ever told they have Chronic Obstructive Pulmonary Disease (COPD) among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

The rate of deaths due to Chronic Lung Disease in Washington County is slightly less than the state. There were 53 deaths due to Chronic Lung Disease in Washington County from 2009 to 2013 (Figures 100 and 101).

**Figure 100. Chronic Lung Disease deaths per 100,000 (age-adjusted)**



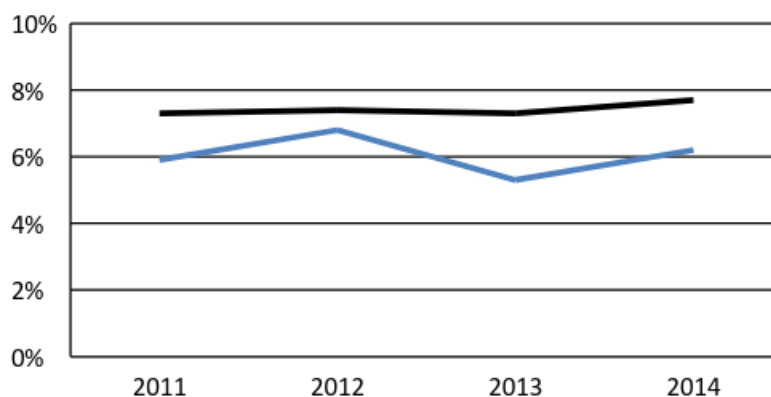
Source: Nebraska DHHS, Vital Records (2013)

Figure 101	Number of deaths due to chronic lung disease (2009-2013)		
	Washington County	Three Rivers	Nebraska
	53	236	4,700

Source: Nebraska DHHS, Vital Records (2013)

Approximately 6% of adults in the Three Rivers District reported that they have been told by a medical professional that they currently have Asthma in 2014 (Figure 102).

**Figure 102. Currently have Asthma among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

## Maternal and Infant Health

In 2013, 14.9% of births in the Three Rivers District received inadequate prenatal care as defined by the Kotelchuk Index (see definition below the figure) (Figure 103).

**Figure 103. Percentage of births receiving inadequate prenatal\* care**

	2012	2013
<b>Three Rivers</b>	12.7%	<b>14.9%</b>
<b>Nebraska</b>	<b>14.2%</b>	<b>14.3%</b>

\*Calculated by using the Kotelchuk Index. The Kotelchuk Index measures adequacy of prenatal care (intensive, adequate, intermediate, or inadequate) by using a combination of the following factors: number of prenatal visits, gestation, and trimester prenatal care started.

Note: county-level data were unavailable.

Source: Nebraska DHHS, Vital Records (2013)

The rate of children born with low birth weights (less than 2,500 grams or approximately 5.5 pounds) has been consistently lower for Washington County as compared to the state (Figure 104).

**Figure 104. Number of low weight births\* and rate per 1,000 births**

	2006-2010	2007-2011	2008-2012	2009-2013
<b>Washington County</b>	62 (57.4)	65 (61.4)	56 (54.8)	58 (55.6)
<b>Three Rivers</b>	<b>309 (63.3)</b>	<b>292 (60.9)</b>	<b>271 (57.1)</b>	<b>260 (55.2)</b>
<b>Nebraska</b>	<b>9,479 (71.0)</b>	<b>9,276 (70.0)</b>	<b>9,118 (69.3)</b>	<b>8,899 (68.1)</b>

\*Less than 2,500 grams (~5.5 pounds)

Source: Nebraska DHHS, Vital Records (2013)

Overall, the rate of premature births has been lower in Washington County compared to the state (Figure 105).

**Figure 105. Number of premature births\* and percentage of total births**

	2006-2010	2007-2011	2008-2012	2009-2013
<b>Washington County</b>	101 (9.4%)	97 (9.2%)	79 (7.7%)	73 (7.0%)
<b>Three Rivers</b>	<b>475 (9.8%)</b>	<b>439 (9.2%)</b>	<b>421 (8.8%)</b>	<b>407 (8.6%)</b>
<b>Nebraska</b>	<b>13,020 (9.8%)</b>	<b>12,681 (9.6%)</b>	<b>12,522 (9.5%)</b>	<b>12,202 (9.3%)</b>

\*Premature births are live births with less than 37 weeks of gestation. Gestational age was determined by ultrasound.

Source: Nebraska DHHS, Vital Records (2013)

The rate of birth defects has been consistently higher in Washington County and the Three Rivers District compared to the state. Since 2006, Washington County's rate has consistently been almost 2% higher than the state. There were 80 children born with birth defects during 2009-2013 in Washington County (Figure 106).

**Figure 106. Number of cases of birth defects and percentage of total births**

	2006-2010	2007-2011	2008-2012	2009-2013
<b>Washington County</b>	<b>68 (6.3%)</b>	<b>84 (7.9%)</b>	<b>77 (7.5%)</b>	<b>80 (7.7%)</b>
<b>Three Rivers</b>	<b>264 (5.4%)</b>	<b>288 (6.0%)</b>	<b>296 (6.2%)</b>	<b>336 (7.0%)</b>
<b>Nebraska</b>	<b>5,970 (4.4%)</b>	<b>7,279 (5.5%)</b>	<b>7,439 (5.6%)</b>	<b>7,883 (6.0%)</b>

Source: Nebraska DHHS, Vital Records (2013)

The rate of infant deaths has been consistently lower in Washington County compared to the state. There were 4 infant deaths in the county from 2009 to 2013 (Figure 107).

**Figure 107. Number of infant deaths and rate\* per 1,000 births**

	<b>2006-2010</b>	<b>2007-2011</b>	<b>2008-2012</b>	<b>2009-2013</b>
<b>Washington County</b>	3 (2.8)	4 (3.8)	4 (3.9)	4 (3.8)
<b>Three Rivers</b>	<b>20 (4.1)</b>	<b>20 (4.2)</b>	<b>20 (4.2)</b>	<b>22 (4.2)</b>
<b>Nebraska</b>	<b>758 (5.7)</b>	<b>753 (5.7)</b>	<b>690 (5.2)</b>	<b>683 (5.2)</b>

\*Rates based on small numbers may not be reliable.

Source: Nebraska DHHS, Vital Records (2013)

## Teen Pregnancy

Washington County has consistently had a lower percentage of births to teen mothers (age 19 and under) as compared to the state and the rate also appears to be on the decline. From 2009 to 2013, there were 46 births to teen mothers in Washington County (Figure 108).

**Figure 108. Number and percentage of births to teen mothers\***

	<b>2006-2010</b>	<b>2007-2011</b>	<b>2008-2012</b>	<b>2009-2013</b>
<b>Washington County</b>	55 (5.1%)	50 (4.7%)	49 (4.8%)	46 (4.4%)
<b>Three Rivers</b>	<b>349 (7.1%)</b>	<b>349 (7.3%)</b>	<b>327 (6.9%)</b>	<b>298 (6.8%)</b>
<b>Nebraska</b>	<b>10,968 (8.2%)</b>	<b>10,570 (8.0%)</b>	<b>9,955 (7.6%)</b>	<b>9,208 (7.1%)</b>

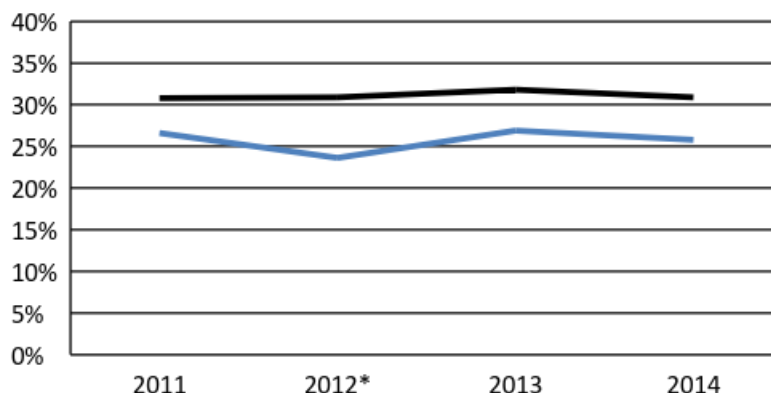
\*Mothers age 19 and under

Source: Nebraska DHHS, Vital Records (2013)

## Sexually Transmitted Disease

Approximately one-in-four adults reported that they have ever been tested for HIV in the Three Rivers District in 2014. This rate is notably lower than the rate for the state (Figure 109).

**Figure 109. Ever been tested for HIV (excluding blood donation) among 18-64 year olds**



\*Statistically significant difference between Three Rivers and the state.

Source: Behavioral Risk Factors Surveillance System (2014)

The incidence of HIV is relatively low in the Three Rivers District. From 2008 to 2012, there were three cases in Dodge County, one in Washington County, and none in Saunders County.

Rates of Chlamydia have been consistently lower in Washington County as compared to the state (Figure 110).

**Figure 110. Number and rate of newly diagnosed Chlamydia cases per 100,000**

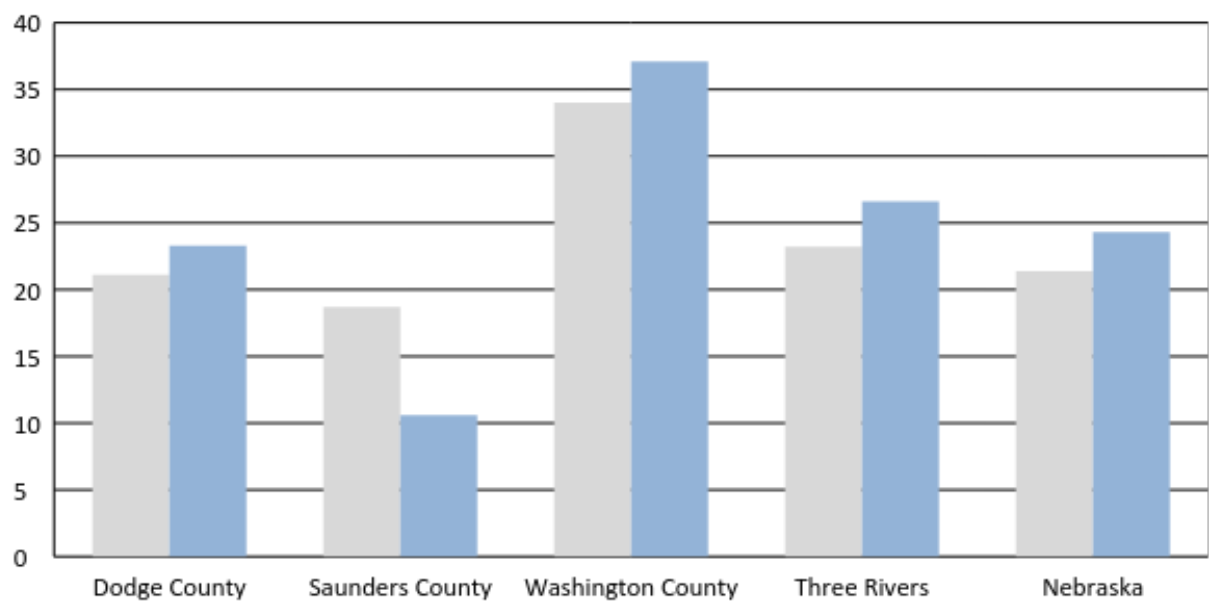
	2010	2011	2012
<b>Washington County</b>	33 (163.1)	23 (113.3)	27 (133.3)
<b>Three Rivers</b>	<b>132 (169.9)</b>	<b>123 (157.8)</b>	<b>168 (216.8)</b>
<b>Nebraska</b>	<b>5,113 (280.0)</b>	<b>6,780 (368.0)</b>	<b>6,748 (363.7)</b>

(Source: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, contained in County Health Rankings)

Alzheimer’s Disease

The rate of Alzheimer’s deaths in Washington County is notably higher than in the state. Note that these rates, as well as all of the other mortality rates are age adjusted, and therefore the higher percentage of elderly individuals in Washington County (and the rest of the district) does not impact the rates. There were 49 deaths due to Alzheimer’s Disease in Washington County from 2009 to 2013 (Figures 111 through 113).

Figure 111. Alzheimer's Disease deaths per 100,000 (age-adjusted)



Source: Nebraska DHHS, Vital Records (2013)

Figure 112	Number of Alzheimer’s Disease deaths (2009-2013)		
	Washington County	Three Rivers	Nebraska
	49	143	2,859

Source: Nebraska DHHS, Vital Records (2013)

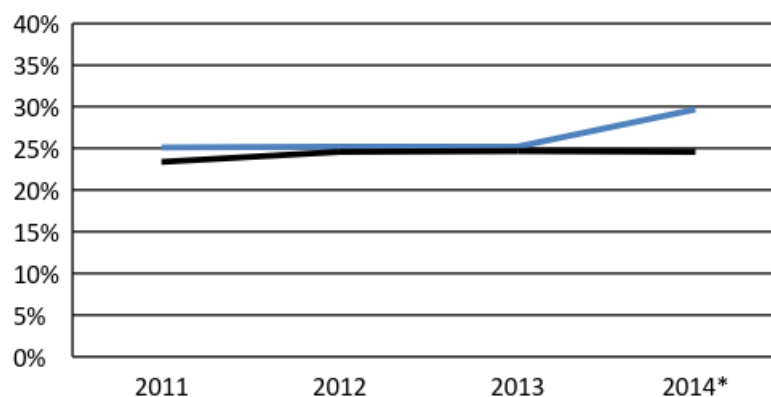
Figure 113	Percentage of deaths due to Alzheimer's Disease by age (2009-2013)				
	0-29	30-44	45-59	60-74	75 and over
Washington County	0.0%	0.0%	0.0%	4.1%	95.9%
Three Rivers	0.0%	0.0%	0.0%	6.3%	93.7%

Source: Nebraska DHHS, Vital Records (2013)

## Arthritis

In 2014, 29.7% of adults in the Three Rivers reported that they have ever been told by a medical professional that they have arthritis (compared to 24.6% for the state) (Figure 114). Note that this rate, as well as all of the other BRFSS data, is age-adjusted, and therefore if there was a higher percentage of elderly individuals in the Three Rivers survey sample, it would not have an impact on the rate.

**Figure 114. Ever told they have arthritis among adults 18 and over**



\*Statistically significant difference between Three Rivers and the state.

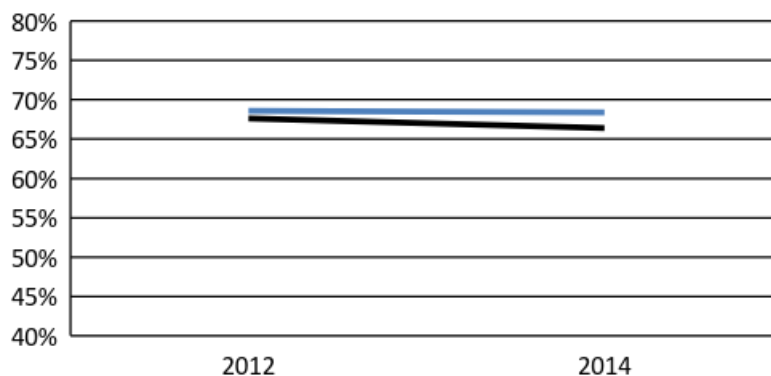
Source: Behavioral Risk Factors Surveillance System (2014)



## Oral Health

In 2014, approximately two-thirds (68.4%) of adults in the Three Rivers District reported that they have visited a dentist or dental clinic in the past year (Figure 115).

**Figure 115. Visited a dentist or dental clinic for any reason in the past year among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014, 47.7% of Three Rivers adults age 45 to 64 reported that they have had permanent teeth extracted due to tooth decay or gum disease (compared to 45.9% for the state) and 12.9% of Three Rivers adults age 65 and over reported having all of their permanent teeth extracted due to tooth decay or gum disease (Figure 116).

**Figure 116. Dental health indicators among adults 18 and over (2014)**

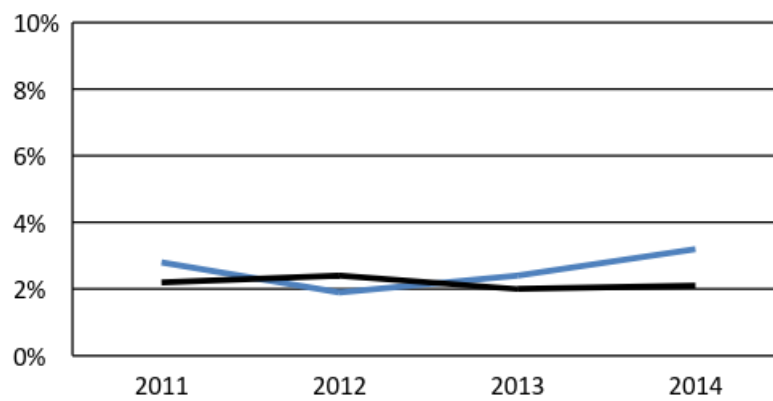
	Three Rivers	Nebraska
Had any permanent teeth extracted due to tooth decay or gum disease among 45-64 year olds	47.7%	45.9%
Had all permanent teeth extracted due to tooth decay or gum disease among adults 65 and over	12.9%	14.1%
Had all permanent teeth extracted due to tooth decay or gum disease among 65-74 year olds	12.8%	10.9%

Source: Behavioral Risk Factors Surveillance System (2014)

## Kidney Disease

In 2014, 3.2% of Three Rivers adults reported that they have ever been told by a medical professional that they have a kidney disease (Figure 117).

**Figure 117. Ever told they have Kidney Disease among adults 18 and over**

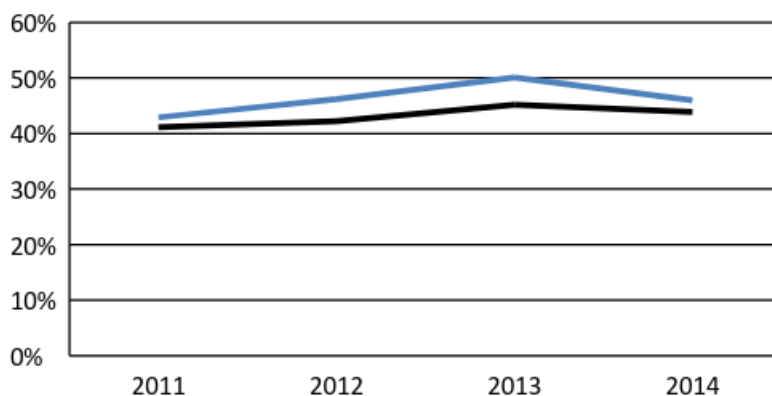


Source: Behavioral Risk Factors Surveillance System (2014)

## Flu and Pneumonia Vaccination

Among those 18 and over in the Three Rivers District, 46.0% reported having a flu vaccination in the past year in 2014 (Figure 118).

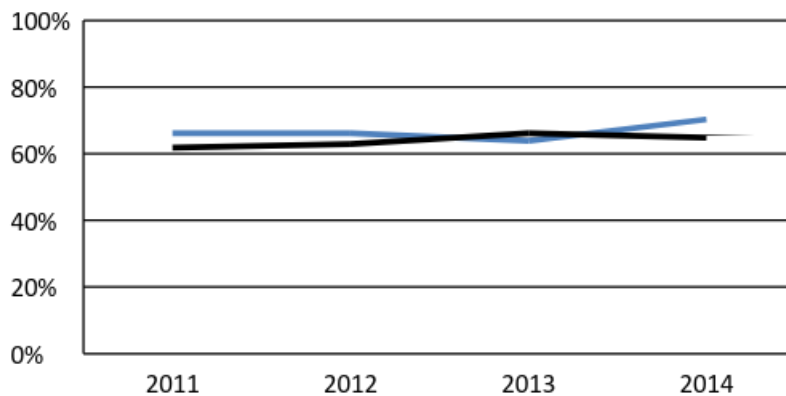
**Figure 118. Had a flu vaccination in the past year among adults 18 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

Among those 65 and over in the Three Rivers District, 70.3% reported having a flu vaccination in the past year in 2014 (Figure 119).

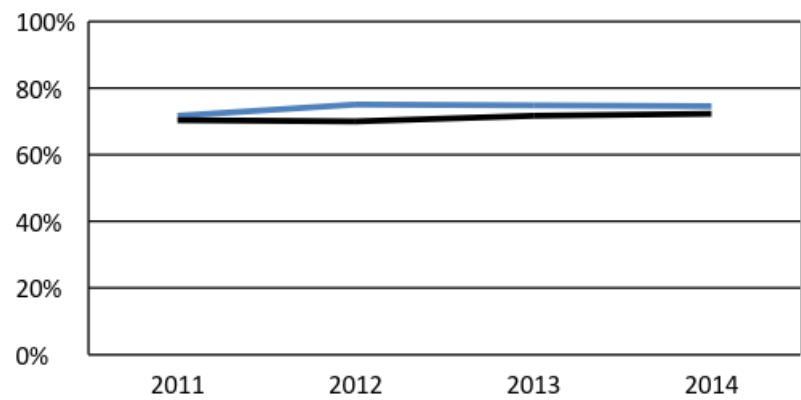
**Figure 119. Had a flu vaccination in the past year among adults 65 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

In 2014 among those 65 and over in the Three Rivers District, 74.6% reported ever having a pneumonia vaccination (Figure 120).

**Figure 120. Ever had a pneumonia vaccination in the past year among adults 65 and over**



Source: Behavioral Risk Factors Surveillance System (2014)

## Child Immunization

Figures 121 through 123 display immunization data for Kindergarten, seventh grade, and out-of-state transfer students. In general, immunization rates are relatively high in Washington County, being slightly higher than the state.

Figure 121	Kindergarten students immunized* for the 2012-2013 school year		
	Washington (n=225)	Three Rivers (n=911)	Nebraska (n=23,912)
<b>DTaP/DTP/DT/Td</b> (more than 3 doses)	97.3%	98.6%	96.6%
<b>Polio</b> (more than 3 doses)	98.7%	99.0%	98.7%
<b>MMR</b> (2 doses)	98.2%	98.5%	97.1%
<b>Hepatitis B</b> (3 doses)	97.3%	98.8%	97.4%
<b>Varicella</b> (2 doses)	96.4%	97.0%	95.9%

\*Those receiving medical, religious, or provisional/military exemptions are counted as not being immunized. There were nine religious exemptions, and three provisional/military exemptions among Three Rivers Kindergarten students.

(School Immunization Survey, 2013)

Figure 122	Seventh grade students immunized* for the 2012-2013 school year		
	Washington (n=278)	Three Rivers (n=988)	Nebraska (n=23,912)
<b>Tdap</b> (1 dose)	99.3%	97.4%	97.5%
<b>MMR</b> (2 doses)	99.6%	99.2%	99.5%
<b>Hep B</b> (3 doses)	100%	99.6%	99.1%
<b>Varicella</b> (2 doses)	88.5%	87.6%	89.0%

\*Those receiving medical, religious, or provisional/military exemptions are counted as not being immunized. There were 14 medical exemptions, 8 religious exemptions, and 28 provisional/military exemptions among Three Rivers 7<sup>th</sup> grade students.

(School Immunization Survey, 2013)

Figure 123	Out-of-state transfer students immunized* for the 2012-2013 school year		
	Washington (n=65)	Three Rivers (n=188)	Nebraska (n=23,912)
<b>MMR</b> (2 doses)	100%	<b>98.9%</b>	<b>86.8%</b>
<b>Hep B</b> (3 doses)	98.5%	<b>97.3%</b>	<b>85.3%</b>
<b>Varicella</b> (2 doses)	84.6%	<b>82.5%</b>	<b>75.3%</b>

\*Those receiving medical, religious, or provisional/military exemptions are counted as not being immunized. There were two medical exemptions, three religious exemptions, and five provisional/military exemptions among Three Rivers out-of-state transfer students.

(School Immunization Survey, 2013)

## Environmental Health

Four indicators of environmental health are displayed below in Figure 124. Being largely rural, the Three Rivers District has a lower percentage of the population that is served by community water systems and that receives optimally fluoridated water. Nitrate levels in the public water systems are slightly lower in Washington County compared to the state. Overall, a higher percentage of children had elevated blood levels in the Three Rivers District compared to the state.

Figure 124	Indicators of environmental health		
	Washington County	Three Rivers	Nebraska
<b>Percentage of population served by community water systems (2012)</b>	72.5%	<b>74.9%</b>	<b>85.9%</b>
<b>Percentage of population receiving optimally fluoridated water (2012)</b>	63.2%	<b>67.9%</b>	<b>71.6%</b>
<b>Nitrate levels in public water systems (2007-2011)</b>	1.4	<b>2.1</b>	<b>2.6</b>
<b>Children with elevated blood lead levels (2009-2011) [# tested]</b>	1.4% (146 tested)	<b>1.9%</b> (1,037 tested)	<b>1.0%</b> (75,688 tested)

Source: Nebraska DHHS Environmental Health (2012)

## ***Conclusion: Community Health Needs***

The following table (Figures 125) presents indicators of community health need for Washington County. All of these indicators are included in the report. The indicators of community health need were selected based largely upon comparison to state-level data. As indication of statistical significance was only available for BRFSS data, statistical significance was not used as a criterion for determining a community health need. The indicators are not presented in prioritized order.

**Figure 125. Indicators of Community Health Needs for Washington County**

Indicator/Area of Community Health Need	Rationale for Selection
➤ Aging Population	<ul style="list-style-type: none"> <li>• The median age in Washington County is 40.8 (state comparison: 36.3).</li> <li>• 14.5% of the Washington County population is age 65 and over (state comparison: 13.7%).</li> </ul>
➤ Health Care Professionals	<ul style="list-style-type: none"> <li>• In Washington County, there are higher ratios of the population to primary care physicians, dentists, and mental health providers compared to the state.</li> </ul>
➤ Access to Locations for Physical Activity	<ul style="list-style-type: none"> <li>• An estimated 48.0% of the population in Washington County has adequate access to locations for physical activity (state comparison: 81.4%).</li> </ul>
➤ Deaths due to Coronary Heart Disease	<ul style="list-style-type: none"> <li>• From 2009 to 2013 there were 117 deaths due to coronary heart disease in Washington County, accounting for an age-adjusted rate of 90.3 per 100,000 population (state comparison: 80.6 per 100,000).</li> </ul>
➤ Diabetes	<ul style="list-style-type: none"> <li>• From 2009 to 2013 there were 145 deaths due to diabetes in Washington County, accounting for an age-adjusted rate of 117.9 per 100,000 population (state comparison: 81.6 per 100,000).</li> <li>• In 2014, 10.0% of the Three Rivers District population reported that they have ever been told by a doctor that they have diabetes (state comparison: 9.2%).</li> </ul>
➤ Birth Defects	<ul style="list-style-type: none"> <li>• From 2009 to 2013 there were 80 cases of birth defects in Washington County, accounting for 7.7% of all births (state comparison: 6.0%).</li> </ul>
➤ Deaths due to Alzheimer's Disease	<ul style="list-style-type: none"> <li>• From 2009 to 2013 there were 49 deaths due to Alzheimer's Disease in Washington County, accounting for an age-adjusted rate of 37.1 per 100,000 population (state comparison: 24.3 per 100,000).</li> </ul>
➤ Community Water Systems	<ul style="list-style-type: none"> <li>• In 2012, 72.5% of the population in Washington County was served by community water systems (state comparison: 85.9%)</li> <li>• In 2012, 63.2% of the population in Washington County was receiving optimally fluoridated water (state comparison: 71.6%).</li> </ul>
➤ Youth Marijuana and Prescription Drug Use	<ul style="list-style-type: none"> <li>• 10<sup>th</sup> and 12<sup>th</sup> grade students across the Three Rivers District have consistently reported higher rates of past 30-day marijuana and prescription drug use compared to their peers across the state.</li> </ul>
➤ Obesity/Overweight	<ul style="list-style-type: none"> <li>• In 2014, an estimated 44.1% of the entire Three Rivers District adult population was obese (state comparison: 40.6%), and 69.4% of the adult population was overweight or obese (state comparison: 66.7%). The percentage of adults who are obese and/or overweight has been increasing in the Three Rivers District.</li> </ul>



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