Northeast Nebraska Rural Health Network Community Health Needs Assessment

April 2019-March 2022

This report was prepared by RJR Consulting for:

Northeast Nebraska Public Health Department Pender Community Hospital Providence Medical Center

List of agencies who provided CHNA input:

Allen Senior Center

Dakota County Connections

Dixon County Sheriff's Department

Elkhorn Logan Valley Public Health Department

Emerson-Hubbard Schools

Hartington Senior Center

Haven House

Heartland Counseling Services

Laurel Education Department

Legacy Garden & Prairie Breeze Assisted Living

Luna's Cafe

Madison County Juvenile Services

Mercy Health

Midtown Health Center

Nebraska Association of Local Health Directors

Nebraska Department of Health and Human Services

Nebraska Extension

Northeast Nebraska Behavioral Health Network

Northeast Nebraska Community Action Partnership

Northeast Nebraska Public Health Department

Pender Medical Clinic

Pender Community Hospital

Pender Public Schools

Ponca Mercy Medical Clinic

Providence Medical Center

Region 4 Behavioral Health System

State Nebraska Bank

Thurston County Emergency Management

Thurston County Sherriff's Office

University of Nebraska College of Nursing Northern Division

Wakefield Community Schools

Wayne Association of Congregations and Ministers

Wayne Community Schools

Wayne County Commissioners

Wayne County Emergency Management

Wayne Emergency Management

Wayne Family Practice

Wayne Food Pantry

Wayne State College

Winnebago Health Department

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Introduction:

The Northeast Nebraska Public Health Department (NNPHD) and the community hospitals in the NNPHD Health District have a shared interest in assessing their community's health needs and working to address those needs to improve the health of the service area. This Community Health Needs Assessment (CHNA) describes the current health status of the four counties of Cedar, Dixon, Thurston and Wayne and provides the foundation for an increased understanding of the factors that may be impacting the ability to improve health outcomes in this service area.

This CHNA provides data from multiple sources including: 1) Input from community members on how they perceive their health, quality of life and the availability of health and community services (Section II); 2) An assessment of what is occurring, or might occur that will affect the health of the counties (Section III); 3) Capabilities of the current public health system to include the services, activities and competencies to provide essential services (Section I and IV); and 4) A review of many data sources that describe the health of the population including trends, health issues, behavioral factors and social and economic conditions (Section V).

The CHNA as a whole is intended to serve as the foundation for setting health priorities with a shared goal of ultimately reducing health disparities and improving the health status of the district by strengthening the health system's coordination of resources and quality of life of all populations in Northeast Nebraska.

Historically, community health assessments were done independently by individual agencies. When the Patient Protection and Affordable Care Act (ACA) was passed in March of 2010, a new requirement was put into place that required nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) with input from those with expertise in public health every three years. During the development of this CHNA, the Providence Medical Center (PMC) and Pender Community Hospital (PCH) worked closely with NNPHD to gather data, analyze the data and set priorities. Input from targeted sectors of the community was also a priority in the planning of the CHNA; focus groups and written surveys were obtained that included input from low-income, underserved, and minority populations as well as the general public. Multiple other agencies to include the Winnebago Health Department were also involved and a full list can be found on page 3 of this document.

The CHNA and Community Health Improvement Plan (CHIP) process was conducted with funds from the Health Resources & Services Administration (HRSA), Rural Health Network Development Planning Program. The CHNA process took approximately nine months to complete and included the utilization of a large number of local, state and national data sources and indicators.

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¹ Patient Protection and Affordable Care Act, 42 USC. 18001 et seq. (2010).

Description of the MAPP Planning Process:

Mobilizing for Action through Planning and Partnership (MAPP) was chosen for this CHNA and is the most common planning process used by local health departments and by hospitals to develop CHNA's in Nebraska.² MAPP is a partnership-based framework that was developed by the National Association of County and City Health Officials (NACCHO), in collaboration with the Centers for Disease Control and Prevention (CDC) in 1997. MAPP is a comprehensive approach that includes the collection and analysis of both qualitative and quantitative data.

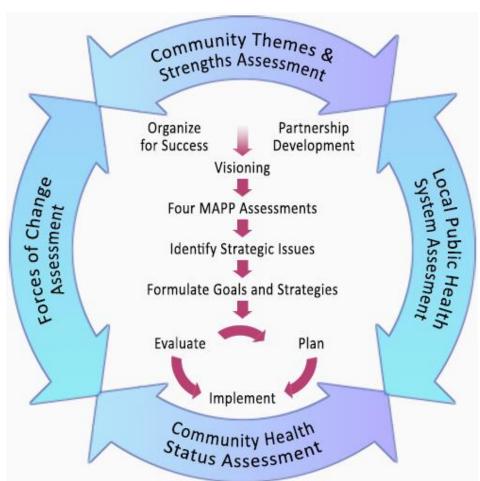


Figure 1: MAPP Assessments and Process

The MAPP process has six key phases found in the center of the above representation of the framework (Figure 1). This Community Health Needs Assessment (CHNA) will focus mainly on the four MAPP assessments represented by the blue arrows. These assessments are the third phase of the MAPP process and will make up most of the information presented within this document.

² David Palm, Li-Wu Chen and Jamie Larson, "An Assessment of the Community Health Needs Assessment and Implementation Plans for Nonprofit Small Rural Hospitals in Nebraska" Research Findings Brief, Nebraska Center for Rural Health Research, August 2017.

As can be seen by the MAPP framework diagram, MAPP is made up of the six phases listed below.

Organize for success/Partnership development.

This phase of the work was formally begun in January of 2018 when the NNPHD and representatives from Pender Community Hospital and Providence Medical Center began to meet to discuss completing a new joint Community Health Needs Assessment (CHNA) that would meet the requirements of the IRS CHNA's as well as the Nebraska state requirements for local public health departments. As part of this process, a core team was formed using a memorandum of agreement as a backbone structure to oversee the data gathering process and manage the work. The core team made the decision to apply for a Health Resources and Service Administration (HRSA), *Rural Health Network Development Planning Program* grant to help fund the work. This grant helped the core team to move forward. The core team was charged with the oversight of the entire process and with the dissemination of the results.

Visioning

A short visioning process was held at NNPHD in August of 2018 with the Network Core Team partners. The ultimate three-year vision for the MAPP process was stated to be: Working together we create a healthier community.

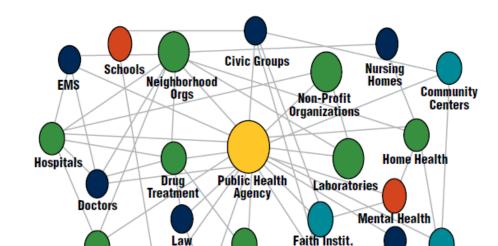
The working together represented the idea of both the network partners and the entire public health system; community reflected the idea of the four-county service area.

Four MAPP assessments

Each of the four assessments gather information and provide critical insights into the health challenges and opportunities confronting the community. These four assessments and the issues they address are described below. All four of the assessments are utilized in this Comprehensive Community Health Needs Assessment to gather information from a different viewpoint.

- 1) Community Themes and Strengths Assessment (CTSA). This MAPP assessment gathers information about what is important to people who live, work and play in the service area. Information is gathered by asking community populations questions directly. In this CHNA, focus groups and community health surveys were used to gather the information. The questions help the organizations that make up the public health system to identify key strategic issues. The CTSA helps to answer questions about how the quality of life in the NNPHD is perceived. In addition to answering questions, the CTSA also gathers information about what assets are available to improve community health.
- 2) Local Public Health System Assessment (LPHSA). This MAPP assessment looks at how well the entire local public health system (LPHS) is doing to meet the ten essential services of public health. LPHSs are a network of entities with differing roles, relationships, and interactions whose activities combined contribute to the health and

well-being of the community. The NNPHD LPHS is made up of many different agencies; a listing of the LPHS agencies that participated in this CHNA can be found on page 3 of this document. The diverse agencies that make up any LPHS are often represented by the diagram below (Figure 2). The LPHSA is a valuable tool for identifying areas for system improvement, strengthening local partnerships, and assuring that a strong system is in place for effective delivery of day-to-day public health services and response to public health emergencies.



Tribal Health

Fire

Elected Officials

Transit

Figure 2: Public Health System Diagram

3) Forces of Change Assessment. This MAPP assessment tries to answer the question: What are the trends, factors and events that are influencing or will influence childhood obesity in our community in the next three years 2019-2022? Some assessment frameworks identify this assessment as an external environmental scan and others identify it as a Strengths, Weaknesses, Opportunities and Threats assessment. The exercise also helps the community to understand what factors may promote the success of any plan to improve the health of the community and what factors may become barriers to a plan to improve the health of the community.

Corrections

Enforcement

Employers

CHCs

4) Community Health Status Assessment. This MAPP assessment has health data, demographic data and economic data that can help inform the community on how healthy it is compared to a benchmark. Data can come from local sources such as the BMI data included from the schools or data collected from NNPHD and the hospitals or from state or national sources. The data is then grouped into sets with a common theme which may vary from one health department to another.

<u>Identify strategic issues.</u> Phase four is the identification of strategic issues and this phase is done after the data has been complied and reviewed. The identification of community prioritized strategic issues is completed at the Community Health Improvement Plan (CHIP) meeting with a broad spectrum of community members.

This CHNA identifies potential strategic issues through the analysis of the four MAPP assessments. The final identified strategic issues will be presented in the companion CHIP document.

<u>Formulate goals and strategies</u> Phase five will be addressed in the CHIP and will comprise the bulk of the CHIP. The CHIP will be based off of the data collected in this assessment and the overall goals and objectives that the NNPHD community and the members of the Network Core Planning Team choose at the CHIP meeting. An emphasis will be made on presenting evidence-based interventions that have been proven to be effective to address the specific strategic issues.

<u>Take action</u> (implement, evaluate and plan). Phase six is a dynamic phase that lasts from the completion of the CHIP plan until the next CHIP is developed with the next MAPP cycle. It is a continuous improvement process cycle that begins with implementation of the goals and strategies, the evaluation section is the evaluation of the implementation of the CHIP and the planning includes the tweaking of the CHIP plan periodically to move the process forward. The CHIP is meant to be a living plan that changes to meet the challenges, needs and opportunities of the community.

Description of the CHNA Network Core Team:

The backbone of the CHNA process is a Network Core Team comprised of representatives from the two hospitals, Providence Medical Center (PMC) and Pender Community Hospital (PCH) as well as the NNPHD which serves as the district health department. Members of the core team provided guidance throughout the CHNA process and were charged with determining what data was included, gathering community input and where appropriate additional health data, as well as reviewing the data and sharing this data with community stakeholders. The purpose of this core team was self-determined and is represented by the statement of purpose adopted at a July 2018 meeting:

In rural Nebraska, it's important that we maximize our resources. That's why we are working together as partners to measure the health of the area and make a plan that will create a healthier community for all people.

Providence Medical Center (PMC)

Providence Medical Center is a non-profit, 21 bed Critical Access hospital that has been serving the healthcare needs of our area since 1975. PMC currently employs over 200 individuals, and provides state-of-the-art healthcare to more than 13,500 residents in our service area consisting of Wayne, Dixon, Cedar, Cuming and Thurston counties.

Providence Medical Center is a full-service hospital offering inpatient care, skilled care, emergency services, surgical services and a full range of diagnostic outpatient services

including laboratory, radiology respiratory therapy, occupational, speech and physical therapy. PMC operates a very robust outpatient services department and currently hosts twenty-six physicians in sixteen different medical specialty clinics.

Providence Medical Center also operates a Medicare certified Home Care agency, Hospice agency, Advanced Life Support ambulance service and a community wellness center.

Providence Medical Center has recently achieved 5-star status from the Center for Medicare and Medicaid Services for excellence in patient satisfaction. This is a direct reflection of our mission - *Providing Quality Healthcare in the Spirit of Christ*.

Pender Community Hospital (PCH)

The Mission of the Pender Community Hospital District (PCHD) is to provide a continuum of exceptional healthcare services in a healing environment for everyone. Pender Community Hospital (PCH) has a rich history of service that began over 50 years ago and continues to grow. Most recently, it has been named a CMS 5-Star rated facility.

In 2000, the hospital board of directors decided to expand by purchasing the local nursing home, Legacy Gardens. Our affiliated sister organization, Pender Care Center District Inc. operates the 42 bed Medicare/Medicaid nursing home facility. In 2008, Prairie Breeze, a 16-bed assisted living facility, was built. Two retail pharmacies, Pender and Wisner Apothecary Shop, followed and most recently a 40-child capacity child development center, Little Sprouts, was opened.

In February of 2012, Pender Community Hospital opened a brand new state-of-the-art 20 plus million-dollar facility to replace the existing one. PCH provides a wide range of inpatient, outpatient, surgical, ER, OB, Rehab and Mental Health services. 2013 brought more expansion by acquiring the local Pender Medical Clinic and their three satellite locations. Pender Medical Clinic is just a few short weeks away from opening a new, expanded facility on the hospital campus.

In September of 2018, PCHD broke ground on a new clinic 10 miles north in Emerson, Nebraska. This clinic will feature additional space, updated equipment and a retail pharmacy. In addition to the Emerson clinic, there are also satellite clinics in Beemer and Bancroft, NE. Pender Community Hospital District's continued growth ensures that exceptional care across the continuum will continue for future generations.

Northeast Nebraska Public Health Department (NNPHD)

Northeast Nebraska Public Health Department (NNPHD) is a local, governmental agency developed in 2002 and is authorized to provide public health services for Cedar, Dixon, Thurston and Wayne Counties through an interlocal agreement of the counties. Under State Statute, 71-1628.04, NNPHD is charged to carry out the three core functions of public health which are assessment, policy development and assurance. The functions include ten essential services: 1. Monitor health status to identify

community health problems. 2. Diagnose and investigate health problems and health hazards in the community. 3. Inform, educate and empower people about health issues. 4. Mobilize community partnerships to identify and solve health problems. 5. Develop policies and plans that support individual and community health efforts. 6. Enforce laws and regulations that protect health and ensure safety. 7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable. 8. Assure a competent public health and personal health care workforce. 9. Evaluate effectiveness, accessibility and quality of personal and population-based health services. And, 10. Research for new insights and innovative solutions to health problems. NNPHD serves a population of approximately 31,000 residents in the fourcounty health district which includes a growing Hispanic population and two Native American Tribes. NNPHD offers a wide variety of services and programs that address access to care, chronic disease, environmental health, emergency preparedness, infectious disease investigation, oral health, community assessment and planning. NNPHD currently has six full-time and seven part-time employees as well as an 11member board representative of the counties served, who are all dedicated to the mission of public health. The board provides fiscal oversight and ensures accountability to the agency vision of Healthy People in Healthy Communities.

Community Themes and Strengths

There are four sections that make up this assessment. The first two sections gather the perceptions of those living or working in the service area. The defined service area for this Community Health Needs Assessment is Cedar, Dixon, Thurston and Wayne Counties which is the official service area of the NNPHD. The CHNA Network Core Team chose to gather subjective community input for this section of the CHNA report via electronic surveys available through a variety of websites and five in-person focus groups. The intent was to provide a deeper understanding of the issues that residents feel are important by answering questions such as: "What is important to our community?", "How is quality of life perceived in our community" and "How does the community perceive services that are being provided?"

In addition to this survey in the Appendix IV is the Northeast Nebraska Rural Health Network 2018 Agricultural Health & Safety Survey Summary. This survey was targeted toward individuals who list agriculture as their occupation. Results from select questions are included in the appropriate sections of this document.

The third section is a Network Core Team service inventory which looks at how the Network Core Team reports on the services that are available in the four targeted counties. This section helps the reader to understand what services are available helps identify health service gaps in the targeted area.

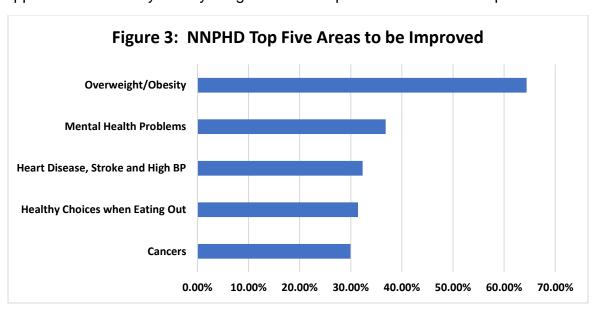
The fourth section looks at what happened after the last Community Health Needs Assessment. This section is important to understand how that assessment changed the health of the community and what went well and what could be improved for the next

Community Health Improvement Plan (CHIP). These lessons can help inform the process of choosing strategic issues, determining action steps and evaluating their effectiveness.

Community Health Electronic Surveys:

A survey development committee made up of 5 members of the Northeast Nebraska Rural Health Network Core Planning Team reviewed 11 different community health surveys to select the questions for this survey. The survey, which became known as the *Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey* (also referred to as the electronic survey), contained 14 multiple choice questions that also offered an "other" option for respondents to include their own ideas; one question was open ended. There were six demographic questions. Once finalized, the survey was translated into Spanish and converted to an electronic "Survey Monkey" format. The survey was linked to the health department's website and both hospital websites. A distribution plan was drafted and approved by the Core Planning Team.

The goal was to have a minimum of 378 surveys completed which would provide for a statistically reliable sample based on a 95% confidence level with a +/- 5% degree of accuracy margin of error. The total number of surveys collected was 554 with 458 from those living within the NNPHD survey area. All surveys were kept as the other 96 surveys were most likely from those who worked in the targeted service area. While all four counties were represented, most of the surveys (235) were from Wayne County, 87 from Thurston County, 74 from Cedar County and 62 from Dixon County. Like the census demographic data, most of the respondents identified as White at 90.4%, Hispanic/Latino at 4.43% and American Indian at 3.14%. Approximately 80% of the respondents were female and 20% male. Results from this survey can be found throughout this document and are identified as the Northeast Nebraska Rural Health Network 2018-2019 Survey or as the "electronic survey". The full report can be found in Appendix II. One key survey insight was the top NNPHD areas for improvement.



The top two answers appear to be the most common themes throughout the CHNA focus groups, surveys and the forces of change assessment. Heart disease and cancer are the two most common causes of mortality for the area.

Another overall insight came from having participants choose from a list of health behaviors both positive and negative which statements applied to them. Table 1 below is a summary of those answers listed from the lowest response to the highest.

Table 1 : Health Behaviors Reported	
Overuse Prescription Drugs	0.00%
Use Others Prescription Drugs	0.18%
Use Street Drugs	0.18%
Chew Tobacco	1.08%
Use Marijuana	1.44%
Smoke cigarettes	5.42%
Alcoholic drink->1 Females, >2 Males	7.22%
Drink > 1 sugar sweetened drink/day	23.10%
Eat fast food > 1 time per week	32.49%
Eat five servings of fruit/veges	33.39%
My work has a disaster plan	34.48%
Use Insect repellant when outdoors	39.53%
Mammograms Female 40+ or as advised	63.56%*
Have access to work Wellness Program	42.78%
Exercise three times per week	44.77%
Use Sunscreen when outdoors	48.38%
Pap Smears, Females 21+ or as advised	72.21%*
Get Flu shot every year	70.58%
Over 50 and get regular colon screening	56.00%**

*Age and Gender Adjusted; **Age Adjusted

Focus Group Summaries:

As part of the Community Themes and Strengths Assessment of the MAPP process, a total of five focus groups were held in 2018: Group 1) Wayne State College; Group 2) Allen Senior Center; Group 3) Pender Parents; Group 4) Hartington Senior Center and Group 5) Wakefield Hispanic Community. Each focus group identified some community focus areas. Commonalities were found among the diverse populations to include: 1) All participants described their own communities in a positive manner; 2) Four of the five communities specifically used the term "friendly" to describe their community and 3) Two of the focus groups identified racism as an issue in their community.

The total number of persons participating in all five groups was 74, with groups ranging from eight to twenty-four participants. The focus groups had similar questions for all groups. A copy of all questions listed in order with the response of the five groups as recorded by NNPHD can be found in Appendix III. Comments are reported as listed

although they are grouped into positive or negative for health categories by this CHNA editor.

Table 2: Wayne State College Focus Group Results			
Positive for Health	Negative for Health	Most Important Areas to Address	
Multiple places for physical fitness	Financial burden for healthy food options	Mental Health	
Quick response to safety issues in the community	Racism in the community	Healthy eating	
Not many hate crimes	Not a lot of diversity	Activities	
Health care is top-notchmany options	Homosexuals don't feel represented	Building networks of health companions	
Mental health services very good on campus	Obesity	Food pantry on campus not used	
Wild Cat Wheels	Alcohol	Not easy to eat healthy on campus	
	Vaping, smoking		
	Unsafe housing		
	Society is making it OK to be		
	obese		
	Same movies at the movie		
	theater		
	Business/activities that no one		
	knows about		
	Not enough activities on		
	campus/community		

Positive for Health	Negative for Health	Most Important Areas to Address
Fire/Rescue	Different backgrounds get picked on	Medical Services
Community Center	Use of chemicals in fields	Transportation
Therapy Table	Nitrates in the water	
Churches	Radon	
Food Pantry	Dust in the Air	
Convenient Store for groceries	High rate of Cancer (due to chemicals in fields)	
Different backgrounds (Democrats)	Cellphones	
School kids include people of all backgrounds/ethnicities.	Small town = Small # of kids in schools, forced to join other schools for sports, limit the opportunities for different sports	
	Drugs	
·	Alcohol use	
·	Smoking, Vaping	
	Younger families moving away in search of jobs and better sources of income.	

Table 4 : Pender Parent Focus Group Results			
Positive for Health	Negative for Health	Most Important Areas to Address	
Hospital, Clinics are doing health coaching	Participation of youth sports falls off after 8th grade.	Eldercare	
Businesses growing	Eldercare – no one to care for them	Focus on the youth	
Community center	No transportation	Transportation	
Fitness center	Psychiatric care – nothing in town, big problem during a crisis, stigma in a small town so people are afraid to get help in the community.		
Youth sports	Language barrier with parents		
Backpack program	Healthy food it hard to get and is more expensive in a small town.		
NENCAP in town	No low income housing, Assisted Living, Fixed Income, Independent Living are not options.		
WIC program	Kids seeing drugs through parents		
PTO (Pender booster club	Drugs area out there, not seen in		
supporting the school)	school but know it's out there.		
Weightlifting at the school during the summer	No drug dog or police to check on drugs at the school		
Afterschool program	Kids doing prescription drugs instead of marijuana.		
Kids doing prescription drugs instead of marijuana.	No variety of sports so parents/kids are traveling.		
Jail/Police – partnership with the clinic (healthier conditions for inmates) new jail. Community with fitness center	Kids only get a slap on the wrist from cops, kids feel bold and brave.		
,	Gym is not 24/7		
Youth sports			
Free/Reduced lunch			
Early Childhood Program keeps growing			
Strong Thrift Store – puts money back into the community.			
Teammates mentoring program is great			

Table 5: Wakefield Hispanic Group Focus Group Results		
Positive for Health	Negative for Health	Most Important Areas to Address
New playground at the school and park for kids to be active	Cattle near town – can bring diseases	Have a pharmacy/hospital (X2)
School nurse provides hygiene/cleaning lessons to each class	Kids know who are doing drugs but don't say anything because of the repercussions.	Mobile clinics – low cost services
Safe to walk to work (not a lot of crime)	None/limited transportation available.	Kids Health Education
Need parenting classes – parents give kids whatever they want so they are quiet	City only cleans part of the town when it snows – hard on people	Dental cleanings
Community is safe – parents become too carefree with their children.	Housing prices going up – need to control how many live per house; roaches and pests are bad. Some have black mold – called the city – they don't help.	
Walking trail	Need better security at the park with kids riding bikes to the pool.	
People are aware of Siouxland and Midtown; prefers Midtown because it is cheaper, and they have dentists/counseling.	Drug problems are very high with minors – school does drug testing but sometimes they just test the Hispanic kids	
	Someone buys kids alcohol; need to work with the cops to find the people that area buying alcohol and drugs	
	A lot of people don't have Medicaid, Medicare, or Insurance so they don't go to the doctor.	
	Kids need a safe place to play (ex: indoor playground or gated playground).	

Table 6: Hartington Focus Group Results						
Positive for Health	Negative for Health	Most Important Areas to Address				
Rehab Center	Ice on the Streets	Emergency Healthcare Services Closer				
Medical Center	25 miles to Yankton for an Emergency	Low-Income Housing				
Eye doctor	No good paying jobs, jobs always available					
Dentist	Local dentist doesn't have Medicaid					
Good grocery store	Parents drive kids everywhere, they don't walk much					
Good meals at senior center	No housing available for low-income.					
Community complexes/gym/football	Kids transportation needed, no transportation services on the weekends					
Schools						
Daycares						
Activities at senior center						
Churches						
Yoga classes						

Network Core Team Resource Inventory / Gaps in Resources

The purpose of this section is to help the reader to understand what services are currently available in what counties within the service area and help identify health service gaps in the targeted area. Not all health gaps in services need to be addressed in order to have a healthy community, for example some services may have little utilization if available due to population size and make more sense from an economies of scale viewpoint to be offered in a larger metropolitan area.

Taking an inventory of services is important to understand what the service area has to offer and where the services are located. The areas with the highest score of "present and adequate to meet the needs of the county" were mostly found in primary care for adults, radiology and rehabilitation. The areas of the lowest scores were found in smaller counties for specialty services which can be expected. The areas of Behavioral Health and weight loss were identified by individual community members in the focus groups and surveys. Behavioral Health was felt to be present but not adequate to meet the needs in three counties and present and nearly adequate in one county. Weight loss programming for adults was felt to be present in all four counties but not adequate to meet the needs of the counties. Weight loss programming for children was not present in two counties and felt to be inadequate in the other two counties.

All the core team partners completed this point in time survey in the fall of 2018.

Table 7: Availability of Medical and Health Resources by County (Scores Averaged)							
		Not Present in the	Present but Not Adequate to Meet the Needs of the	Present and Nearly Adequate to Meet the Needs of the	Present and Adequate to Meet the Needs of the		
	County	County=0	County=0.5-1	County>1-1.5	County>1.5-2		
	Cedar				X		
Primary Care	Dixon			Х			
Physicians for	Thurston				Х		
Adults	Wayne				Х		
	Cedar			Х			
Primary Care	Dixon			Х			
Physicians for	Thurston			X			
Children	Wayne			X			
	Cedar		Х				
OB/GYN	Dixon			Х			
Services	Thurston				Х		
	Wayne				X		
Services for	Cedar	Х					
Adolescent	Dixon	X					
Sexual Health	Thurston		Х				
(Title X)	Wayne			Х			
(**************************************	Cedar	Х		21			
Cardiology	Dixon	X					
Services	Thurston			Х			
-	Wayne			X			
	Cedar	Х		7.			
Neurology	Dixon	X					
Services	Thurston		Х				
-	Wayne		X				
	Cedar		X				
Orthopedic	Dixon		X				
Services	Thurston		7.	Х			
-	Wayne			X			
	Cedar	Х		A			
Urology	Dixon	X					
Services	Thurston		Х				
	Wayne		X				
	Cedar	Х					
Pulmonary	Dixon	X					
Services	Thurston		Х				
OCI VIOCO	Wayne		X				
	Cedar		X				
Radiology and	Dixon		X				
Imaging	Thurston				X		
Services	Wayne				X		
	Cedar	Х					
	Dixon	X					
Mammography	Thurston				Х		
	Wayne				X		

	County	Not Present in the County=0	Present but Not Adequate to Meet the Needs of the County=0.5-1	Present and Nearly Adequate to Meet the Needs of the County>1-1.5	Present and Adequate to Meet the Needs of the County>1.5-2
	Cedar		X		
Diabetes	Dixon		Х		
Education	Thurston			Х	
	Wayne		Х		
	Cedar	Х			
Cardiac	Dixon	Х			
Rehabilitation	Thurston				Х
- Tonasinaion	Wayne				X
	Cedar			X	X
Physical	Dixon			A	Х
Therapy	Thurston				X
Петару	Wayne				X
				V	^
	Cedar			X	
Occupational	Dixon				X
Therapy	Thurston				X
	Wayne				X
	Cedar			X	
Speech Therapy	Dixon				X
opecon merupy	Thurston			X	
	Wayne				X
	Cedar		X		
Respite Care for	Dixon		Х		
Adults	Thurston		Х		
	Wayne			X	
	Cedar		Х		
Respite Care for	Dixon		Х		
Children	Thurston		Х		
	Wayne			Х	
	Cedar			Х	
	Dixon			X	
Dental Care	Thurston			X	
Services for Adults	Wayne			x	
Dental Care	Cedar		Х		
Services for	Dixon			Х	
Children	Thurston		Х	, A	
(Pediatric Dentistry)	Wayne		X	х	
, , , , , , , , , , , , , , , , , , ,	Cedar		Х		
Behavioral Health Services	Dixon			Х	
	Thurston		Х		
	Wayne		X		
	Cedar		X		
	Dixon		X		
Substance	Thurston		X		
Abuse Services	Wayne		X		

		N	Present but	Present and Nearly	Present and
		Not	Not Adequate	Adequate to	Adequate to
		Present in	to Meet the	Meet the Needs	Meet the Needs
	0	the	Needs of the	of the	of the
	County	County=0	County=0.5-1	County>1-1.5	County>1.5-2
Community	Cedar			X	.,
Sites for BP	Dixon			.,	X
Checks	Thurston			X	
	Wayne			X	
	Cedar			X	
Vaccination	Dixon			X	
Clinics	Thurston			X	
	Wayne			Х	
Education for	Cedar		X		
Breast and	Dixon			X	
Cervical Cancer	Thurston			X	
Cervical Caricer	Wayne		Х		
	Cedar		Х		
Education for	Dixon			Х	
Colon Cancer	Thurston		Х		
	Wayne		Х		
	Cedar		Х		
Education for	Dixon			Х	
Living with	Thurston		Х		
Chronic Disease	Wayne		Х		
	Cedar	Х			
Education for	Dixon		Х		
Heart Disease	Thurston		Х		
1100110 21000.00	Wayne		X		
	Cedar		X		
Weight Loss	Dixon		X		
Programing for	Thurston		X		
Adults	Wayne		X		
	Cedar	Х			
Weight Loss Programming	Dixon		Х		
	Thurston	Х			
for Children	Wayne	-	Х		
Diabetes	Cedar	Х			
Prevention	Dixon		Х		
Education	Thurston	Х	^		
Ladoation	Wayne	^	Х		
	vvayne				

Impact of Previous Implementation Strategies:

Previous Community Health Needs Assessments and Implementation plans have been done by the members of the Network Core Planning team in largely single agency focused efforts. Each agency developed their own implementation plan based on the assessment. In January of 2019, the Network Core Planning Team summarized these efforts to learn from them and to help avoid potential pitfalls in the implementation of new Community Health Improvement Plans (CHIP's) during 2019-2022. The action cycle of MAPP with its focus on implementation and evaluation is a common failure

point for many communities in the MAPP process improvement cycle. While the last iteration of CHIP's did lead to some successes, specifically an increase in behavioral health services for some of the NNPHD areas the CHIP implementation process also yielded some valuable lessons for the next implementation period.

A major factor in implementation rollout and success was unexpected events. During the last implementation period, the NNPHD service area was affected by two tornado events which pulled NNPHD resources away from the CHIP. The first tornado was an EF-4 in Wayne Nebraska which caused no fatalities but did however cause a lot of property damage as it had an estimated wind speed of 165 miles per hour. The other tornado event, occurring just 9 months later, spawned numerous tornadoes which caused property damage in the remainder of the three counties in the NNPHD health district. Both events required a sustained response from one or more members of the Network Core Team and was cited as a factor in loss of implementation accountability in the previous CHIP. Agencies were simply too overwhelmed with the emergency and its sustained mitigation. In addition, other public health emergencies also occurred during the implementation period. The group discussion included a suggestion that the Network Core Team keep a focus on emergency preparedness and community resilience in the process of community improvement planning.

Other lessons learned during the last implementation were discussed and complied for the group to consider as takeaways to keep in mind during the next CHIP implementation cycle.

- Plan and discuss how the NNPHD service area can move from planning to implementation through the use of action plans that have timelines, agency and person responsible and regular evaluation and reporting for accountability.
- Ask for community volunteers to assist in leading CHIP strategic sections so that there is depth in organizational leadership and leadership does not fall on one agency.
- No one agency should be responsible for CHIP implementation and activities.
- Narrow down the strategic issues and keep CHIP goals that support strategic issues to a reasonable number.
- Focus on some prevention activities within the strategic issues chosen.
- Attention should be paid to how resources will be allocated to support the CHIP strategic issues.

Forces of Change Assessment Summary

The purpose of the meeting was to gather input from the community about the trends, factors and events that are now influencing or could influence the health of the four-county area over the next three years. While the meeting organizers wanted to gather information on overall health, there was an emphasis on obesity. A complete report on the meeting can be found in Appendix 1.

The meeting was held with most of the 45 participants attending virtually using an Adobe Connect platform. The 45 participants represented 29 different agencies or businesses in four different counties, each county had no less than 11 participants who identified themselves as living or working within that county. Participants represented multiple sectors including non-profit organizations, hospitals/health clinics, behavioral health, schools, public health, colleges, emergency providers, nursing homes, faith institutions, tribal health and business. Participants were asked two questions: 1) "What are the trends, factors and events that are influencing or will influence childhood obesity in our community in the next three years 2019-2022?" And 2) "What are the trends, factors and events that are influencing or will influence overall health in our community in the next three years 2019-2022?" All answers were recorded in the meeting minutes.

When asked, "What are the top opportunities to improve health in the community?", obesity had the most overall responses as a priority issue at 24 votes, followed by behavioral health at 18 votes. Health promotion, sharing and partnering were viewed as strategies that the Core Network Team can use in the development of a strategic plan to address the top issues.

When community participants from the four counties were asked, "What are the top threats to the health of the community?", obesity was viewed as the top threat (24 responses) followed by behavioral health (16 responses), access to care (8 responses) and other economic factors (6 responses).

Local Public Health System Assessment Summary

The purpose of the National Local Public Health System Assessment (LPHSA) is to promote continuous improvement that will result in positive outcomes for system performance. Benefits of the LPHSA include:

- Better understand the Local Public Health Systems (LPHS) current performance
- Identify and prioritize areas of strengths, weaknesses and opportunities for improvement
- To help articulate the value that quality improvement initiatives bring to the LPHS

A series of five facilitated meetings were held virtually using the Adobe Connect platform. Each of the five meetings lasted 90 minutes. Three meetings were held on March 11th and two held on March 18th, 2019. The meetings all had at least 15 people present at each meeting. See Table 8.

Table 8: Number of Attendees and Primary Presenter for LPHSA						
Number of Attendees Primary Presenter						
Meeting 1	24	Kim Schultz, NNPHD				
Meeting 2	15	Julie Rother, NNPHD				
Meeting 3	Jim Frank, PMC					
Meeting 4 17 Katie Peterson, PCH						
Meeting 5	15	McKayla Sander, PMC				

At least one participant representing each of the four counties was at every meeting.

Table 9: The Number of participants from each County for LPHSA								
	Cedar Dixon Thurston Wayne							
Meeting 1	4	2	5	10				
Meeting 2	2	1	3	7				
Meeting 3	1	3	4	6				
Meeting 4	4	3	5	8				
Meeting 5	2	3	3	7				

Participants represented many different segments of the local public health system. The LPHSA also has some optional assessments that can be performed, however, due to time limitations the NNPHD LPHS did not complete these optional assessments. The entire LPHSA assessment can be requested from NNPHD.

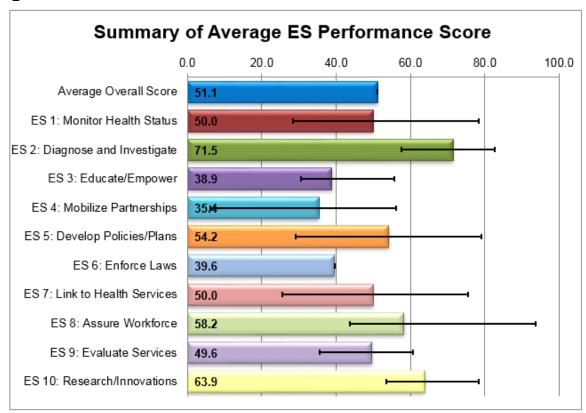
Table 10 : Members of the Public Health System represented at each meeting							
	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5		
Public Health	6	3	2	4	3		
Hospital/Health Clinic	7	4	7	6	5		
School	0	0	0	0	1		
Fire, EMS, Law Enforcement	3	0	2	0	0		
Nursing Home	1	0	1	0	0		
Faith Institution	0	1	1	0	0		
Tribal Health	1	0	0	0	0		
College	1	0	1	0	2		
Business	1	0	0	0	0		
Behavioral Health	0	1	0	1	3		
Non-Profit	3	1	2	2	2		
Elected Official	2	1	2	0	0		
Private Citizen	2	0	0	2	0		
Other	2	3	0	1	0		



The self-assessment is structured around the Model Standards for each of the ten Essential Public Health Services, (EPHS), hereafter referred to as the Essential Services, which were developed through a comprehensive, collaborative process involving input from national, state and local experts in public health. Altogether, for the local assessment, 30 Model Standards serve as quality indicators that are organized into the ten essential public health service areas in the instrument and address the three core functions of public health, Figure 4.

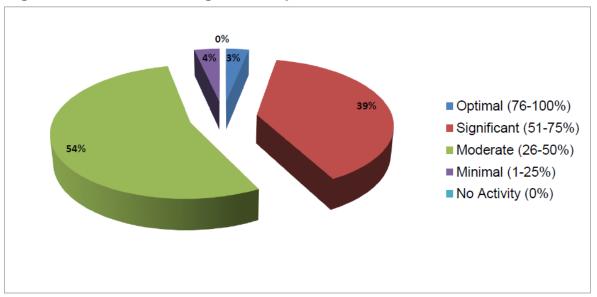
The participants at each meeting were provided with a summary of the LPHSA model standard, a power point presentation on what is happening within the NNPHD LPHS, some questions about what is happening in their agency with that Essential Service and then provided with an opportunity to vote on the level that the LPHS achieved that standard. The results of the LPHSA were scored using the National LPHSA tools and are displayed in the Figure 5 below. The black bars identify the range of the reported performance score responses within each Essential Service for the NNPHD LPHS.

Figure 5: NNPHD Essential Service Scores



The LPHS was scored using a five-point system from "no activity" to "optimal activity". The NNPHD LPHS did not receive any "no activity" scores represented by the 0% between the 3% Optimal, and 4% Minimal. Most of the scores provided were in the "moderate activity" range 54% indicating that the NNPHD LPHS achieved 26-50% of the model standard. The Figure 6 below has the rank percentages.

Figure 6: LPHSA Percentages of Responses



Community Health Status Assessment Findings

Demographic Data:

Population Characteristics:

According to the 2017 population estimates from the U.S. Census³, the population of the NNPHD service area had 30,825 persons located in 2,053 square miles and four counties. The district is rural with an average of 15 persons per square mile. A comparison of the NNPHD service area with other rural counties and Nebraska's four urban counties is provided below. Note the population loss in rural counties as opposed to the population gain for urban counties. The population change in a rural Nebraska area is not unusual and not a new phenomenon but an ongoing challenge.

Table 11: 2000-2017 Population Changes Nebraska Urban and Rural Comparisons							
	2017 Population est.	2010 Population est.	2010-2017 Net Change	Land Area in square miles	Population/ square mile	% of Total NE 2016 Population	
Douglas County	561,620	517,116	8.6%	328	1,712	29.25%	
Lancaster County	314,358	285,407	10.1%	838	375	16.37%	
Sarpy County	181,439	158,840	14.2%	239	759	9.45%	
Hall County	61,519	58,607	5.0%	546	113	3.20%	
NNPHD Counties	30,825	31,387	-1.8%	2053	15	1.61%	
Remaining 84 Rural Counties	770,315	774,970	-0.6%	74,873	10	40.12%	
Nebraska	1,920,076	1,826,327	5.49%	76,824	25	100%	

(Source: U.S. Census Quick Facts)

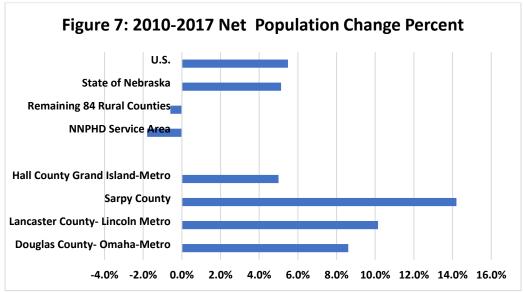
Overall in 2017, there was a district-wide decrease of 562 persons (1.8% loss) from the 2010 census, when the population was 31,387. Unlike NNPHD, Nebraska's population is increasing, driven by urban gains. In the 2017 U.S. Census population estimates, Nebraska's population was estimated at 1,920,076⁴, this count was up 5.13% from the

³ U.S. Census 2017 Quick Facts for Cedar, Dixon, Thurston and Wayne retrieved from <a href="https://www.census.gov/quickfacts/fact/table/cedarcountynebraska,dixoncountynebraska,thurstoncountynebraska,dixoncountynebraska,thurstoncountynebraska,dixoncountynebraska,thurstoncountynebraska,dixoncountynebrask

⁴ U.S. Census 2017 Quick Facts, Nebraska and U.S. retrieved from https://www.census.gov/quickfacts/fact/table/US,ne/PST045217

2010 Census and consistent with the national increase of 5.49% during the same

period.



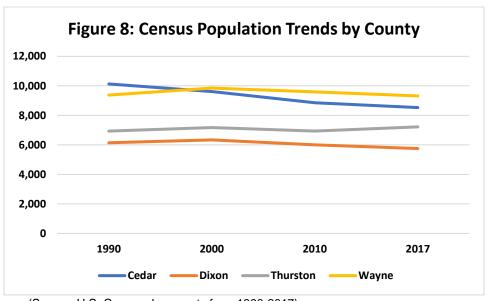
(Source: U.S. Census data)

This loss of population in the NNPHD service area was not evenly represented across the four counties. One county, Thurston, had a gain of 4% in population from 2010 to 2017, adding 283 persons, Cedar County conversely lost 322 persons during the same time frame.

Table 12: Population, Population Change and Population Density of Service Area							
County	Number of Incorporated Towns	Total 2010 Census Population	Total 2017 Population Estimates	Net Change 2000-2017	Square Miles	2017 Persons/Sq mile	
Cedar	10	8,852	8,530	-322	740.31	12	
Dixon	10	6,000	5,754	-246	476.23	12	
Thurston	6	6,940	7,223	283	393.58	18	
Wayne	6	9,595	9,318	-277	442.92	21	
NNPHD	32	31,387	30,825	-562	2053.04	15	

(Source: U.S. Census data)

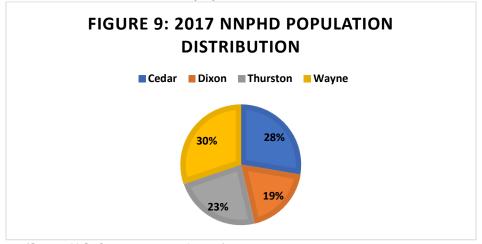
The 2010-2017 population changes should be taken in context by looking for trends over a longer time. When looking at the time period from 1990 to 2017, the NNPHD has lost a total of 1,760 persons with the majority of those (1,601) lost from Cedar County. Thurston County was the only county to have a net gain during this period adding a total of 287 persons. Figure 8, provides a graphic portrayal of the population by county during this period.



(Source U.S. Census documents from 1990-2017)

The total loss of NNPHD population between 1990-2017 is a 5.4% loss moving from 32,585 to 30,825. The population of the district has been generally trending slowly downward, with Cedar county showing the largest population change from 10,131 in 1990 to 8,530 in 2017. During the same period of time, Dixon County lost 389 persons and Wayne County lost 57 persons⁵.

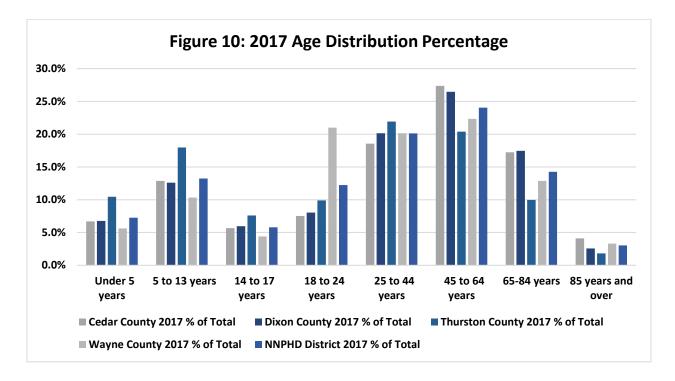
While Wayne is the largest county at 9,318, all the counties are currently between 5,000-10,000 in population. The population of each individual county makes up between 19-30% of the total NNPHD population.



(Source U.S. Census 2017 estimates)

⁵ 1990-2000 intercensal tables retrieved from https://www2.census.gov/programs-surveys/popest/tables/1990-2000/intercensal/st-co/co-est2001-12-31.pdf

Population by Age Group



Wayne County has the most 18-24-year age group most likely related to the presence of Wayne State College. The service area age distribution shows a larger percent of younger population groups in Thurston County when compared to the other three counties and a lower percentage of the population in the age groups of 45 and above.

Table: 13: 2017 Population Age Distribution for NNPHD								
	Cedar County	Dixon County	Thurston County	Wayne County	NNPHD District			
	% of Total	% of Total	% of Total	% of Total	% of Total			
Under 5 years	6.7%	6.8%	10.5%	5.6%	7.3%			
5 to 13 years	12.9%	12.6%	18.0%	10.3%	13.2%			
14 to 17 years	5.7%	6.0%	7.6%	4.4%	5.8%			
18 to 24 years	7.5%	8.0%	9.9%	21.0%	12.2%			
25 to 44 years	18.6%	20.1%	21.9%	20.1%	20.1%			
45 to 64 years	27.4%	26.5%	20.4%	22.3%	24.0%			
65-84 years	17.2%	17.5%	10.0%	12.9%	14.3%			
85 years and over	4.1%	2.6%	1.8%	3.3%	3.0%			
Total Population	100.0%	100.0%	100.0%	100.0%	100.0%			

(Source: U.S. Census/American Community Survey)

Contributing to the Thurston age distribution, lower percentages above 45 years phenomenon, is the county premature death rate. Thurston county has an extremely high premature death rate of 16,000/100,000, more than triple the 2018 premature

death rate in Cedar which was 4,500/100,000 by contrast. Premature death measures the risk of dying before age 75. The top counties in the U.S. have a premature death rate of 5,300/100,000 emphasizing how good the premature death rate is in Cedar County, as can be seen from Table 13, Cedar County has the highest percentage of population over the age of 45 years in the NNPHD service area. The Nebraska average is 6,000 premature deaths to a 100,000 population. A visual depiction of Thurston's premature death rate in relationship to the U.S. and the state is shown below in Figure 11.

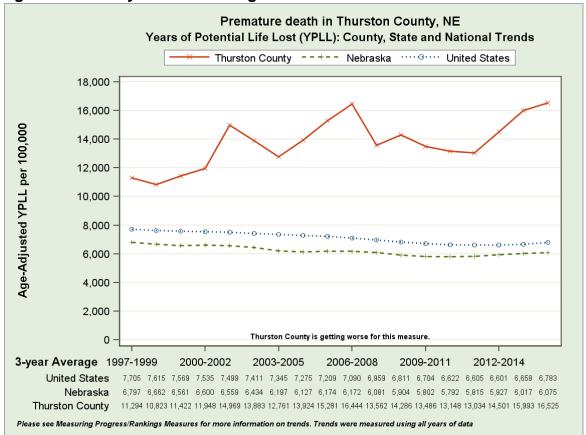


Figure 11: County Health Rankings Chart on Premature Death in Thurston County

Population Growth

The 85 and older age group experienced the greatest growth in population of any major age group between 2010-2017 (7.6% increase) for the NNPHD service area. This population group was followed closely by the 65 and older group (6.1% increase). Together, those 65 and older account for an estimated 17.3% of the NNPHD service area population. In Nebraska, this population makes up 12.2% of the total population.

Table 14: NNPHD District Age Distribution Change from 2010-2017											
	201	LO	201	7	2010-2017						
	Population	% of Total	Population	% of Total	% Change in Population						
Under 5 years	2,266	7.2%	2,240	7.3%	-1.1%						
5 to 13 years	3,990	12.7%	4,083	13.2%	2.3%						
14 to 17 years	1,860	5.9%	1,785	5.8%	-4.0%						
18 to 24 years	4,130	13.2%	3,774	12.2%	-8.6%						
25 to 44 years	6,194	19.7%	6,201	20.1%	0.1%						
45 to 64 years	7,933	25.3%	7,411	24.0%	-6.6%						
65-84 years	4143	13.2%	4394	14.3%	6.1%						
85 years and over	871	2.8%	937	3.0%	7.6%						
Total Population	31387	100.0%	30825	100.0%							

(Source: U.S. Census/American Community Survey2010-2017 Population Data)

In general, the population of children decreased from 2010 to 2017, the decrease was slight for infants and toddlers (under 5 years of age) with the population decreasing (-1.1%). Children 14-17 years of age decreased by (-4.0%) and those 18-24 by (-8.6%), which was the highest decrease in any population group. The age group between 5-13 years increased for the district by 2.3%.

The Median age is the age that would divide a population into two numerically even groups- that is, half of the people are younger than this age and half are older.

All but one county in the NNPHD service area saw a decrease in the median age of the population of the county (the exception being Wayne). It should be noted that even with the decrease, Cedar and Dixon have median ages relatively high when compared to the state and nation. Thurston has a relatively low median age in comparison to the state and nation. This may reflect the high premature death rate.

Table 15: Median age for selected years							
	2010	2017					
Cedar	44.4	43.6					
Dixon	42.1	41.7					
Thurston	29.4	27.7					
Wayne	29.2	33.2					
Nebraska	36.2	36.5					
U.S.	36.9	37.7					
(Source: U.S. Census	(Source: U.S. Census/American Community						

Survey2010-2017 Population Data)

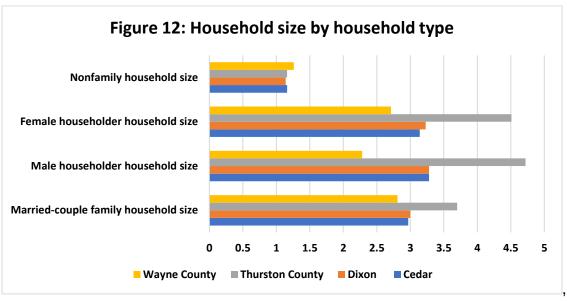
Household by Type

The number of persons per household averages 2.63 for the U.S. and 2.46 for Nebraska for 2013-2017. The number of persons per household is less than these averages for Cedar and Wayne Counties and higher than these averages for Thurston County.

Table 16: Average Persons per Household 2013-2017								
	Cedar	Dixon	Thurston	Wayne	Nebraska	U.S.		
Persons per household	2.40	2.46	3.27	2.25	2.46	2.63		

(Source: U.S. Census 2017 Quick Facts, Counties, Nebraska and U.S)

Persons/household varies by the type of household. In the NNPHD service area, non-family households are smaller in size than the other three types of households.



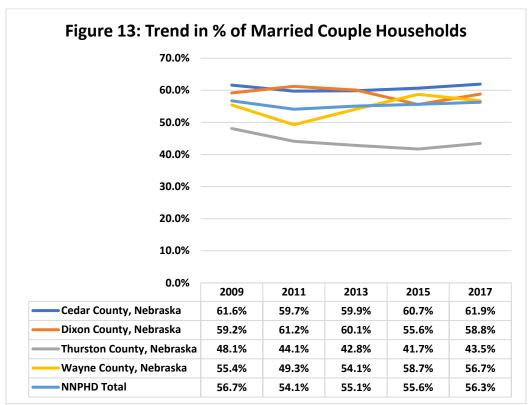
(Source: American Community Survey, Household and families, 2013-2017)

The most common household type in the NNPHD district between 2013-2017 was married-couple family households at 56%, the next largest group for NNPHD was non-family households which tend to be smaller in size (see Figure 17). The smallest number of households was male householder with no wife present at 3%, with female head of householder with no husband present at 9%. Children living in single-parent households make up 12% of all NNPHD households in 2017.

Table 17: Household type numbers and Percentage of Total Households in NNPHD 2017									
	Married-couple family households	Male householder, no wife present households	Female householder, no husband present households	Nonfamily households					
Cedar County, Nebraska	2172	71	139	1126					
Dixon County, Nebraska	1357	83	166	701					
Thurston County, Nebraska	931	159	473	579					
Wayne County, Nebraska	2044	78	231	1249					
NNPHD Total households	6504	391	1009	3655					
NNPHD Percentage	56%	3%	9%	32%					

(Source: American Community Survey, Household and families, 2013-2017

In looking at the past 10 years for a trend in household types, the married couple's household type was selected as the largest household type for the NNPHD area. The NNPHD service area in 2009 had 56.7% of all households identified as married couple households, in 2017 that percentage was 56.3%. The percentage of married couple households increased slightly in Cedar and Wayne counties over the 10-year period. Only Thurston County saw a downward trend, losing over 4.5% of its married couple households during the 10-year period.



(Source: American Community Survey 5-Year Estimates obtained by individual years from 2009-2017)

Children in single-parent households is the percentage of children (less than 18 years of age) in family households that live in a household headed by a single parent. The single parent could be a male or female and is without the presence of a spouse. The numerator is the number of children under 18 in a single parent household. The denominator is the number of children living in family households in a county. Foster children and children living in non-family households or group quarters are not included in either the numerator or denominator.

According to the County Health Rankings website, "Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use). Self-reported health has been shown to be worse among lone parents than for parents living as couples, even when controlling for socioeconomic characteristics.

Mortality risk is also higher among lone parents. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers". ⁶

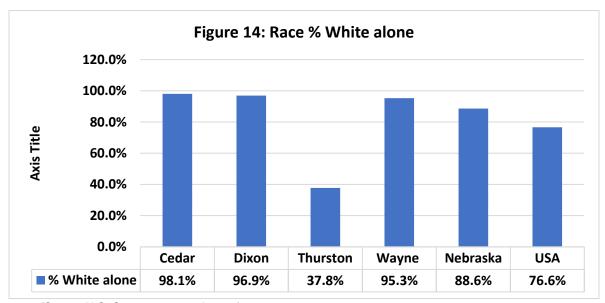
The percentage of children living in single parent households varies considerably by NNPHD county from 17% in Wayne County to 55% in Thurston County. The Nebraska average was 29% with the range for all counties between 6-55%. The next highest county to Thurston had an average of 45% of children in single-parent households during this time.

Table 18: % of Children in single-parent households 2012-2016									
	Cedar Dixon Thurston Wayne Nebraska								
% of Children in single-									
parent households	19%	25%	55%	17%	29%				

(Source: 2018 County Health Rankings)

Racial and Ethnic Minorities:

The Census Bureau defines race as a person's self-identification with one or more social groups. An individual can report as White, Black or African American, Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, some other race or report multiple races. The race of the population of Nebraska and the USA as reported on the 2018 Census estimates, shows a predominately White alone population. The white alone percentage for race in NNPHD is higher than both Nebraska and the USA in three counties, only Thurston is significantly different in race than other NNPHD counties.



(Source U.S. Census 2018 estimates)

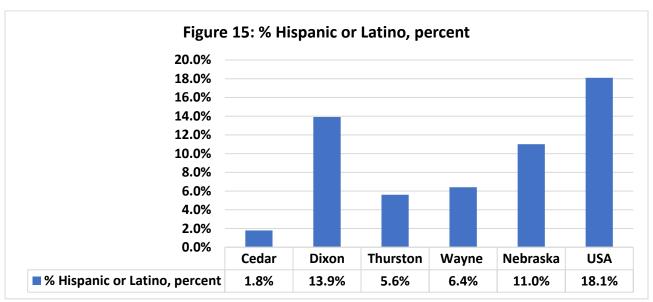
⁶ County Health Rankings, *Children in single-parent households,* Retrieved from http://www.countyhealthrankings.org/app/nebraska/2018/measure/factors/82/description

Nebraska overall has a slightly higher American Indian and Alaskan native population group than the U.S., having 1.5 percent of the population of Nebraska and 1.3 percent nationally. Nebraska is home to six federally recognized American Indian tribes; these include the Iowa Tribe of Kansas and Nebraska, Omaha Tribe of Nebraska, Ponca Tribe of Nebraska, Sac & Fox Nation of Missouri (Kansas and Nebraska), Santee Sioux Nation and the Winnebago Tribe of Nebraska. Nebraska is one of only nine states that has a county (Thurston) with over 50 percent of the population in this category.

Table 19: 2018 Census Population Estimates for Race										
	Cedar	Dixon	Thurston	Wayne						
% White alone	98.1%	96.9%	37.8%	95.3%						
% Black or African American alone	0.3%	0.7%	0.5%	1.7%						
% American Indian and Alaska Native alone	0.5%	0.8%	58.5%	0.8%						
% Asian alone	0.1%	0.3%	0.6%	0.6%						
% Native Hawaiian and Other Pacific Islander alone	0.0%	0.2%	0.0%	0.1%						
% Two or More Races	0.9%	1.2%	2.7%	1.4%						
TOTAL	100%	100%	100%	100%						

(Source U.S. Census 2018 estimates)

Ethnicity is different than race, ethnicity is broken down in two categories, Hispanic or Latino and Not Hispanic or Latino. Hispanic/Latinos may report as any race.



(Source U.S. Census 2018 estimates)

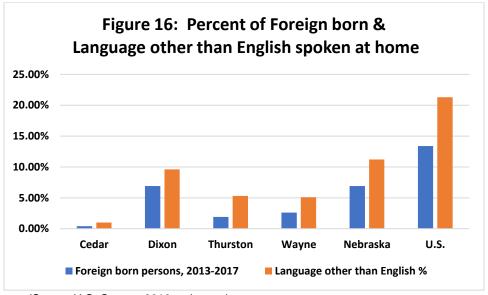
Dixon County is the only county within the NNPHD service area that has a higher percentage of individuals who self-identity on the census as being of Hispanic or Latino

ethnicity than the state of Nebraska. Individuals who identify as being of Hispanic or Latino ethnicity may be foreign-born or have been born in the USA.

The foreign-born population includes anyone who was not a U.S. citizen or a U.S. national at birth. This includes respondents who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. Dixon has the largest percent of persons reporting a foreign birth and is the same percentage as the state of Nebraska. Cedar has the smallest percent of persons reporting Hispanic or Latino ethnicity and the smallest percentage of those reporting a foreign birthplace at less than a half percent.

Table 20: NNPHD Foreign Born Percentages by County 2013-2017									
	Cedar	Dixon	Thurston	Wayne	Nebraska	U.S.			
Foreign born persons %	0.4%	6.9%	1.9%	2.6%	6.9%	13.4%			
Language other than English %	1.0%	9.6%	5.3%	5.1%	11.2%	21.3%			

(U.S. Census 2017 Quick Facts, Counties, Nebraska and U.S)

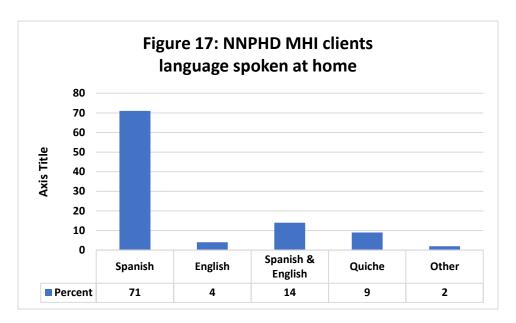


(Source U.S. Census 2018 estimates)

When compared with the U.S., both the percentage of foreign-born persons and those who speak a language other than English at home is relatively low in the four counties service area. It is worthy to note that the U.S. has 13.4% foreign born persons, nearly double Dixon County and the State of Nebraska.

While the percent of the total population who speak a language other than English at home is low, there are pockets of individuals in the service who do so. The majority (96%) of the 710 clients served by the Minority Health Initiative of NNPHD do speak a language other than English at home. Respondents could also choose more than one language.

The most common language spoken at home was Spanish, followed by Spanish and English and then Quiché or K'iche', which is a Mayan language of Guatemala, spoken by the K'iche' people of the central highlands. With over a million speakers, K'iche' is the second-most widely spoken language in the country after Spanish. Most speakers of K'iche' languages also have at least a working knowledge of Spanish.



Economic Indicators:

A strong local economy builds household financial security for all and promotes everyone's health. The outcomes of a strong economy are often seen as economic growth, high employment with adequate salaries and low poverty levels.

Economic factors affect the overall health of a community and can affect community infrastructure such as safe walking routes, access to educational opportunities and access to health care. When families live paycheck to paycheck, not only can they not afford healthy foods, they may not spend on health insurance and forego savings. Without health insurance or savings, working families are at risk from unplanned events and/or expenses which may plummet them into poverty. Families living in poverty or at the edge of poverty are put in a flight or fight response long-term that makes them more susceptible to disease.

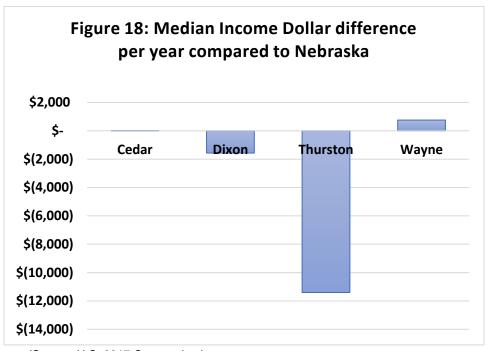
Income

Median Household Income is the amount that divides the income distribution into two equal groups, half having income above that amount, and half having income below that amount. Wayne County has the highest median household income at \$55,141, above the Nebraska Median Household Income and just below the USA Median Household Income. Thurston County has the lowest median household income.

Table 21: Median Household Income in 2016 dollars									
2012-2016 in 2016 dollars	Cedar	Dixon	Thurston	Wayne	Nebraska	USA			
Median Household Income	\$ 54,391	\$ 52,813	\$ 42,979	\$ 55,141	\$ 54,384	\$ 55,322			

(U.S. Census Data)

Individuals living in Wayne County have on average \$757 per year more than the Nebraska median income while individuals living in Thurston County have on average (\$11,405) less than the Nebraska median income. Dixon County averages (\$1,571) less per year than the Nebraska median income and Cedar \$7.00 more when looking at 2012-2016 Census data. See also Table 21 and Figure 18.



(Source: U.S. 2017 Census data)

Employment and Workforce

Cedar County has the highest percent of the NNPHD population age 16 and older in the workforce with 70.1%, while Thurston County has the lowest percent at 63.9% just slightly above the U.S. average.

Table 22: Population 16 and older in civilian labor force 2013-2017								
	Cedar	Dixon	Thurston	Wayne	Nebraska	U.S.		
Percent of population age 16								
and older in labor force	70.10%	68.20%	63.90%	68.60%	69.60%	63.00%		

(Source: U.S. Census 2017 Quick Facts, Counties, Nebraska and U.S)

While the counties are all rural, most of the population is not engaged in farming. In the past half century or more, the farm sector and its relationship to the rest of the economy has changed. The mechanization of agriculture with more sophisticated tractors, harvesters, and other agricultural equipment means that far fewer people are required to do the same amount of work on a farm with greater farm productivity. Improvements in techniques and inputs led yields to improve as well, increasing the amount that could be earned from a single acre. The number of individuals engaged in farming, fishing or forestry in the four-county area is reported to be 633 out of 15,367 total workers over the age of 16 or 4.1%.

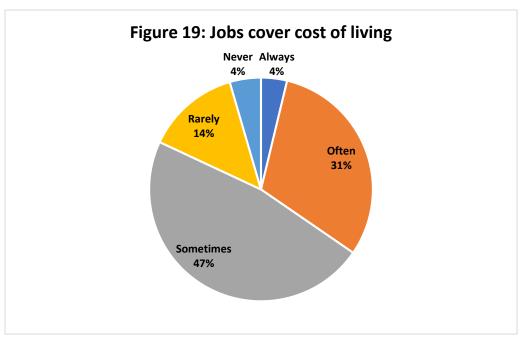
Table 23 provides some insight into the top occupations in the four-county area. Caution should be used however, as it does not list all the choices available on the census. For example, in the area of healthcare, information about those working as health technologists and technicians is not included even though other healthcare positions are listed in the table. The same is true for business occupations as the table does not include computer or engineering occupations. Only the occupations with the highest number of employed persons are listed.

Knowledge about occupations can assist in planning for health promotions and understanding the types of occupational health risk factors in the NNPHD area. For example, office and administrative support workers are the largest category of workers. Office workers are among the unhealthiest group of workers because they are usually sedentary in the workforce, spending a large amount of their day at a desk. This type of work has been linked to back problems, heart disease and eye strain.

Table 23: Main civilian occupations (not all inclusive) for those 16 years +									
	Cedar	Dixon	Thurston	Wayne	TOTAL				
Business/Financial Operations	124	59	74	266	523				
Education, training & Library	276	217	259	452	1,204				
Health diagnosing & treating	133	92	110	148	483				
Healthcare support	184	98	65	240	587				
Food preparation & food service	172	123	106	234	635				
Building/grounds cleaning/maintenance	133	161	82	163	539				
Personal care and service	199	76	118	254	647				
Sales	402	175	181	450	1,208				
Office and administrative support	572	390	352	725	2,039				
Farming, fishing and forestry	188	115	59	271	633				
Construction & Extraction	302	173	150	180	805				
Installation, Maintenance & Repair	160	193	88	198	639				
Production	322	284	136	369	1,111				
Transportation	222	142	93	213	670				
Material moving	101	120	51	106	378				

(Source: American Community Survey, 2017, Occupation by sex for civilian employed)

NNPHD also completed an Agricultural survey in 2018 with 135 respondents (about 21% of this occupation). One of the questions was: *Jobs in my community pay enough to cover the cost of living.* The results are shown in Figure 19.



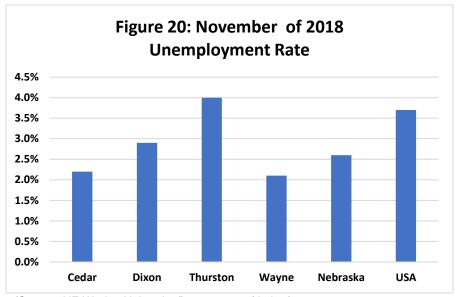
(Source: NNPHD Agricultural Survey 2018)

The unemployment rate is defined as the number of unemployed persons divided by the labor force in a particular region, such as a state or country. The effects of unemployment on health are negative. Men who became unemployed after entering one study were compared with an equal number, matched for age and race, who continued to work.

After unemployment, medical symptoms without a discernible organic cause, such as depression, and anxiety were significantly greater in the unemployed than employed. Furthermore, unemployed men made significantly more visits to their physicians, took more medications, and spent more days in bed sick than did employed individuals even though the number of diagnoses in the two groups were similar⁷.

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⁷ Linn, M. W., Sandifer, R., & Stein, S. (1985). Effects of unemployment on mental and physical health. American journal of public health, 75(5), 502-6.



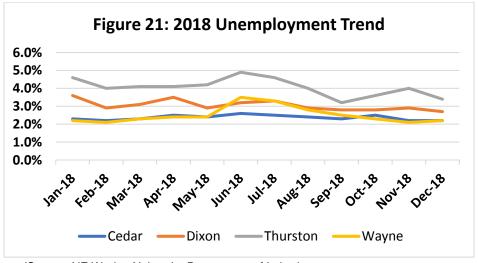
(Source: NE Works, Nebraska Department of Labor)

Thurston County had the highest rate of unemployment in 2018. Cedar County and Wayne County had lower rates than the State of Nebraska.

Table 24: Point in time Unemployment Rate in November of 2018							
	Cedar	Dixon	Thurston	Wayne	Nebraska	USA	
Unemployment Rate	2.2%	2.9%	4.0%	2.1%	2.6%	3.7%	

(Source: NE Works, Nebraska Department of Labor)

In some areas unemployment rates may fluctuate seasonally, and the graph below shows the unemployment trend for the NNPHD service area in 2018. Thurston County maintains the highest unemployment rate throughout 2018.

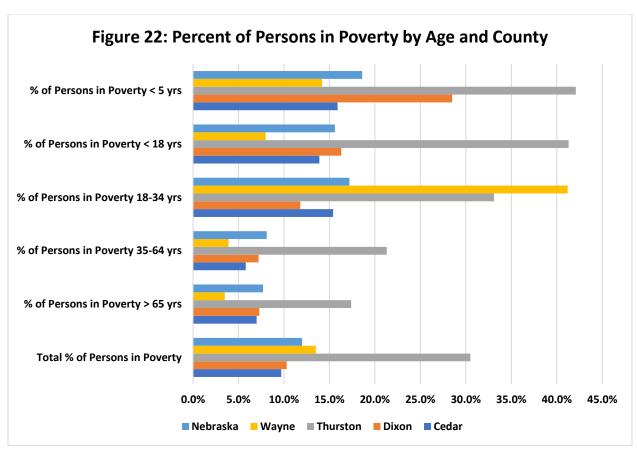


(Source: NE Works, Nebraska Department of Labor)

Poverty

The federal poverty level is the minimum amount of income that a household needs to be able to afford housing, food and other basic necessities. During 2018, the mainland Federal Poverty Level (FPL) is \$12,140 for a single person and \$25,100 for a family of four⁸. If a family's total income is less than this threshold, then that family and every individual in it is considered in poverty.

In the NNPHD service area, Cedar and Dixon Counties have a lower percent of persons in poverty in any age group than the State of Nebraska or the USA. In contrast, Thurston County has more than double the state percentage level in all but one age group for poverty. It is interesting to note that Wayne County, which has a four-year college, has the highest percent of persons in the 18-34-year-old age group in poverty.



(Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates)

In general, the younger the age group, the higher the poverty level. Children are much more likely to live in poverty than senior citizens in all five geographic areas.

⁸ Federal Register, Vol.83, No.12 January 18, 2018 retrieved from https://www.govinfo.gov/content/pkg/FR-2018-01-18/pdf/2018-00814.pdf

Table 25: Percent of Persons in Poverty by Age Group and Geographic Region									
2013-2017 ACS five year estimates	Cedar	Dixon	Thurston	Wayne	Nebraska				
Total % of Persons in Poverty	9.7%	10.3%	30.5%	13.5%	12.0%				
% of Persons in Poverty > 65 yrs	7.0%	7.3%	17.4%	3.5%	7.7%				
% of Persons in Poverty 35-64 yrs	5.8%	7.2%	21.3%	3.9%	8.1%				
% of Persons in Poverty 18-34 yrs	15.4%	11.8%	33.1%	41.2%	17.2%				
% of Persons in Poverty < 18 yrs	13.9%	16.3%	41.3%	8.0%	15.6%				
% of Persons in Poverty < 5 yrs	15.9%	28.5%	42.1%	14.2%	18.6%				

(Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates)

Poverty and lower incomes are associated with poorer health outcomes. Some of the key findings in this area from the *CDC Health Disparities and Inequalities Report-U.S.2013* are listed⁹:

- Among persons with asthma, attacks were reported more frequently for adults with incomes <250% of poverty.
- Diabetes prevalence was highest among those who were poor.
- Periodontitis prevalence is highest among those with lower household income.
- Preventable hospitalization rates were higher for residents of lower income neighborhoods.

Food and Housing

Food insecure households may not know how they will provide for their next meal. As defined by the U.S. Department of Agriculture (USDA), food security refers to the household-level economic and social condition of reliable access to an adequate amount of food for an active, healthy life for all household members. A household is food insecure if, in the previous year, they experienced limited or uncertain availability of nutritionally adequate foods. Not everyone struggling with hunger in the U.S. qualifies for SNAP or other federal assistance programs.

Table 26: Overall rate of Food Insecurity in NNPHD service area							
Cedar Dixon Thurston Wayne							
Total Population in 2016	8,657	5,809	6,989	9,414			
Overall Food Insecurity Rate in 2016 10.7% 10.1% 18.9%							
Est. Number of Food Insecure Individuals 930 590 1,320 1,18							

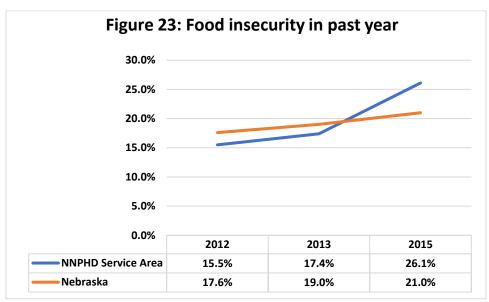
(Feeding America, Map the meal, Overall Food Insecurity in Nebraska 2016)

The overall rate of food insecurity in Nebraska is 11.9%. Two of the counties (Thurston and Wayne) in the NNPHD service area have higher overall food insecurity rates than the State of Nebraska.

⁹ Mortality Weekly Report (MMWR), November 22, 2013 / 62(03);3-5, *CDC Health Disparities and Inequalities Report — United States, 2013* retrieved from

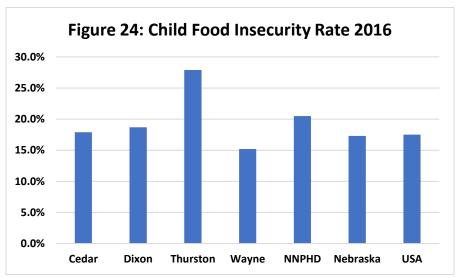
https://www.cdc.gov/mmwr/preview/ind2013 su.html#HealthDisparities2013

The NNPHD district rate of food insecurity can be assessed as well from the self-reported percentage of adults 18 and older who report that they were always, usually, or sometimes worried or stressed during the past 12 months about having enough money to buy nutritious meals. The reported food insecurity was below the state of Nebraska for 2012 and 2013 and above the state of Nebraska for 2015.



(Source: Behavioral Risk Factor Surveillance System)

The rate of food insecurity is higher in children than in adults in the NNPHD service area, State of Nebraska and the U.S., as can be seen by Figure 24 below.



(Feeding America, Map the meal, Overall Food Insecurity in Nebraska 2016)

Within the four-county service area, there were a total of 7,921 children in 2016. Of those children, 20.5% or 1,620 were estimated to be food insecure. The Nebraska rate of childhood food insecurity during the same time was 17.3% and the U.S rate was 17.5%. As can be seen by the chart, more than 1 in 4 children in Thurston County are

estimated to be food insecure. Not all the children who are food insecure are eligible for federal food assistance. Federal Food assistance for children may include SNAP (below 130% of FPL), free school meals (below 130% of FPL), reduced price school meals (below 185% of FPL) and WIC (below 185% of FPL).

Table 27: Child Food Insecurity in NNPHD Service Area in 2016							
Cedar Dixon Thurston Wayne							
Population under 18 years	2,143	1,461	2,491	1,826			
Child Food Insecurity Rate 17.9% 18.7% 27.9% 15.2							
Est. Number of Food Insecure Children (FIC) 380 270 690 280							
% FIC likely eligible for nutrition assistance	55%	56%	84%	62%			

(Feeding America, Map the meal, Child Food Insecurity in Nebraska 2016)

The rate of owner-occupied housing units is higher than the State of Nebraska and the nation in two of the four counties within the NNPHD service area. Thurston and Wayne have a lower rate of owner-occupied housing units than both the U.S. and State of Nebraska. Thurston County is the lowest at 59.9%. The median home value in all four counties is less than the State of Nebraska and less than the national average. The same is also true for the median gross rent.

Table 28: Housing 2013-2017						
	Cedar	Dixon	Thurston	Wayne	Nebraska	U.S.
Owner occupied housing rate	80.7%	80.3%	59.9%	63.5%	66.0%	63.8%
Median value of owner						
occupied	\$ 113,600	\$ 87,600	\$ 79,100	\$ 133,000	\$ 142,400	\$ 193,500
Median gross rent	\$ 621	\$ 671	\$ 578	\$ 680	\$ 773	\$ 982

(U.S. Census 2017 Quick Facts, Counties, Nebraska and U.S)

Good health depends on having homes that are safe and free from physical hazards. Adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control; adequate housing can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases, injuries and poor childhood development. Severe Housing Problems is the percentage of households with at least one or more of the following housing problems:

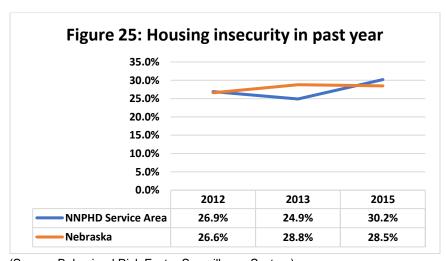
- Housing unit lacks complete kitchen facilities; incomplete kitchen facilities is defined as a unit which lacks a sink with running water, a range or a refrigerator.
- Housing unit lacks complete plumbing facilities; incomplete plumbing facilities is defined as lacking hot and cold piped water, a flush toilet, or a bathtub/shower.
- Household is severely overcrowded; defined as more than 1.5 persons per room.

 Household is severely cost burdened; defined as monthly housing costs (including utilities) that exceed 50% of monthly income.

The data in this section is from the Comprehensive Housing Affordability Strategy (CHAS) data from the U.S. Department of Housing and Urban Development (HUD); CHAS data is obtained from the U.S. Census collection. In Nebraska, average percentage of households having at least one of the four criteria for severe housing problems is 13%. Three of the counties in the NNPHD service area have percentages lower than the State of Nebraska. Only Thurston County at 21% is above the state average and at the top of the Nebraska range of 3-21%. The next highest county is at 11%.

Table 29: Individual County results from 2010-2014					
Cedar Dixon Thurston Wayne					
Severe Housing Problems	11%	9%	21%	11%	

Housing insecurity was assessed by using the Behavioral Health Risk Factor Surveillance Survey (BRFSS), which is a self-report survey. This BRFSS question for adults 18 and older who report that they own or rent their home; the response is the percentage who report that they were always, usually, or sometimes worried or stressed during the past 12 months about having enough money to pay their rent or mortgage. The housing insecurity in the NPPHD district is similar to the State of Nebraska rate.



(Source: Behavioral Risk Factor Surveillance System)

Participation in Government Programs

A household's percentage of the federal poverty level is used to set federal nutrition program thresholds for eligibility, such as the threshold for the Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp Program). SNAP is the largest of the federal nutrition programs and provides recipients with resources to buy groceries

with federal benefits. In order to qualify for SNAP, individuals/households must be below 130% of the federal poverty level.

Percent of Students Eligible for Free and Reduced Lunch Program by County, 2016-17, Nebraska Grant Perkins Legend Percent Eligible for Free Lunch No data NEBRASKA 1% - 36% 50 100 Miles 37% - 44% Good Life, Great Mission. 45% - 52% Source: USDA Economic Research Services food environment atlas 53% - 65% (www.ers.usda.gov/food-environment-atlas.aspx), U.S. Department of Education, DEPT, OF HEALTH AND HUMAN SERVICES National Center for Education Statistics, and Common Core of Data

Figure 26: Nebraska Students Eligible for Free/Reduced Lunch by County

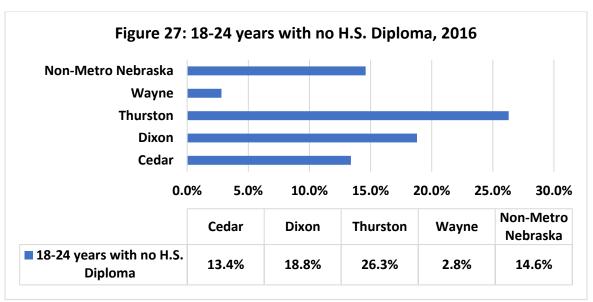
In general, those who are <130% of poverty are eligible for SNAP, Women Infants and Children (WIC), and Free and reduced lunches, see also Table 30. Those between 130-185% are eligible for WIC and reduced lunches. Those above 185% of poverty are not usually eligible for nutrition programs except food banks and other charitable assistance.

Table 30: Likely Income Eligible for Federal Nutrition Assistance in selected geographic areas.						
	Cedar	Dixon	Thurston	Wayne	Nebraska	
%< 130% Poverty	41%	46%	73%	48%	44%	
130-185% Poverty	12%	10%	6%	10%	12%	
%> 185% Poverty	47%	43%	22%	42%	44%	

(Source: Feeding America, Map the Meal Gap 2018)

Educational Levels and High School Graduation Rates

The U.S. Census service tracks educational levels including the percentage of 18-24-year olds without a high school diploma. Wayne County has the lowest percentage without a high school diploma, while Thurston County has the highest percentage. The Nebraska county with the highest percentage in 2016 had 50% of those between 18-24 years without a high school diploma.



(Source: US Census, American Community Survey, 2010 and 2016 5-year estimates)

It is now widely recognized that health outcomes are deeply influenced by a variety of social factors outside of health care. Education and Income are two of these social factors. People with higher levels of education and higher income have lower rates of many chronic diseases, compared to those with less education and lower income levels. The data below is from the 35th annual report on the nation's health published in 2011. This report featured a special edition devoted to socioeconomic status and health. The report had these highlights:¹⁰

•In 2007-2010, higher levels of education among the head of household resulted in lower rates of obesity among boys and girls 2-19 years of age. In households where the head of household had less than a high school education, 24 percent of boys and 22 percent of girls were obese. In households where the head had a bachelor's degree or higher, obesity prevalence was 11 percent for males aged 2-19 years and 7 percent for females.

•In 2007-2010, women 25 years of age and over with less than a bachelor's degree were more likely to be obese (39 percent-43 percent) than those with a

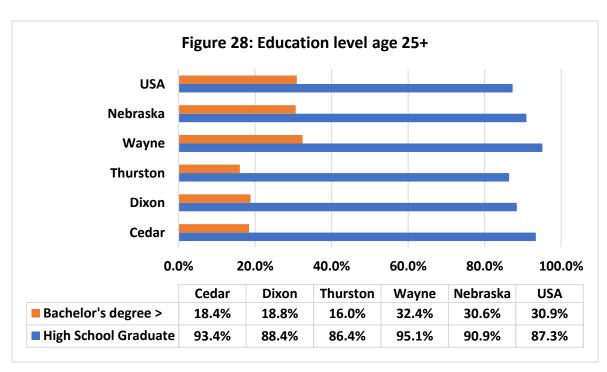
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¹⁰ Center for Disease Control, Press Release, May 16th, 2012 retrieved from https://www.cdc.gov/media/releases/2012/p0516 higher education.html

bachelor's degree or higher (25 percent). Obesity prevalence among adult males did not vary consistently with level of education.

- •In 2010, 31 percent of adults 25-64 years of age with a high school diploma or less education were current smokers, compared with 24 percent of adults with some college and 9 percent of adults with a bachelor's degree or higher. Overall, in the same year, 19 percent of U.S. adults age 18 and over were current cigarette smokers, a decline from 21 percent in 2009.
- •Between 1996-2006, the gap in life expectancy at age 25 between those with less than a high school education and those with a bachelor's degree or higher increased by 1.9 years for men and 2.8 years for women. On average in 2006, 25-year-old men without a high school diploma had a life expectancy 9.3 years less than those with a Bachelor's degree or higher. Women without a high school diploma had a life expectancy 8.6 years less than those with a bachelor's degree or higher.

Two of the counties in the NNPHD service area (Cedar and Wayne) have higher high school graduation rates for those over 25 years than the State of Nebraska or the USA. Only Wayne County has a higher percent of persons over 25 years with a bachelor's degree or higher than the State of Nebraska or the USA. Wayne County has a four-year public college located in the county. Dixon's percent of persons age 25 and older with a high school degree is higher than the USA but lower than the Nebraska rate. Thurston's percentage of those over 25 with a high school degree is below the Nebraska and US rate. Three of the four counties have a much lower rate of individuals 25 years or older with a bachelor's degree or higher than Nebraska or the USA.



NNPHD has an ongoing Minority Health Initiative (MHI) for Dixon and Wayne Counties that between 2013-2018 provided services for 710 individuals (Dixon & Wayne). Part of the data gathering included the level of education on those served. Over 70% of those served in this program did not have a high school education, see Figure 29 below.

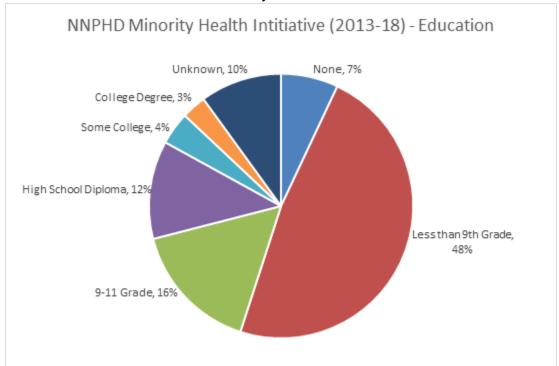


Figure 29: Data from NNPHD MHI Surveys on Educational Level

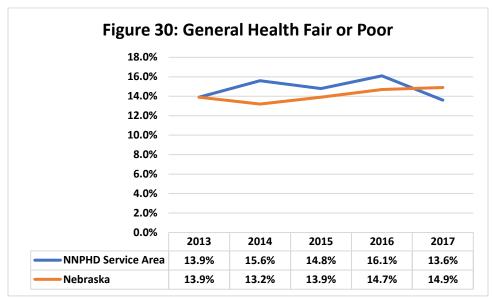
Overall Health:

General Health

In the NNPHD service area, one measure of how the public health system is doing to reach an improved status of overall health, is the percentage of adults 18 and older who report that their general health is fair or poor. This measure is based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The values reported in Figure 30 and Table 31 is the percentage of respondents who rated their health "fair" or "poor."

As we age, our risk of poor or fair health increases. This means that counties with older populations (like Cedar) are more likely to have a higher proportion of their population in poor or fair health compared with counties with younger populations. Every county population has a different age distribution, so an adjustment is made to account for the age distribution in order to fairly compare the risk of fair or poor health for residents across different counties. Adjusting for age removes the effect of age as a risk factor on

fair or poor health since aging is not preventable. The results reported below are all age-adjusted for this measure. In the past five years, the NNPHD service area has reported in four of the past five years slightly higher rates of people who feel their health is fair or poor than the State of Nebraska.



(Source: Behavioral Risk Factor Surveillance System)

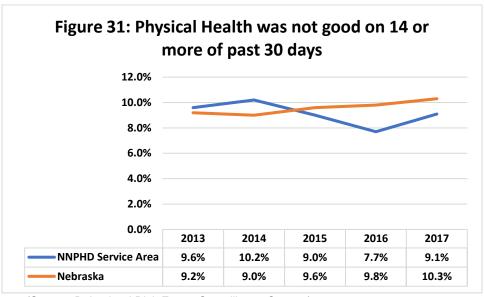
The individual counties that make up NNPHD show variance in this measure. In 2016, three of the four counties had a lower percentage of adults reporting poor or fair health with only Thurston County reporting poor or fair health above the Nebraska average at 23%, compared to 14.7% for the state in 2016.

Table 31: 2016 Individual County Results for Fair or Poor Health					
Cedar Dixon Thurston Wayne					
% Adults reporting fair or poor health	12%	14%	23%	14%	

(Source: 2018 County Health Rankings)

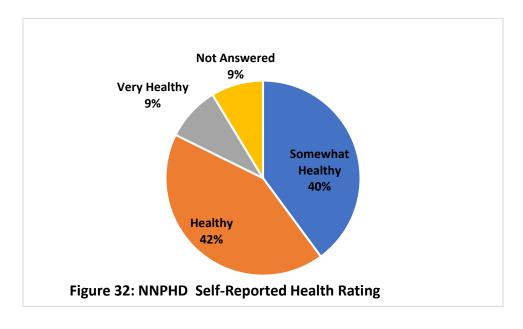
Another way to measure overall health is to look at the percentage of adults 18 and older who report that their physical health (including physical illness and injury) was not good on 14 or more of the previous 30 days. This measure is based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" This measure is also age-adjusted since our risk of poor health increases as we age.

On this measure NNPHD had a slightly higher percentage than the State of Nebraska in 2013 and 2014, and a slightly lower percentage on the survey than the state in 2015-2017. See Figure 31.



(Source: Behavioral Risk Factor Surveillance System)

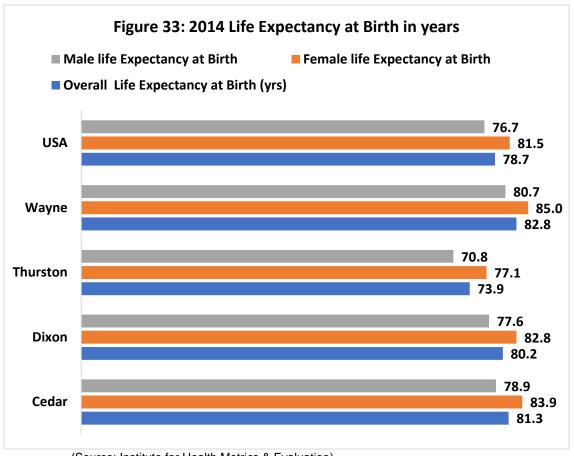
On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), the question was asked "How do you rate your own personal health?" This was not an age adjusted survey, nor are the results available at the county level. Figure 32 shows the results. No respondents chose "Fair" or "Poor" responses.



Life Expectancy at Birth and Low Birthweight

Life expectancy at birth is the average number of years that a newborn is expected to live if the current mortality rates continue to apply. Life expectancy at birth reflects the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups - children and adolescents, adults and the elderly.

Women live longer than men on average across all geographic regions. Where you are born also affects your life expectancy. A female child who was born in Thurston County in 2014 is likely to live to 77.1 years, while a female child born in the same year in Wayne County will live on average nearly 8 years longer. A male child will live ten years longer in Wayne County than Thurston County.



(Source: Institute for Health Metrics & Evaluation)

Low birthweight (LBW) is unique as a health outcome because it represents multiple factors: infant current and future morbidity, as well as premature mortality risk, and maternal exposure to health risks. LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to health care. the social and economic environment the mother inhabits, and environmental risks to which she is exposed. Authors have found that modifiable maternal health behaviors. including nutrition and weight gain, smoking, and alcohol and substance use or abuse can result in LBW¹¹. Data for this measure is from the National Center for Health Statistics drawn from the National Vital Statistics System (NVSS). The overall Nebraska rate of LBW is 7%, with a county range between 3-12%. All of the counties in the NNPHD service area are below 7% on this measure.

¹¹ Bailey BA, Byrom AR. Factors predicting birth weight in a low-risk sample: The role of modifiable pregnancy health behaviors. Maternal Child Health J. 2007;11:173-179.

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Table 32: Individual County results from 2010-2016					
Cedar Dixon Thurston Wayne					
% of live births with LBW	4%	6%	6%	6%	

(Source: National Center for Health Statistics)

Mortality Data

When looking at mortality rates¹², heart disease and cancer hold the top two spots for cases of mortality in all three of population groups reviewed, each accounting for more than 20% of all total deaths and together accounting for about 2 of every five deaths.

National mortality rates differ among these population groups in several key ways. In the Hispanic/Latino population group, they are nearly twice as likely to die from diabetes as the non-Hispanic white population. Chronic liver disease and cirrhosis is the 7th leading cause of death for Hispanic/Latinos and does not make the top 10 in the other two populations, which both rank Influenza and Pneumonia in the 8th spot. The rate of unintentional injury and stroke is also higher in the Hispanic/Latino population.

Table	33: Differences in the 10 lea	ading causes of mortality in	USA, 2016
Rank	USA Overall	Non-Hispanic Whites	Hispanics
1	Heart Disease-23.1%	Heart Disease-23.5%	Cancer -20.9%
2	Cancer-21.8%	Cancer-21.9%	Heart Disease -20.1%
3	Unintentional Injuries- 5.9%	Chronic Lower Respiratory Disease-6.3%	Unintentional Injuries - 8.3%
4	Chronic Lower Respiratory Disease-5.6%	Unintentional Injuries- 5.7%	Stroke 5.5%
5	Stroke-5.2%	Stroke-5.0%	Diabetes mellitus-4.5%
6	Alzheimer's Disease-4.2%	Alzheimer's Disease-4.6%	Alzheimer's Disease- 3.6%
7	Diabetes mellitus-2.9%	Diabetes mellitus-2.5%	Chronic Liver Disease & Cirrhosis-3.3%
8	Influenza & Pneumonia- 1.9%	Influenza & Pneumonia- 1.9%	Chronic Lower Respiratory Disease-2.8%
9	Kidney Disease-1.8%	Suicide-1.7%	Kidney Disease 2.0%
10	Suicide-1.6%	Kidney Disease-1.7%	Suicide-1.9%

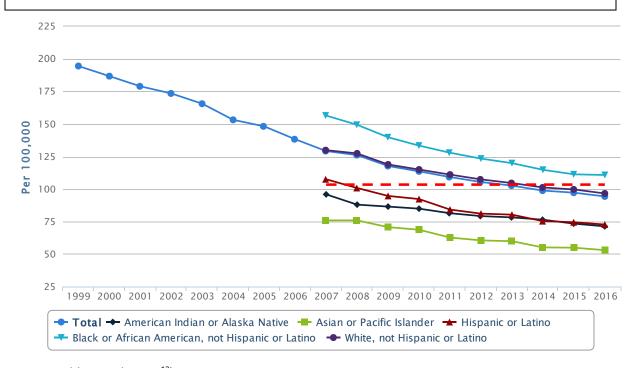
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¹² Heron, Melonie; National Vital Statistics Reports, *Deaths: Leading Causes for 2016*, 2018, Volume 67, Number 6 retrieved from https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_06.pdf

Overall in the USA, the mortality rate from heart disease, also known as coronary heart disease, has been decreasing for all populations and is now under the Healthy People 2020 target of 103.4 deaths per 100,000 population. Figure 34 shows the age adjusted deaths for coronary heart disease by race and ethnicity.

Figure 34: Coronary heart disease deaths (age adjusted, per 100,000 population)

By Race/Ethnicity HP 2020 Target = 103.4



Source: Healthy People 2020¹³)

County Health Rankings Data¹⁴

The County Health Rankings provide a starting point for communities to discuss how their health is influenced by the places they live, work and play. The rankings are based on a model that takes into consideration multiple factors that, if improved, would make the county a healthier place. The County Health Rankings provide two types of rankings; 1) Health Outcomes ranking and 2) Health Factors outcome ranking. **The lower the ranking, the healthier the county.**

¹³ Healthy People 2020, Coronary heart disease deaths chart retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke/national-snapshot March 9, 2019

¹⁴ Nebraska County Health Rankings data, 2013-2018 retrieved from http://www.countyhealthrankings.org/app/nebraska/2018/overview

Nebraska has 80 ranked counties in 2018, with 13 counties unranked. All the counties within the NNPHD service area were ranked.

Table 34:	2018 Health Outcomes Rank	2018 Health Factors Rank
Cedar	2 nd	6th
Dixon	27th	63rd
Thurston	80th	80th
Wayne	6th	5th

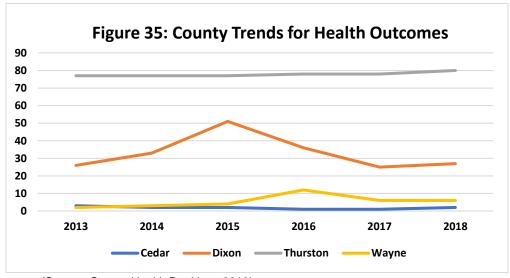
(Source: County Health Rankings 2018)

NNPHD has two counties with health outcomes and health factors ranking in the first quartile (Cedar and Wayne). Dixon County is near the top of the second quartile in health outcomes, ranked at 27 out of 80. However, Dixon falls to the lower end of the third quartile at 63rd in the health factors ranking. In contrast, Thurston County is the least healthy county in both health outcomes and health factors in the NNPHD service area, as well as within the state of Nebraska.

Health Outcome Rankings

The overall rankings in health outcomes represent how healthy counties are within the state. The ranks are based on two types of measures: how long people live and how healthy people feel while alive.

In looking at a five-year trend on health rankings, Cedar and Dixon Counties have been ranked low in the County Health Rankings, indicating the overall health of these Counties is very good when compared with Nebraska, while Thurston County has ranked consistently at 79 or 80 out of 79 or 80 ranked counties since 2013 indicating the overall health of the County is poorer than its peer counties in Nebraska



(Source: County Health Rankings 2018)

Premature death is the measure of length of life used by County Health Rankings to help determine ranking of health outcomes. Premature death measures the risk of dying before age 75. Thurston county has an extremely high 2018 premature death rate of 16,000/100,000, more than triple the 2018 premature death rate in Cedar which was 4,500/100,000 by contrast.

A map of Nebraska (Figure 36) showing the county rankings illustrates the distribution of the counties based on quartiles from healthiest to least healthy counties. The darker the county the less healthy. Cedar County has consistently ranked first or second in the health outcome rankings since 2014, making it one of the healthiest counties in Nebraska.

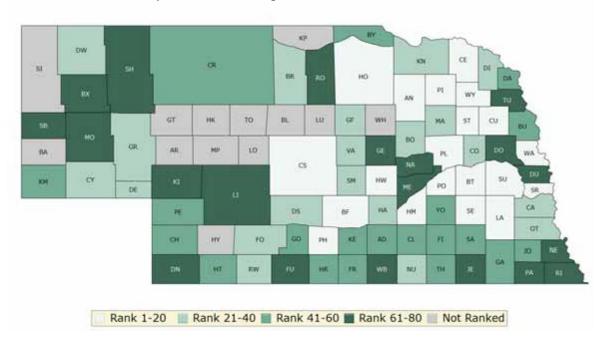


Figure 36: Nebraska County Health Rankings 2018

Health Factor Rankings

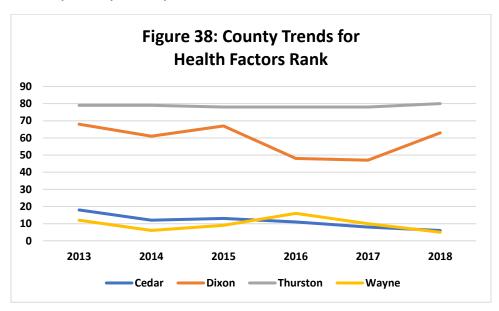
Health factors drive health outcomes. The overall rankings in health factors represent what influences the health of a county. They are an estimate of the future health of counties as compared to other counties within a state. The ranks are based on four types of measures: health behaviors, clinical care, social and economic, and physical environment factors. Many of the components that make up the four types of these measures will be reported on in later sections of this CHNA. A map of Nebraska comparing the counties on health factor rankings can be found on the next page (Figure 37). The darker the county the more negative the health factors in that county. Wayne and Cedar Counties have more positive health factors than Dixon or Thurston Counties.

51 HO RO WH ж All to 345 00 CS HW KI DE 阵 YD SE LA GO KE AD. FL. SA PH α CH DN ru 303 TH Rank 1-20 Rank 21-40 Rank 41-60 Rank 61-80 Not Ranked

Figure 37: Nebraska County Health Factor Rankings

(Source: County Health Rankings, 2018, Nebraska Report, Health Factor Rankings)

The Figure 38 below shows how the counties in the NNPHD service area ranked on health factors from 2013-2018. Thurston County again shows a marked disparity when compared with the other counties and has consistently ranked the lowest of any county in the state of Nebraska. Cedar County has steadily improved in the county health rankings for health factors between 2013-2018. Along with Cedar, Wayne County has consistently ranked in the top quartile for health factors. Dixon County has shown the most variability from year to year within the NNPHD service area.

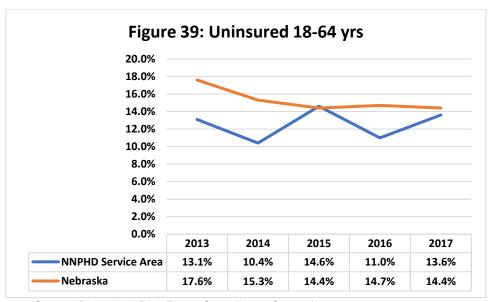


Health Care Access:

Uninsured Population

Lack of health insurance coverage is a significant barrier to accessing needed health care. Uninsured is the percentage of the population under age 65 without health insurance coverage. A person is uninsured if they are currently not covered by insurance through a current/former employer or union, purchased from an insurance company, Medicare, Medicaid, Medical Assistance, any kind of government-assistance plan for those with low incomes or disability, TRICARE or other military health care, Indian Health Services, VA or any other health insurance or health coverage plan. The numerator is the total number of people under 65 in a county who are uninsured, while the denominator is the total county population under age 65. Figure 39 below is the percentage of adults 18-64 years old in the NNPHD district who report that they do not have any kind of health care coverage.

Nebraska had an overall decrease from 17.6% uninsured in 2003, to 14.4% uninsured in 2017. In 2014, U.S. adults including Nebraskans, could buy a private health insurance plan through the Health Insurance Marketplace as part of the Affordable Care Act. The rate of uninsured in the NNPHD service area showed a lot of variability during this same time but did not show a decrease in uninsured at the end of 2017 when compared with 2013.



(Source: Behavioral Risk Factor Surveillance System)

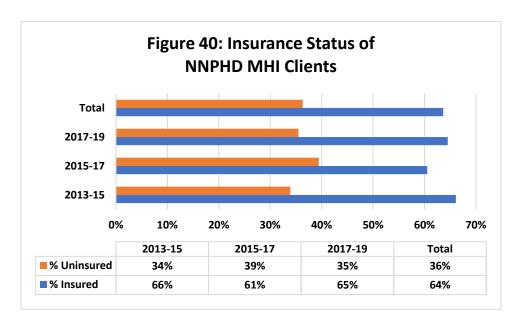
The percentage of uninsured varies within the NNPHD service area by county and by age. Uninsured children is the percentage of the population under age 19 that has no health insurance coverage. Cedar County has the least uninsured, while Thurston has the most uninsured. Only Thurston County had a higher rate of uninsured adults than

the State of Nebraska in 2015. The percentage of uninsured children in Nebraska in 2015 was 9%. Only Dixon County had more uninsured children in 2015 than the state.

Table 35: Individual County Results					
Cedar Dixon Thurston Wayne					
% Uninsured Adults 2015	9%	12%	17%	10%	
% Uninsured Children 2015	8%	10%	9%	6%	

(Source: County Health Rankings 2018)

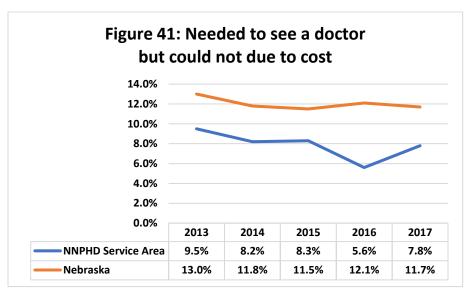
The NNPHD has an ongoing Minority Health Initiative (MHI) that gathers information on the insured status of those seen. Over the five years of the program, a total of 710 individuals were served. Over one third of those seen in the NNPHD have not had any insurance coverage in any of the given time periods. This rate of uninsured is higher than the rates seen for these counties. The percent of clients seen with and without coverage is shown below for the select time periods.



Unable to see a Doctor due To Cost

Lack of insurance is only one factor that keeps people from seeking health care. Additional factors include inadequate insurance which may include high deductibles, high co-payments, and no money left after other expenses such as housing and food. The Northeast Nebraska Public Health Department 2018 Agricultural Health & Safety Survey asked the 135 respondents: "Which of the following have kept you or your family from getting medical, dental or mental health services in the past 23 months?" Respondents could mark all that applied. The largest identified barrier was: My health insurance deductible is too high, reported by 30.37%.

A similar question in the Behavioral Risk Factor Surveillance System (BRFSS) asks: "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?" The graph below is the percentage of adults 18 and older who answered that they needed to see a doctor but could not. The percentage for the NNPHD service area is significantly lower than the state of Nebraska with less than 10% of those responding reporting they could not see a doctor due to cost.



(Source: Behavioral Risk Factor Surveillance System)

The importance of controlling the cost of health care was identified by 37.36% of the 554 respondents on the Northeast Nebraska Rural Health Network Survey (electronic).

Primary Care Health Professional Availability

The NNPHD area has designated health professions shortages in all counties. Dixon County is designated as a shortage area for the health professions listed below. Thurston County has the least amount of health profession shortages on this list.

Table 36: State of Nebraska Designated Health Professions Shortage Areas					
	Cedar	Dixon	Thurston	Wayne	
Family Practice	Х	Х	X	Х	
Internal Medicine	Х	Х	Х	Х	
Pediatrics	Х	Х	Х	Х	
Obstetrics & Gynecology	Х	Х	Х	Х	
General Surgery	Х	Х		Х	
Pharmacist	Х	Х		Х	
Occupational Therapist		Х			
Physical Therapist		Х			

(Source: The Status of Healthcare Workforce in the State of Nebraska¹⁵)

¹⁵ Wilson FA, Wehbi NK, Larson J, et al. *The Status of Healthcare Workforce in the State of Nebraska*. Omaha, NE: UNMC Center for Health Policy, 2018

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Federal health professional shortage areas (HPSAs) are designated by the Health Resources Services Administration (HRSA) as having shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), population (e.g., low income or Medicaid eligible) or facilities (e.g., federally qualified health centers, or state or federal prisons). Two of the four counties in the NNPHD have HPSA's for primary care. Altogether, they have three designated rural federal HPSA's. See also Oral Health and Mental Health for more HPSA's.

Table 37: Designated Rural Primary Care HPSA's in the NNPHD area					
HPSA Name	Designation Type	County			
Avera Medical Group - Hartington	Rural Health Clinic	Cedar County			
Carl T. Curtis Health Center	Indian Health Service Facility	Thurston			
Winnebago PHS Indian Hospital	Indian Health Service Facility	Thurston			

(Source: HRSA, HPSA find 2019)

Federal medically underserved areas/populations (MUA's) are areas or populations designated by HRSA as having too few primary care providers, high infant mortality, high poverty or a high elderly population. All of the four counties are MUA's, three being county wide and Wayne County being limited to the Chapin Precint area.

Table 38: Designated Rural Medically Underserved Areas in the NNPHD area					
Service Area Name	Designation Type	County			
Cedar Service Area	Medically Underserved Area	Cedar			
Dixon Service Area	Medically Underserved Area	Dixon			
Thurston Service Area	Medically Underserved Area	Thurston			
Chapin Prec - County	Medically Underserved Area	Wayne			

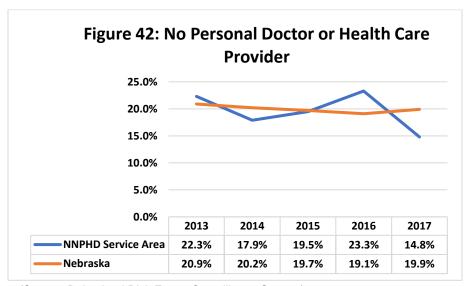
(Source: HRSA, MUA find 2019)

On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), the question was asked "How well do you feel the these services are being provided in your community?" The answer choices included six possibilities. Of the 554 respondents, only three possibilities were used: Very Much, Somewhat and Very Little. The only service identified as being provided "Very Much" was Emergency Services (Ambulance and 911) and 41.16% identified this service in that manner.

The availability of other services from the electronic survey included the following which were identified as "Somewhat" provided in the community: Healthcare Services for the Elderly, Health Screenings & Preventive Services, Health Services for Heart Disease, Health Services for Cancer, Coordination & Communication between Providers, Health Services for Diabetes and the Availability of Healthcare Providers and Specialists.

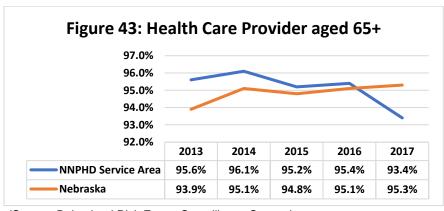
Two services were identified as provided "Very Little", Mental Health Services and Services for Obesity.

Health professional availabilty is also measured based on responses to the Behavioral Risk Factor Surveillance System (BRFSS) question: "Do you have one person you think of as your personal doctor or health care provider?" For anyone who responds "No" a follow-up question is asked: "Is there more than one, or is there no person who you think of as your personal doctor or health care provider?" The percentage of adults 18 and older who report that they do not have a personal doctor or health care provider is reported below for the NNPHD service area. Overall in 2017, approximately 85% of those asked did have a personal doctor or health care provider.



(Source: Behavioral Risk Factor Surveillance System)

The BRFSS data also allows the collection of data on this question for those over 65 years. Those over 65 years are more likely to have a personal healthcare provider than the general population. The percentage of adults 65 and older in the NNPHD service area who report that they have one or more than one personal doctor or health care provider in 2017 was 93.4%.



(Source: Behavioral Risk Factor Surveillance System)

Health information and health literacy

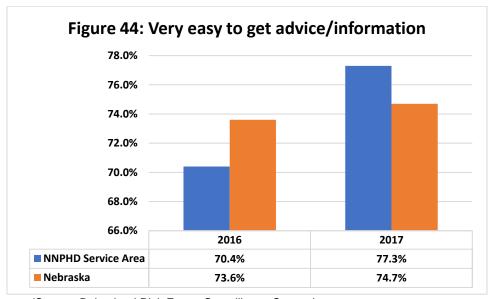
Where do people in the NNPHD service area get their health information? This is an important question to ask to plan health information campaigns to improve the health of the community.

The Northeast Nebraska Rural Health Network 2018 Agricultural Health & Safety Survey asked the 135 participants what their top three choices were for health and safety information. Another survey, the Northeast Nebraska Rural Health Network 2018-2019 Community Health survey (electronic) asked the same question to 554 individuals who lived or worked in the NNPHD service area. The top three results are compared to the Agricultural survey below.

Table 39: Where do you get your health information from?					
Ranking	2018 Agricultural Survey	Percent	2018-2019 Electronic Survey	Percent	
#1	Medical Provider	74.1%	Doctor/Health Care Provider	78.0%	
#2	Internet	70.3%	Internet	64.6%	
#3	Friends & Family	65.2%	Family or Friends	37.2%	

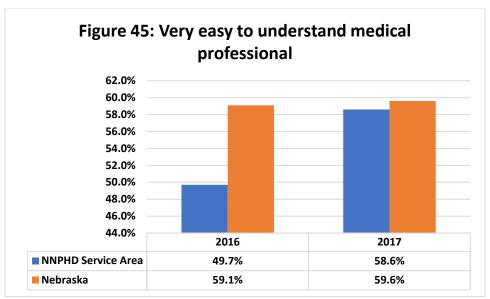
In addition, on the electronic survey, individuals also listed the hospital (34.48%) and newspaper/magazines (28.34%).

Healthy People 2020 has identified health literacy as a priority area in disease prevention and health promotion. The Nebraska BRFSS collection has three questions related to health literacy collected in the past two years of surveys. The NNPHD service area showed improvement in all three questions between the first survey in 2016 and the second in 2017. The first is the percentage of adults 18 and older who report that it is very easy for them to get advice or information about health or medical topics if they need it; excludes those who report that they don't look for health information.



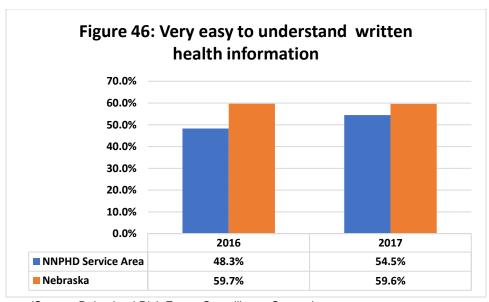
(Source: Behavioral Risk Factor Surveillance System)

The second question is the percentage of adults 18 and older who report that it is very easy for them to understand information that doctors, nurses and other health professionals tell them.



(Source: Behavioral Risk Factor Surveillance System)

The third question is the percentage of adults 18 and older who report that it is very easy for them to understand written health information, such as written information about health on the internet, in newspapers and magazines, and in brochures in the doctor's office and clinic; excludes those who report that they don't pay attention to written health information.

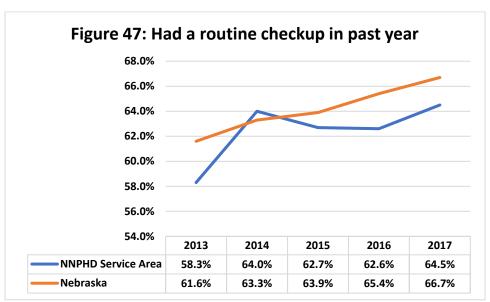


(Source: Behavioral Risk Factor Surveillance System)

Preventative Care-

On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), 38.45% of the 554 respondents felt like Health Screenings & Preventive Services were "Somewhat" provided in their community. The majority of the preventive services in this section show a completion rate less than the states average with opportunities for improvement. Another question from the same electronic survey asked: "What is needed to improve the health of your family and neighbors?" Free or affordable health screenings was chosen by 48.38% of the respondents.

Routine Check-ups



(Source: Behavioral Risk Factor Surveillance System)

Routine health exams and laboratory tests are important to preventative care to detect problems early, when the chances for treatment and cure are better. There is a schedule of what screenings and tests should be taken at what age for both males and females. The NNPHD service area tracks through BRFSS the percentage of adults 18 and older who report that they visited a doctor for a routine checkup during the previous 12 months. Overall, during the past five years, people who live in the NNPHD service area are less likely to have a routine checkup than the average person in Nebraska.

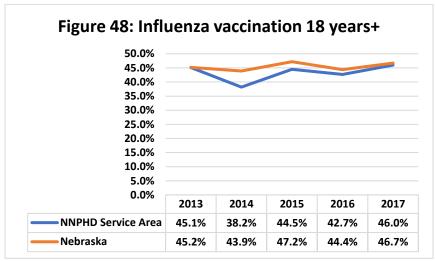
Vaccinations

It is general public health system knowledge that it is better and less expensive to prevent a disease than to treat it after it occurs. Vaccinations provide immunity to specific illnesses or diseases. The rate of vaccination in a community is another measure of how healthy the community is.

Yearly influenza (flu) vaccination is the best prevention tool to prevent influenza. Influenza affects millions of people every year and is responsible for missed work and school, flu-related hospitalizations and even deaths. A high vaccination rate also

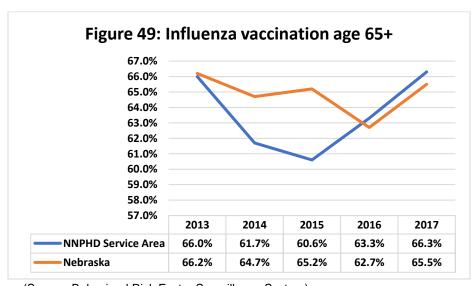
protects the community, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions. The CDC recommends a yearly flu vaccination for everyone.

The BRFSS data for the percentage of adults 18 and older who report that they received an influenza vaccination during the past 12 months has varied between 38.2-46% over the five-year period between 2013-2017. In the 2018 Northeast Nebraska Rural Health Network Agricultural Health & Safety Survey, 43.28% of respondents reported always getting a flu vaccination, while 19.4% reported that they never get one.

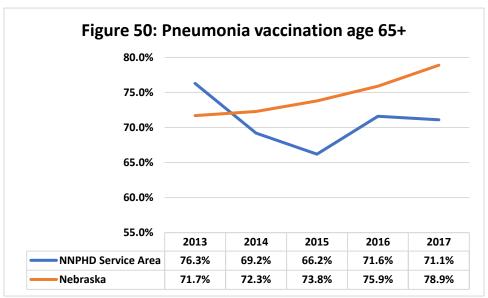


(Source: Behavioral Risk Factor Surveillance System)

People age 65 and older are at a higher risk for complications from influenza, and for those on Medicare, it is an important Medicare performance measure. The percentage those who receive a flu vaccination after age 64 is higher than those over 18 years and older for both the NNPHD service area and the State of Nebraska. The NNPHD rate has displayed considerable variability in this measure over the past five years.

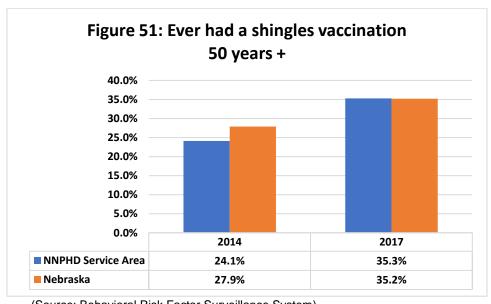


Pneumonia is an infection of the lungs, the pneumonia vaccines help to protect against multiple types of pneumococcal bacteria, a common cause of pneumonia. All adults age 65 years and older should receive pneumonia vaccines because pneumonia is especially dangerous in those over age 65 who have a chronic medical condition. In 2017, 69% of those age 65+ in the USA had received a pneumonia vaccine.

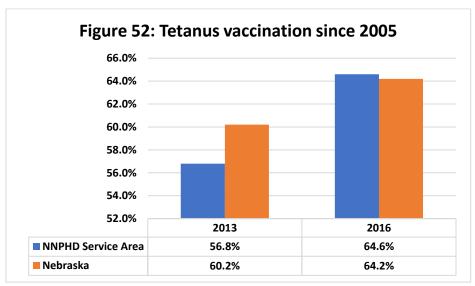


(Source: Behavioral Risk Factor Surveillance System)

Shingles or Herpes Zoster is a common disease, and according to the CDC nearly 1 in 3 people will get shingles in their lifetime. The incidence of shingles increases with age, which is why the shingles vaccine is recommended for everyone age 50 years and older. The newer shingles vaccine is 90% effective at preventing shingles. The BRFSS rate of vaccination for shingles was lower than the Nebraska rate in 2014 and nearly equal to the Nebraska rate in 2017.



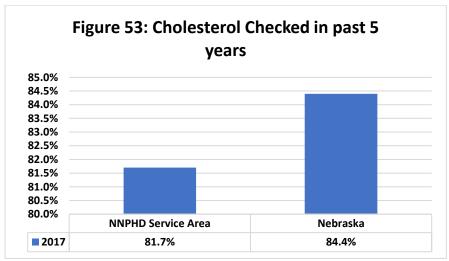
Tetanus is an infection that is caused by bacteria. Tetanus vaccines are recommended for everyone. In the Northeast Nebraska Rural Health Network 2018 Agricultural Health & Safety Survey, 43.28% of the respondents reported that they always get a tetanus vaccination at least every ten years. In the BRFSS survey, the rate of tetanus vaccinations was higher than the Agricultural survey for both the NNPHD area and the state of Nebraska for 2013 and 2016.



(Source: Behavioral Risk Factor Surveillance System)

Lipid Testing

High blood ("bad") cholesterol or LDL cholesterol is linked to an increased risk of heart disease. Percentage of adults 18 and older who report having had their blood cholesterol checked during the past 5 years is reported below and is lower than the average for the state of Nebraska.



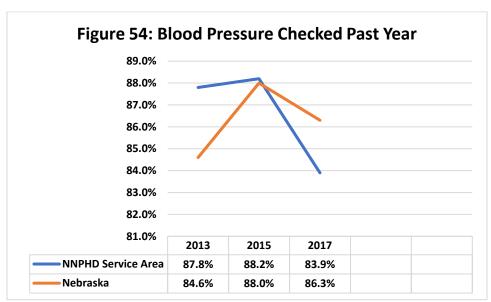
The data below came from the Dartmouth Atlas of Health Care using clinical data from the Centers for Medicare and Medicaid Services (CMS). This measure is specific to diabetics and is the percent of diabetic Medicare enrollees age 65-75 receiving blood lipid testing by county. Measures of the quality of diabetic care for Medicare beneficiaries age 65-75 are not adjusted. The rationale for not adjusting is because every diabetic Medicare patient should receive these tests, regardless of age, sex or race. Statistical adjustments to correct for underlying population differences, are not considered relevant. The Nebraska state average for this measure is 72.69%, only Wayne County is meeting or exceeding the state average for this measure.

Table 40: Individual County Clinical Data for lipid testing ages 65-75 in 2015						
Cedar Dixon Thurston Wayne						
% of Diabetics with Lipid Testing 69.47% 64.79% 50.54% 73.53						

(Source: Dartmouth Atlas Project)

Blood Pressure Assessment

Blood pressure assessment is important to determine heart and vessel health. The higher the blood pressure, the higher the risk of future problems of heart attack, stroke, kidney disease or dementia. On the BRFSS survey, the percentage of adults 18 and older who report having had their blood pressure taken by a doctor, nurse, pharmacist, dentist, eye doctor, or other health professional during the past 12 months is shown on the graph below and compared to the State of Nebraska at various points in time.

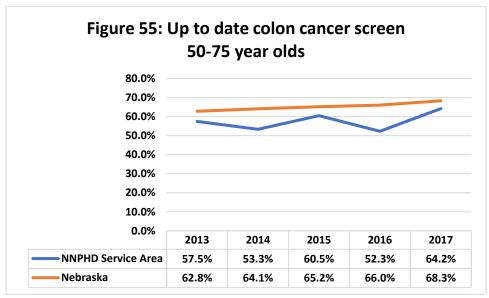


¹⁶ Dartmouth Atlas Project, Quality/Effective Care 2015-by State and County, Retrieved from https://www.dartmouthatlas.org/interactive-apps/quality-effective-care/ on January 26, 2019

Cancer Screening

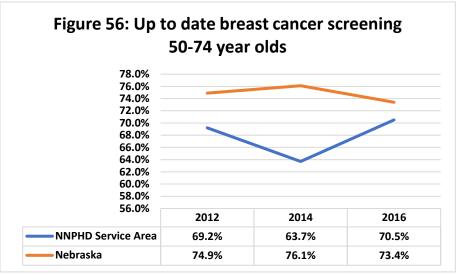
Cancer screenings allow for early detection and treatment often before the cancer can cause symptoms. This section will look at the rate of screening for colorectal, breast and cervical cancers.

Regular screening for colorectal cancer should begin at age 50 and be routinely done until age 75. After age 76, it is recommended that a medical provider be consulted for their advice on colorectal screening. On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), 56% of those who responded ages 50-84 years reported completing a colon cancer screening. This is comparable to the percentage of adults 50–75 years old who report having had a fecal occult blood test (FOBT) during the past year, a sigmoidoscopy during the past 5 years and an FOBT during the past 3 years, or a colonoscopy during the past 10 years on the BRFSS.



(Source: Behavioral Risk Factor Surveillance System)

Conversely, on the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), the percentage of women who received a mammogram over the age of 40 was 63.56%, similar to the self-reported BRFSS rate of mammogram screening shown below. Percentage of females 50-74 years old who self-report having had a mammogram during the past 2 years, while lower than the state of Nebraska, was never lower than 63.7%. The three most common forms of breast cancer screening include self-breast exam, clinical breast exam, and mammogram. Mammograms can identify breast cancer before a lump can be felt which makes it the ideal screening for breast cancer.



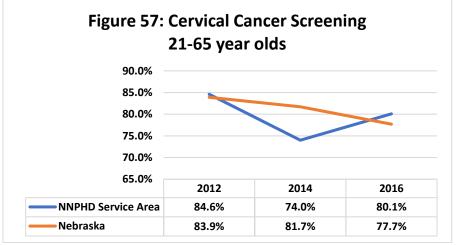
(Source: Behavioral Risk Factor Surveillance System)

Data is available on the actual mammography percentage among female Medicare enrollees ages 67-69 having at least one mammogram every two years using clinical data from the Centers for Medicare and Medicaid Services (CMS). The overall Nebraska average on this measure is 62.58%. All four counties are below the Nebraska state average. Dixon has the highest percentage on this measure.

Table 41: Individual County Clinical Data ages 67-69, 2015						
Cedar Dixon Thurston Wayne						
% ages 67-69 with Mammography 52.38 59.04 33.33 53.33						

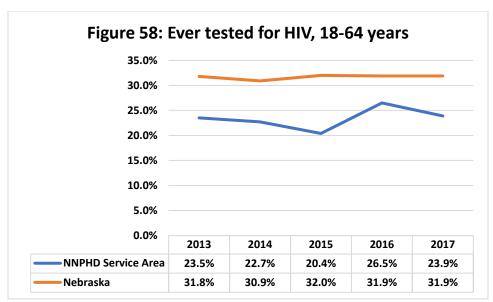
(Source: Dartmouth Atlas Project)

The Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic) also asked women about regular cervical cancer screening. The reported percentage was 72.21% (age adjusted, 20-69 years) which is less than the BRFSS. On BRFSS the percentage of females 21-65 years old, who report having had a Pap test during the past 3 years was never lower than 74% in 2012 and 2016, and the response rate for having a cervical cancer screen was higher than the state of Nebraska.



HIV Testing

HIV prevalence in the USA is estimated to be 0.5% among the general population. HIV infection is much more common in men than women. Gay and bisexual men are the population most affected by HIV. In 2017, gay and bisexual men accounted for 66% of all HIV diagnoses and 82% of diagnoses among males. In 2017, people who inject drugs accounted for 6% of HIV diagnoses. The BRFSS does ask individuals 18-64 years if they have ever been tested for HIV. The rate of testing in the NNPHD area has been consistently lower than the in state of Nebraska.



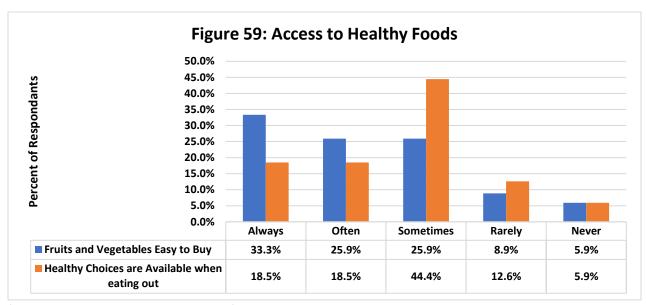
(Source: Behavioral Risk Factor Surveillance System)

Health Behaviors and Risk Factors:

Limited Access to Healthy Foods/Food Environment Index

The NNPHD surveyed 135 members of the agricultural population of the four-county district for input on health and safety needs of the community. The majority (59.2%) felt that fruits and vegetables are easy to buy (always/often). When asked about eating out, only 37% felt that they always or often had healthy choices.

On this same Agricultural survey, the number one concern of respondents was to have access to healthier foods & restaurants, chosen by 31% of those who answered the question: "The most important health or safety need for community is?" While falling into fourth place on the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic) for the question: "What do you think are the top five areas that need to be improved for your community to make it healthier?" Again, 31.41% responded that they need healthy choices when eating out.



(Source: NNPHD Agricultural Survey 2018)

There is strong evidence that residing in a food desert is correlated with a high prevalence of overweight, obesity, and premature death. The County Health Rankings look at the relationship to food access and health.

Limited Access to Healthy Foods is the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and non-rural areas; in rural areas, it means living less than ten miles from a grocery store, in urban the rate is less than one mile. "Low income" is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

The County Health Rankings have moved from the *Limited Access to Healthy Foods* measure only to the *Food Environment Index*, and the measure now comprises two variables; 1) Limited access to healthy foods with data taken from the USDA Food Environment Atlas and 2) Food insecurity with data from Feeding America which estimates the percentage of the population who did not have access to a reliable source of food. The two variables are scaled from 0 to 10 (zero being the worst value in the nation, and 10 being the best) and averaged to produce the Food Environment Index. In 2016, the U.S average value for counties was 7.0, the Nebraska average was 7.6. Three of the four counties, Thurston (6.4), Cedar (7.3) and Dixon (7.4) ranked below the Nebraska average and Wayne (8.0) ranked above the Nebraska average.

Adult Obesity

According to the State of Obesity report, obesity is a harmful, costly and complex health problem with multiple interrelated causes.¹⁷ This same report goes on to say that low-

¹⁷ Robert Wood Johnson Foundation, Trust for America's Health, *The State of Obesity, 2018,* retrieved from https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf

income communities, rural areas and communities of color are disproportionately affected by obesity. The theme of obesity/overweight was the most common theme noted in all of the MAPP assessments. In the NNPHD district, obesity was chosen as the top issue on the electronic survey, forces of change assessment and the focus group meeting. In addition, the data presented in this section of the health status assessment points to a very real problem in this area for both adults and youth.

On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic survey), 64.44% said that obesity was one of the top five areas that needed to be improved for the community to be healthier; this was the number one answer. This concern about obesity was not just for the community, but also at the individual level. The most common response to the question concerning what health challenges you face, was overweight/obese at 45.49% on the electronic survey. When asked what were the top five "unhealthy behaviors" for youth and adults in the community, three of the top five in each category were related to factors around obesity/overweight. This area is clearly of concern to those who live and work in the service area.

Table 42: The top five "unhealthy behaviors"							
Ranking	Youth	Percent	Adults	Percent			
#1	Poor Eating Habits	62.6%	Being Overweight	82%			
#2	Alcohol Use	60.7%	Lack of Exercise	76%			
#3	Lack of Exercise	52.7%	Alcohol Use	71%			
#4	Bullying	45.5%	Poor Eating Habits	69%			
#5	Being Overweight	45.3%	Tobacco Use	37%			

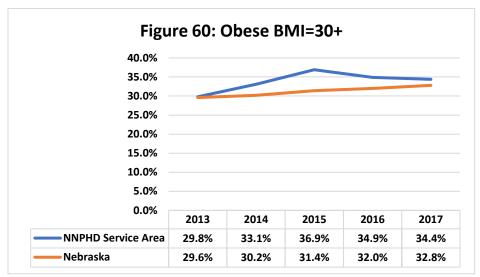
The electronic Community Health Survey also asked how well services were being provided in the community. On this survey, 37.36% of the 554 respondents felt that as far as services for obesity, the community was providing "very little".

The State of Obesity source lists Nebraska's 2017 adult obesity rate at 32.8% with 69% of all adults being overweight or obese. Nebraska ranks 10th highest in obesity/overweight rate out of 50 states. The report uses data from the National Health and Nutrition Examination Survey (NHANES) data, which is based on actual physical examinations. Physical exam data from clinics in NNPHD service area was reviewed and shown to be higher than the national NHANES data, however, the data was not able to be verified at the time of this publication.

The BRFSS data presented in Figure 60 and 61 and the individual county data in Table 43 are based on self-reported height and weight. Research has demonstrated that people tend to overestimate their height and underestimate their weight. Therefore, the NHANES data is felt to be a more accurate reflection of overall obesity. NHANES data is not available for NNPHD or the county level but is mentioned only because of

¹⁸ Ibid

the potential for underreporting the actual levels of obesity and overweight in the service area.



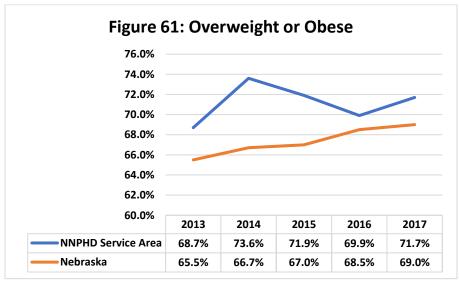
(Source: Behavioral Risk Factor Surveillance System)

In 2015, the range of percentages of obese in the BRFSS ranged from a low of 26% to a high of 43%. Thurston County had a high of 43% of all adults age 18 and older self-reported heights and weights that made their BMI >30.

Table 43: 2015 Individual County BRFSS Results							
Cedar Dixon Thurston Wayne							
% Adult obesity 31% 35% 43% 32%							

(Source: County Health Rankings 2018)

The NNPHD percentage of adults 18 and older with a body mass index (BMI) of 25.0 or greater, based on self-reported height and weight, from the BRFSS is also reported here, no County specific data was available for this measure.

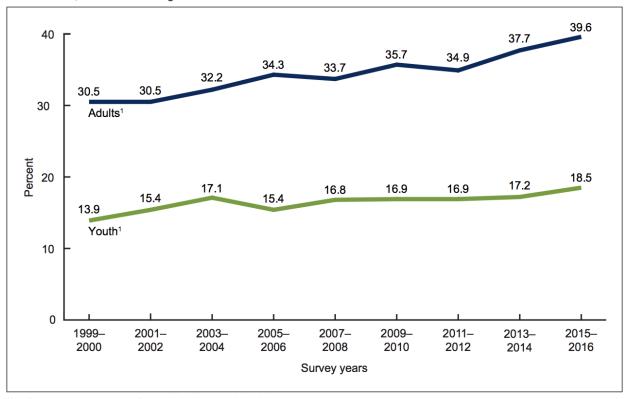


Childhood Obesity

The graph below is from the State of Obesity website¹⁹ and shows the trend pattern for both adult and childhood obesity and is shown here for comparison with NNPHD data on childhood Body Mass Index (BMI). BMI is a person's weight divided by height in metric measurement. For children and teens, BMI is age and sex-specific and is often referred to as BMI-for-age. In children, a high amount of body fat can lead to weight-related diseases and other health issues and being underweight can also put one at risk for health issues.

Figure 62: Trends in obesity among adults and youth

Figure 5. Trends in obesity prevalence among adults aged 20 and over (age adjusted) and youth aged 2–19 years: United States, 1999–2000 through 2015–2016



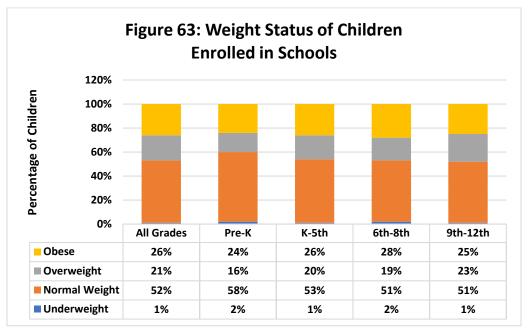
Significant increasing linear trend from 1999–2000 through 2015–2016.

NOTES: All estimates for adults are age adjusted by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over. Access data table for Figure 5 at: https://www.cdc.gov/nchs/data/databriefs/db288_table.pdf#5.

SOURCE: NCHS, National Health and Nutrition Examination Survey, 1999-2016.

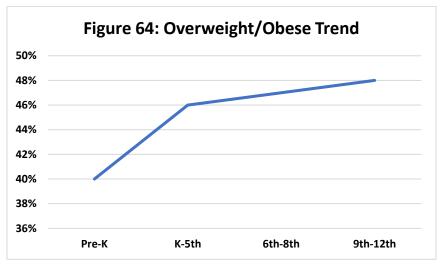
The NNPHD, along with five school partners, collected BMI data on 1,965 unduplicated children in 2018-2019 to get an accurate picture of the levels of obesity and obese/overweight children. An overview of the results of this data collection are presented in Figure 63 for the NNPHD service district. No school data was available by county, however children from every county were represented.

¹⁹ State of Obesity, Childhood Obesity Trends, *NHANES National Trends*, Retrieved from https://www.stateofobesity.org/childhood-obesity-trends/ on March 12, 2019



(Source: NNPHD 2018 UNK School BMI data)

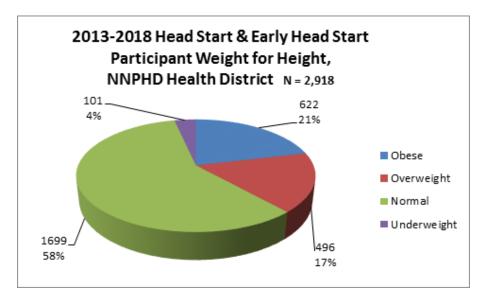
The rates on the school BMI data collection were higher for every age group in the service area when compared with the national data. Nationally, 18.4% of 6 to 11-year-olds and 20.6% of 12 to 19-year-olds have obesity. As mentioned, childhood obesity levels tend to rise as children age. The percentage of children enrolled in the grade categories who were overweight or obese ranged from a low of 40% in Pre-K, to a high of 48% in the 9th to 12th grade, see also Figure 64.



(Source: NNPHD 2018 UNK School BMI Data)

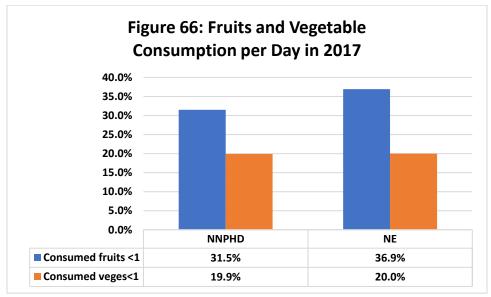
The overall national childhood obesity rate is 18.5%, significantly lower than the rates found in the NNPHD service area BMI data collection, represented in Figures 62-64. The national rate varies among different age groups and rises as children get older (just as it does in the NNPHD service area).

As part of this CHNA, height/weight data was gathered from other local agencies to determine the weight status of children in the NNPHD service area. The graph below is from children under five who participated in regional Head Start and Early Head Start programs from 2013-2018 in Northeast Nebraska, which includes the four counties in this CHNA. The rate of obesity for his group is 21%, compared to the national average of 13.9% for children age 2-5. See Figure 65 below:



Consumption of Fruits and Vegetables

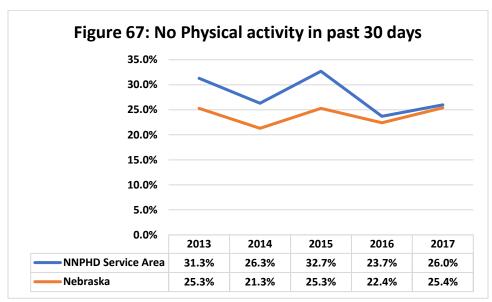
The percentage of adults 18 and older in the NNPHD service area who report consuming fruit less than one time per day during the past month is lower than for the state of Nebraska but not significantly so. The percentage of adults 18 and older who report consuming vegetables an average of less than one time per day during the past month is very similar to the state of Nebraska.



On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), the percent of respondents who reported eating at least five servings of fruits and vegetables most days of the week was reported at 33.39%

Physical Activity

The BRFSS reports several measures around physical activity. In general, those who live in the NNPHD area are less physically active than the average for the state of Nebraska. One measure that shows this is the percentage of adults 18 and older who report no physical activity or exercise (such as running, calisthenics, golf, gardening or walking for exercise) other than their regular job during the past month.



(Source: Behavioral Risk Factor Surveillance System)

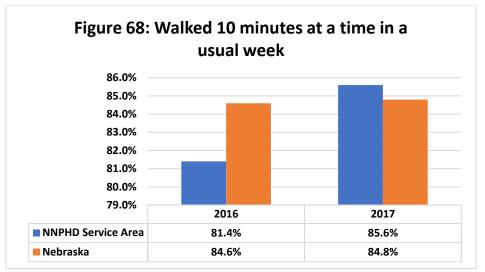
There was some county level physical inactivity data available from the 2014 responses to the Behavioral Risk Factor Surveillance Survey and is the percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month. When compared to the 2014 above, it can be noted that Wayne county was the most active county, while the other three counties were above the district average.

Table 44: Individual County BRFSS Results 2014						
Cedar Dixon Thurston Wayne						
% Adults with no physical activity 29% 32% 33% 23%						

(Source: County Health Rankings 2018)

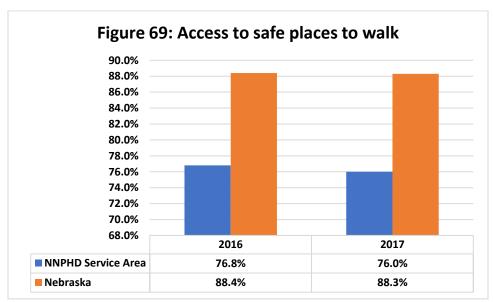
On the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic), the percent of respondents who reported exercising at least three days per week was 44.77%.

Percentage of adults 18 and older who report that during an average week they walk for at least 10 minutes at a time for recreation, exercise, to get to and from places, or for any other reason was less than the state of Nebraska average in 2016, but greater in 2017.



(Source: Behavioral Risk Factor Surveillance System)

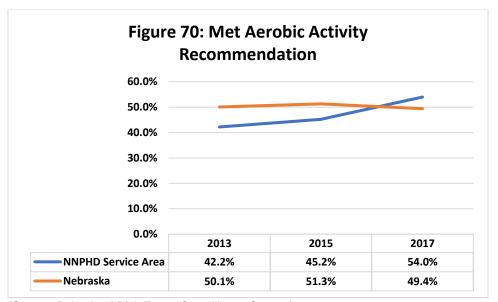
The percentage of adults 18 and older who report that they have access to sidewalks, shoulders on the road, trails, or parks where they can safely walk in their neighborhood (defined as the area within one-half mile or a ten-minute walk from their home) was less than the average for the state of Nebraska and can be associated with the "ruralness" of the service area.



(Source: Behavioral Risk Factor Surveillance System)

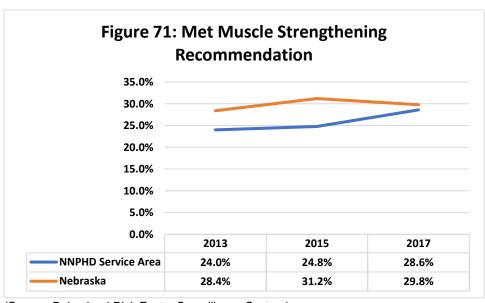
Another BRFSS measure is the met aerobic physical activity recommendation. For this measure, the percentage of adults 18 and older who report at least 150 minutes of moderate-intensity physical activity, or at least 75 minutes of vigorous-intensity physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic

activity per week during the past month is measured. The NNPHD rate was lower than the state of Nebraska in 2013 and 2015 and higher in 2017.



(Source: Behavioral Risk Factor Surveillance System)

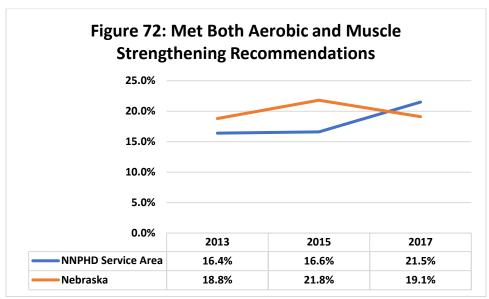
Another BRFSS available for the NNPHD service area is the muscle strengthening recommendation. This is the percentage of adults 18 and older who report that they engaged in physical activities or exercises to strengthen their muscles two or more times per week during the past month. The NNPHD is lower than the state of Nebraska on this measure.



(Source: Behavioral Risk Factor Surveillance System)

The last physical activity measure available on the BRFSS is the percentage of adults 18 and older who report at least 150 minutes of moderate-intensity physical activity, or at least 75 minutes of vigorous-intensity physical activity, or an equivalent combination

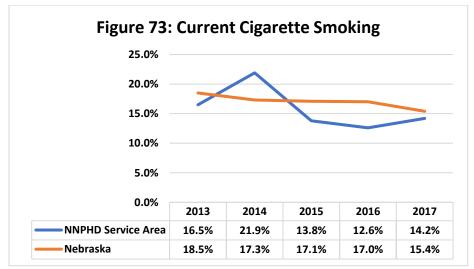
of moderate- and vigorous-intensity aerobic activity per week during the past month and that they engaged in physical activities or exercises to strengthen their muscles two or more times per week during the past month.



(Source: Behavioral Risk Factor Surveillance System)

Smoking/Tobacco Use

The negative effects of smoking on health outcomes are well known. According to the CDC, smoking is the leading cause of preventable death and it harms nearly every organ of the body²⁰. The rates of smoking among Nebraska adults is trending down.



²⁰ CDC, Smoking Fast Facts, retrieved on January 25th, 2019 from https://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm?s_cid=osh-stu-home-spotlight-001

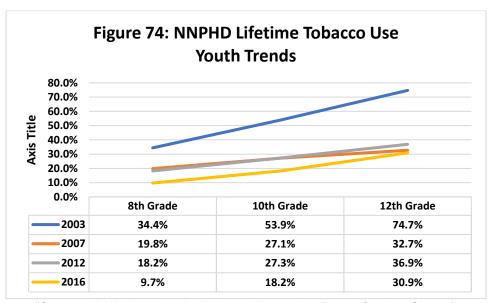
The adult smoking rate is based on Behavioral Risk Factor Surveillance Survey (BRFSS) data and is the percentage of the adult population in a county who both report that they currently smoke every day or most days and have smoked at least 100 cigarettes in their lifetime. The rate of smoking is generally lower in the NNPHD service area than for the state.

County data is available on this measure. The Nebraska average in 2016 was 17% and the county responses ranged from a low of 13% in Wayne County to a high of 29% in Thurston County. Cedar and Wayne Counties were at 13%. Counties in the U.S. that were top performers on this issue had 14% or less smoking rates, making three of the four counties top US performers.

Table 45: 2016 Individual County BRFSS Results						
Cedar Dixon Thurston Wayne						
% of Adults who report smoking	13%	17%	29%	13%		

(Source: County Health Rankings 2018)

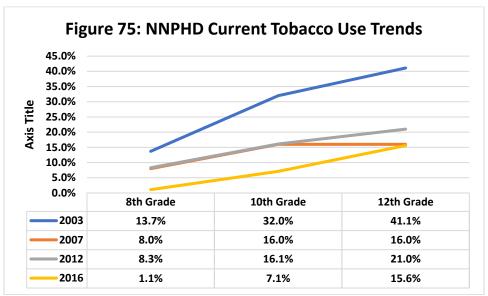
The percentage of students who smoke was also reviewed for the 8th, 10th and 12th grades under the Nebraska Student Health and Risk Prevention (SHARP) Surveillance System. The Nebraska Risk and Protective Factor Student Survey section of the SHARP provided data on 506 students from the four NNPHD counties.



(Source: NNPHD Nebraska Risk and Protective Factor Student Survey)

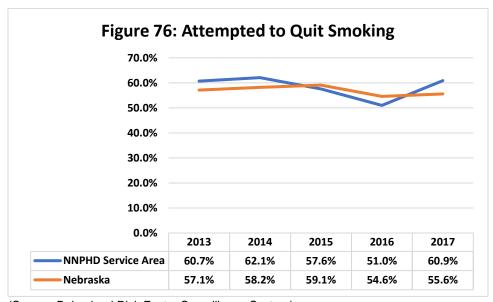
The measure above is percentage of students who reported using tobacco one or more times in their lifetime. As can be seen by the graph, lifetime use increases with grade level, however, the percentage of youth in each grade level who have used tobacco one or more times has steadily decreased from 2003 to 2016.

The measure below is based on the actual percentages of students who smoked cigarettes in the past thirty days before the survey was taken each year. Notice again that cigarette use increases with age but decreases with subsequent measurement years. In 2003, 41.1% of students in the 12th grade had smoked cigarettes in the past thirty days. In 2016, that number fell to 15.6%. In the 8th grade in 2013, 13.7% had smoked cigarettes in the past 30 days compared to only 1.1% of 8th graders in 2016.

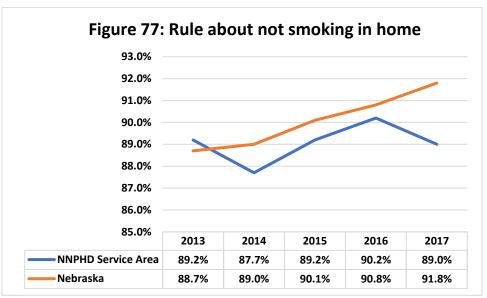


(Source: NNPHD Nebraska Risk and Protective Factor Student Survey)

Most adults who are smoking in the NNPHD area and in Nebraska have tried to quit smoking. BRFSS data collects information on adults 18 and older who report that they currently smoke cigarettes and that they stopped smoking cigarettes for one day or longer during the previous 12 months because they were trying to quit smoking.

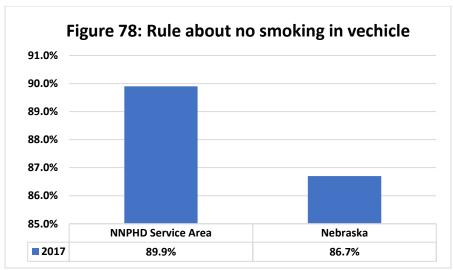


There is no risk-free level of secondhand smoke exposure, even brief exposure can be harmful to health.²¹ The CDC recommends taking steps to protect yourself and family from secondhand smoke including making your home and vehicle smoke-free. Most of the NNPHD households report that they do not allow smoking in the house. The graph below is the percentage of adults 18 and older who report that they have such a rule.



(Source: Behavioral Risk Factor Surveillance System)

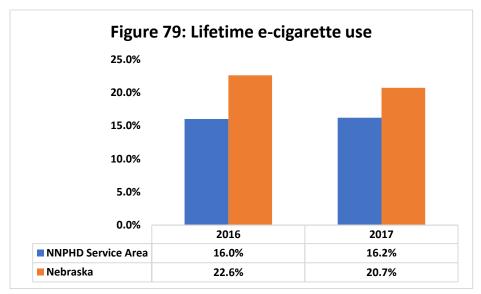
In addition to smoke-free homes, most adults in the NNPHD service area and in Nebraska also do not allow smoking in their primary vehicle.



²¹ 3.U.S. Department of Health and Human Services. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006

Cigarette smoking has slowly been declining in the United States. But many alternatives have been gaining popularity such as e-cigarettes. Most e-cigarettes contain nicotine, the same drug found in cigarettes. E-cigarettes may contain harmful substances, but the types or concentrations of chemicals a person is exposed to will vary by brand, type of device, and how it is used. E-cigarettes have only been readily available in the United States since 2006. As a result, there's limited research on their health risks.

It is important to note that the FDA has not approved e-cigarettes as a way to quit smoking. Doctors and the FDA recommend evidence-based methods for quitting smoking. The Nebraska and NNPHD BRFSS surveys contained questions about e-cigarette use in 2016 and 2017. The percentage of adults 18 and older who report that they have ever used an e-cigarette or other electronic "vaping" product (even just one time) in their entire life was one such question. E-cigarette use was lower in the NNPHD service area in 2017 at 16.2% than in the State of Nebraska at 20.7%. This may be due to later availability in the NNPHD area than in areas of larger population.



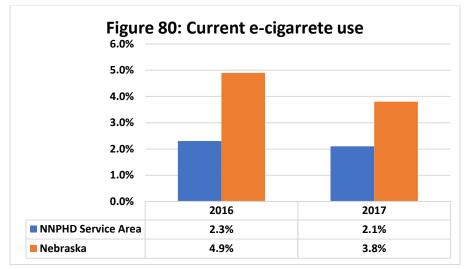
(Source: Behavioral Risk Factor Surveillance System)

Data was also available on youth lifetime e-cigarette use for 2016. The percentage of students in the 12th grade who had ever tried electronic-cigarettes or vaping was 37.1%, more than double the adult average of 16.2%. Due to the unknown health risks from e-cigarettes in youth, this is especially troubling. The percentage of NNPHD students who have used e-cigarettes in the past 30 days is also higher at every grade level even the 8th grade than the use for NNPHD adults in 2017 (2.1%).

Table 46: 2016 Percent of NNPHD Youth using e-cigarettes past 30 days						
8th 10th 12th						
	grade	grade	grade			
Ever tried e-cigarettes (vaping) even once	8.1%	20.2%	37.1%			
Current use of e-cigarettes in past 30 days	2.7%	8.2%	12.1%			

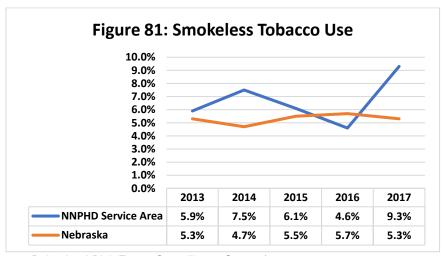
(Source: NNPHD Nebraska Risk and Protective Factor Student Survey)

The percentage of adults 18 and older who report that they currently use e-cigarettes or other electronic "vaping" products either every day or on some days in 2017 was 2.1%.



(Source: Behavioral Risk Factor Surveillance System)

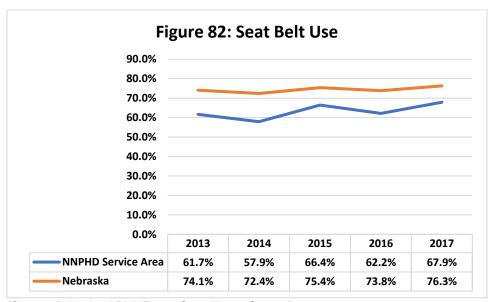
Smokeless tobacco products contain tobacco or tobacco blends. Prolonged use of smokeless tobacco products contributes to serious health issues such as cancer and heart disease. Some smokeless tobacco products contain 3 to 4 times more nicotine than cigarettes²². These products also contain substances that increase risk of oral and oropharyngeal cancer. The percentage of adults 18 and older who report that they currently use smokeless tobacco products (chewing tobacco, snuff, or snus) either every day or on some days, is higher in the NNPHD service area than in Nebraska.



²² Cancer.Net, *Health Risks of E-cigarettes, Smokeless Tobacco, and Waterpipes*https://www.cancer.net/navigating-cancer-care/prevention-and-healthy-living/stopping-tobacco-use-after-cancer-diagnosis/health-risks-e-cigarettes-smokeless-tobacco-and-waterpipes

Driving related health risk factors

Motor vehicle crashes are a leading cause of death among those aged 1-54 in the U.S.²³ According to the CDC, seat belt use for adults and children is one of the most effective ways to save lives and reduce injuries in an auto crash. More than half of adults who die in crashes are not buckled up at the time of the accident. The NNPHD service area has a lower percentage of adults 18 and older who report that they always use a seatbelt when driving or riding in a car.



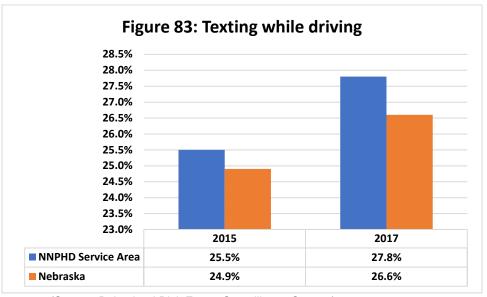
(Source: Behavioral Risk Factor Surveillance System)

Distracted driving is driving while doing another activity that takes your attention away from driving. Distracted driving can increase the chance of a motor vehicle crash. Sending a text message, talking on a cell phone, using a navigation system, and eating while driving are a few examples of distracted driving. Any of these distractions can endanger the driver and others.

Texting while driving is especially dangerous because it combines all three types of distraction. Sending or reading a text message takes your eyes off the road for about 5 seconds, long enough to cover a football field while driving at 55 mph.

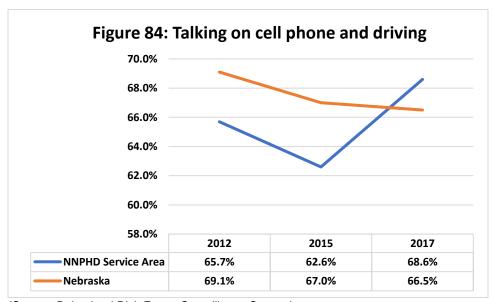
In the NNPHD service area, the percentage of adults 18 and older who report that they texted or e-mailed while driving a car or other vehicle on one or more of the past 30 days, is higher than the Nebraska average for the same measure.

²³ 1.Centers for Disease Control and Prevention. WISQARS (Web-based Injury Statistics Query and Reporting System) [online]. Atlanta, GA: US Department of Health and Human Services, CDC; 2015. Retrieved from https://www.cdc.gov/injury/wisqars/index.html



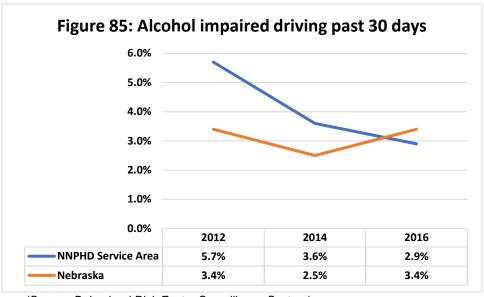
(Source: Behavioral Risk Factor Surveillance System)

While texting while driving was higher consistently in the NNPHD service area, the percentage of adults 18 and older who report that they talked on a cell phone while driving a car or other vehicle on one or more of the past 30 days was lower in the last year of the three-year data series.



(Source: Behavioral Risk Factor Surveillance System)

The NNPHD percentage of adults 18 and older who self-report driving after having had perhaps too much to drink during the past 30 days was higher than the Nebraska state average on two of three surveys. The BRFSS question is: "During the past 30 days, how many times have you driven when you've had perhaps too much to drink?"



(Source: Behavioral Risk Factor Surveillance System)

Alcohol-Impaired Driving Deaths is the percentage of actual motor vehicle crash deaths which had alcohol involvement. This data is from the Fatality Analysis Reporting System (FARS), which is a census of fatal motor vehicle crashes within the 50 States. To qualify as a FARS case, the crash had to involve a motor vehicle traveling on a trafficway customarily open to the public and must have resulted in the death of a motorist or a non-motorist within 30 days of the crash. Most mortality measures are reported based on the county of residence for the person who died. However, alcoholimpaired driving deaths are reported for the county of occurrence. This is because it is more likely that the drinking behavior that led to the driving crash happened where the accident occurred rather than in the county where the people involved in the crash reside. If a county experiences 200 crashes and 20 of them were caused by alcohol, then the county would receive a value of 10% (20/200). Some counties had no qualifying fatalities some years, so a five-year period is used. The National Highway Traffic Safety Administration defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a non-motorist (usually a pedestrian or bicyclist) had a measurable or estimated blood alcohol concentration of 0.01 grams per deciliter or above.

The Nebraska average on this measure is 37%, three of the four counties are above the Nebraska average. Only Cedar County is below the Nebraska average, and is in the top percentile for this measure nationally.

Table 47: Individual County FARS Results 2012-2016						
Cedar Dixon Thurston Wayne						
% Alcohol impaired driving deaths	13%	67%	61%	43%		

(Source: Fatality Analysis Reporting System (FARS)

Injury Data

Injuries are one of the leading causes of death; unintentional injuries were the 3rd leading cause, and intentional injuries the 10th leading cause of US mortality in 2016.²⁴ Unintentional injuries include: poisoning, motor vehicle traffic, and falls. Intentional injuries include: suicide firearm, suicide suffocation, and homicide firearm. Unintentional injuries are a substantial contributor to premature death among those under 45. Injuries account for 17% of all emergency department visits and falls account for over 1/3 of those visits.²⁵ See also data under driving related health risks from the previous section.

The data below is the number of deaths per 100,000 and covers a five-year period from 2012-2016. The data is from the Compressed Mortality File (CMF) which is a county-level national mortality and population database located on CDC WONDER. The Nebraska overall average injury death rate was 58 per 100,000 with a range from 23-131 deaths per 100,000 on a county basis. Wayne was at the lowest end of the Nebraska range at 23 deaths per 100,000 and the other three counties were above the Nebraska average. Thurston County had the highest injury death rate at 111.

Table 48: Individual County Injury Death Rate 2012-2016 per 100,000					
Cedar Dixon Thurston Wayne					
Number of deaths due to injury	83	76	111	23	

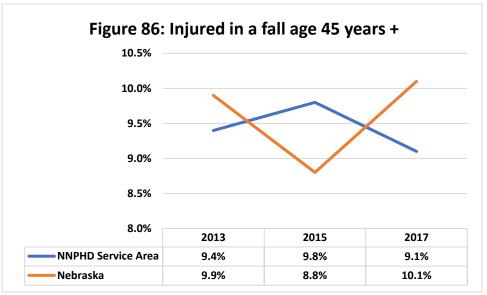
According to the CDC, one in four older people fall each year but less than half will report the injury to their doctor, and one out of five falls will lead to a serious injury such as broken bones.²⁶ Falls are also the most common cause of traumatic brain injuries.

Non-fatal falls for the NNPHD service area were also looked at through the BRFSS survey. Two questions are asked about falls on the survey: "In the past 12 months, how many times have you fallen?" and "How many of these falls caused an injury? By an injury, we mean the fall caused you to limit your regular activities for at least a day or to go see a doctor?" The self-reported percentage of adults 45 and older who report being injured due to a fall during the past 12 months that caused them to limit their regular activities for at least a day or to go see a doctor, is what is reported on in this document and is not significantly different than the data for the state of Nebraska.

²⁴ Centers for Disease Control and Prevention. *Leading causes of Death* Centers for Disease Control and Prevention Retrieved from https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm on January 26, 2019

²⁵ Villaveces A, Mutter R, Owens PL, Barrett, ML. Causes of Injuries Treated in the Emergency Department, 2010. AHRQ. 2013;SB156:1-8.

²⁶ Centers for Disease Control and Prevention, *Important Facts about Falls* Retrieved from https://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html on January 26, 2019.



(Source: Behavioral Risk Factor Surveillance System)

The BRFSS survey asks about work-related injury or illness in the past year. In the NNPHD service area employed adults 18 and older who had a work-related injury or illness was lower than the state average in 2015 and 2017, and higher than the state average in 2013 and 2014. No data was available for 2016.



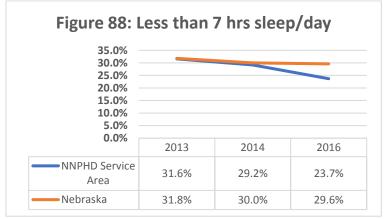
(Source: Behavioral Risk Factor Surveillance System)

Sleep

According to the County Health Rankings website: "Sleep is an important part of a healthy lifestyle. Sleep plays a key role in maintaining proper growth and repair of the body, learning, memory, emotional resilience, problem solving, decision making, and emotional control. A lack of sleep can have serious negative effects on health. Ongoing sleep deficiency has been linked to chronic health conditions including heart disease, kidney disease, high blood pressure, and stroke, as well as psychiatric disorders such as depression and anxiety, risky behavior, and even suicide. A lack of sleep can not

only affect people's own health, but also the health of others. Sleepiness, especially while driving, can lead to motor vehicle crashes and put the lives of others in jeopardy".

The NNPHD service area BRFSS survey included the following question: "On average, how many hours of sleep do you get in a 24-hour period?" The Percentage of adults 18 and older who reported that they get an average of less than 7 hours of sleep is trending downward for the NNPHD area indicating more sleep for respondents.

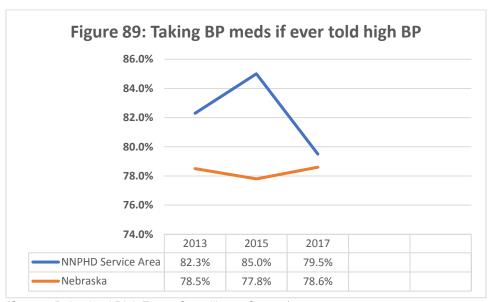


(Source: Behavioral Risk Factor Surveillance System)

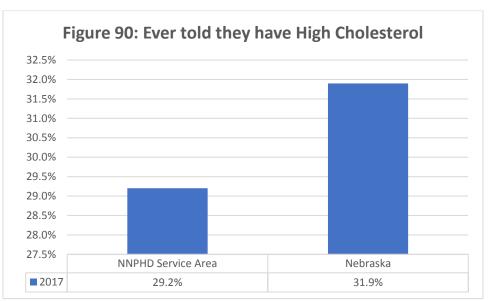
Selected Health Issues:

Cardiovascular Disease

Among adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have high blood pressure (excluding pregnancy), the percentage who report that they currently take medication for their high blood pressure is higher in the NNPHD service than for the state of Nebraska.

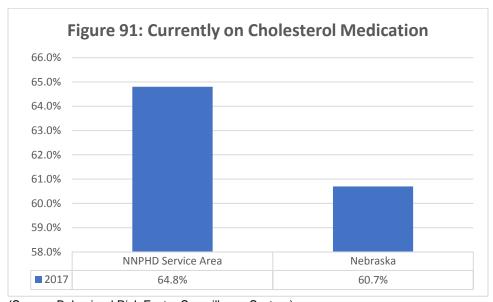


The BRFSS also collects data on those adults 18 and older who report that they have ever had their blood cholesterol checked and were told by a doctor, nurse, or other health professional that their blood cholesterol is high.

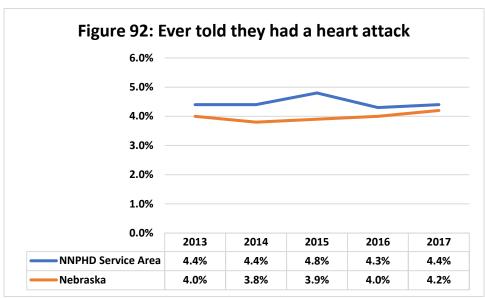


(Source: Behavioral Risk Factor Surveillance System)

Among adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that their blood cholesterol is high, the percentage who report that they currently take medication prescribed by a doctor or other health professional for their blood cholesterol is higher in the NNPHD service area than in the state of Nebraska.

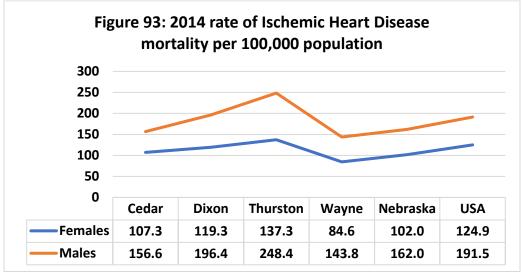


A negative health outcome of cardiovascular disease is heart attack. The percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they had a heart attack or myocardial infarction is shown below for the past five years.



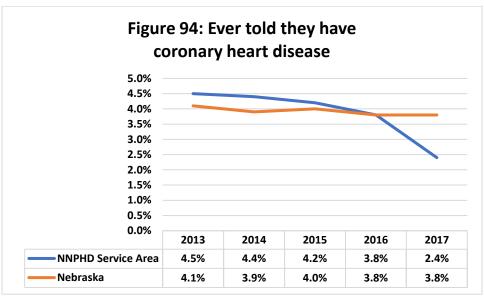
(Source: Behavioral Risk Factor Surveillance System)

Coronary heart disease is also known as ischemic heart disease or "hardening of the arteries". The rate of ischemic heart disease deaths is per 100,000. The data is age-standardized, which means that the confounding effect of age has been taken away in order to make fair comparisons across counties who have different age distributions. Males have higher rates of Ischemic Heart Disease deaths than females across all geographic regions. Thurston County has the highest rate of Ischemic Heart Disease deaths in males and females of the NNPHD service area. Wayne County is below the Nebraska and USA rate on this measure for both females and males.



(Source: Institute for Health Metrics & Evaluation)

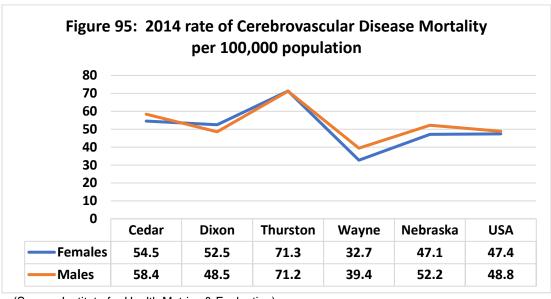
The BRFSS reports also provide data on the percentage of adults 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they have angina or coronary heart disease.



(Source: Behavioral Risk Factor Surveillance System)

Cerebrovascular Disease/Stroke

Cerebrovascular disease (CVD) is also known as "stroke". The CVD death rate is per 100,000 population and the data is age-standardized to remove the confounding effect of age in order to make fair comparisons among counties.

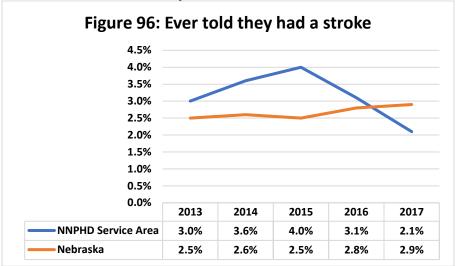


(Source: Institute for Health Metrics & Evaluation)

Three of the counties in the NNPHD service area had CVD mortality rates higher than the State of Nebraska and the USA for females. Thurston has the highest rate of CVD

mortality in the NNPHD district, and the rate is significantly higher than the Nebraska or USA rate for both females and males.

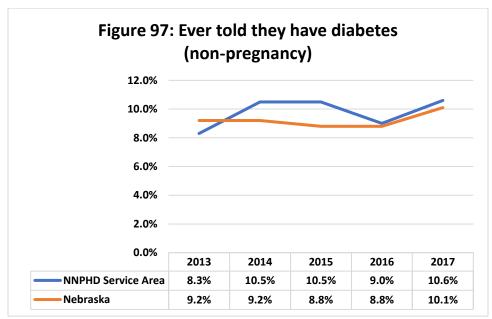
The BRFSS data also has a question about the percentage of adults 18 and older who self-report that they have ever been told by a health professional that they had a stroke. The percentage rate was higher than the state in until 2017, when the rate was lower than the state for the first time in five years.



(Source: Behavioral Risk Factor Surveillance System)

Diabetes

In the NNPHD service area, the percentage of adults 18 and older who self-report that they have ever been told that they have diabetes (excluding pregnancy) is slightly higher than the state of Nebraska in all years except 2013.



County level data was also available for 2014 on a county basis. The Nebraska average in 2014 was 9% with a county range from 7-17%. Dixon and Thurston had higher percentages than the state average. Thurston County had the highest state average of 17% of adults diagnosed with diabetes, the next closest county at 12%

Table 49: Individual County BRFSS Ever told Diabetes 2014, 20 years+						
Cedar Dixon Thurston Wayne						
% Adults with Diagnosed diabetes	9%	10%	17%	8%		

The data in Table 50 came from the Dartmouth Atlas of Health Care using clinical data from the Centers for Medicare and Medicaid Services (CMS). This measure is specific to diabetics and is the percent of diabetic Medicare enrollees age 65-75 receiving HbA1c testing by county. Measures of the quality of diabetic care for Medicare beneficiaries age 65-75 are not adjusted. Because every diabetic patient in Medicare should receive these tests regardless of age, sex or race, statistical adjustments to correct for underlying population differences are not relevant.²⁷ The Nebraska average for this measure is 84.59%, three of four counties in the NNPHD service area are below the state of Nebraska on this performance measure. Only Cedar County is above the state average.

Table 50: Individual County Clinical Data ages 65-75					
Cedar Dixon Thurston Wayne					
% of Diabetics receiving HbA1c testing	85.26%	78.87%	64.52%	82.35%	

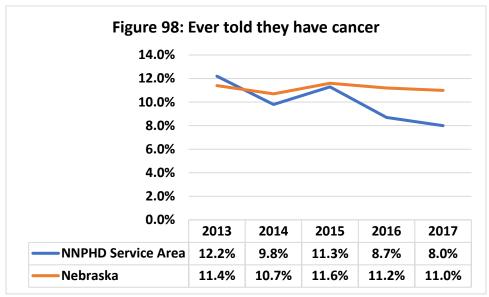
(Source: Dartmouth Atlas Project)

Cancer

Approximately 38.4% of men and women will be diagnosed with cancer at some point during their lifetimes (based on 2013–2015 data).²⁸ The most common cancers (listed in descending order according to estimated new cases in 2018) are breast cancer, lung and bronchus cancer, prostate cancer, colon and rectum cancer, melanoma of the skin, bladder cancer, non-Hodgkin lymphoma, kidney and renal pelvis cancer, endometrial cancer, leukemia, pancreatic cancer, thyroid cancer, and liver cancer.

In the NNPHD area, the percentage of adults 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they have skin cancer, or any other type of cancer, has been lower than the State of Nebraska since 2014.

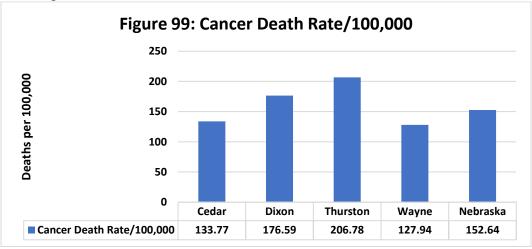
 ²⁷ Dartmouth Atlas Project, Quality/Effective Care 2015-by State and County, Retrieved from https://www.dartmouthatlas.org/interactive-apps/quality-effective-care/ on January 26, 2019
 ²⁸ National Cancer Institute, Cancer Statistics, retrieved from https://www.cancer.gov/about-cancer/understanding/statistics



(Source: Behavioral Risk Factor Surveillance System)

In the United States, the overall cancer death rate has declined since the early 1990s. Between 1991-2015, the overall cancer death rate in the USA decreased by 26%.²⁹ Overall for all types of cancer, cancer mortality is higher among men than women (196.8 per 100,000 men and 139.6 per 100,000 women).³⁰

Cancer is one of the top two leading causes of mortality in the USA. The US age adjusted death rate from cancer is 152.49 per 100,000. The Nebraska rate is not significantly different at 152.64 deaths from cancer per 100,000. Data is available for the four counties however; it should be noted that in order to get enough numbers to be valid, multiple years of data must be used. Thus, the data is from the period of 1999-2017. See Figure 99.

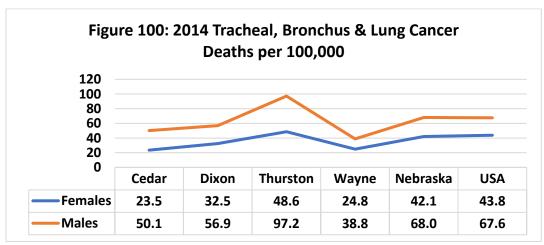


Thurston has the highest county death rate from all cancers in the state of Nebraska and is listed at number 1 out of 82 ranked counties with a death rate of 206.78 deaths

³⁰ Ibid.

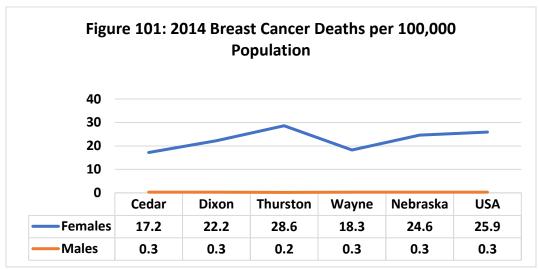
²⁹ Ibid

per 100,000. Dixon is listed at 14th out of 82 counties and is also above the Nebraska state average at 176.59 deaths for every 100,000 in population. Cedar ranks 79th out of 82 counties and has the fourth lowest cancer death ranking. Wayne ranks 81st having the second lowest cancer death rate in the state of Nebraska out of the ranked counties for the 1999-2017 period. Data was also available at the county level for tracheal, bronchus and lung cancer deaths per 100,000 population, age-standardized. Males have a higher death rate from these cancers for all of the targeted geographic regions. Thurston County has the highest death rate per 100,000 in the NNPHD area on this measure for males or females. Thurston County has the highest rates.



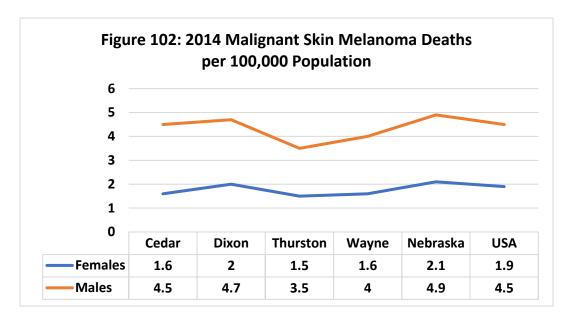
(Source: Institute for Health Metrics & Evaluation)

More women are diagnosed with breast cancer than any other cancer, besides skin cancer. The average 5-year survival rate for people with breast cancer is 90%. The average 10-year survival rate is 83%, however, breast cancer is the second most common cause of death from cancer in women in the United States, after lung cancer. Breast cancer can affect men as well as women. The 2014 NNPHD rate of breast cancer deaths is lower in all counties except Thurston, when compared with USA.

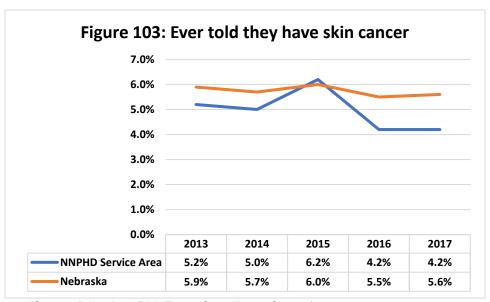


(Source: Institute for Health Metrics & Evaluation)

Malignant melanoma is a form of skin cancer that affects more men than women. The State of Nebraska has a higher rate of Melanoma than any county in the NNPHD service area. The data is age-standardized to remove the confounding effect of age to make fair comparisons.



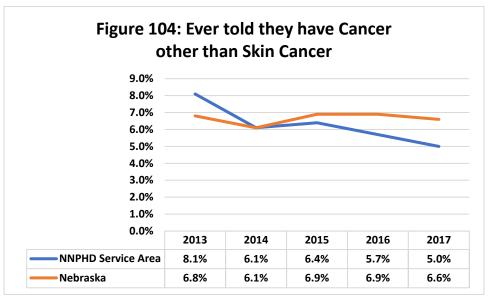
The BRFSS percentage of adults 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they have skin cancer has been lower the state of Nebraska rate for all years except 2015.



(Source: Behavioral Risk Factor Surveillance System)

The BRFSS also measures the percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have a

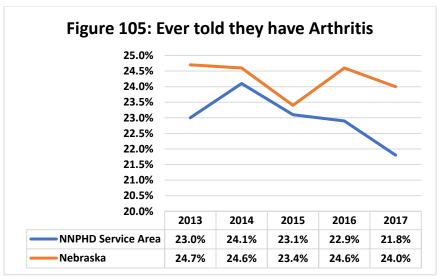
type of cancer other than skin cancer, is lower for the NNPHD service area after 2014 than for the State of Nebraska.



(Source: Behavioral Risk Factor Surveillance System)

Arthritis/rheumatoid arthritis, gout, lupus or fibromyalgia.

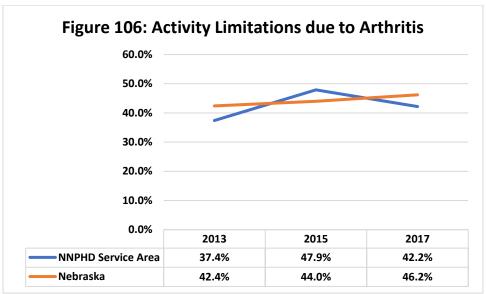
The rate of individuals who have been diagnosed with arthritis or another inflammatory disease listed is lower for the NNPHD service area than the state of Nebraska. The BRFSS measures the percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.



(Source: Behavioral Risk Factor Surveillance System)

On the BRFSS survey adults 18 and older were asked if they have ever been told by a health professional that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. The percentage who report that their usual activities are

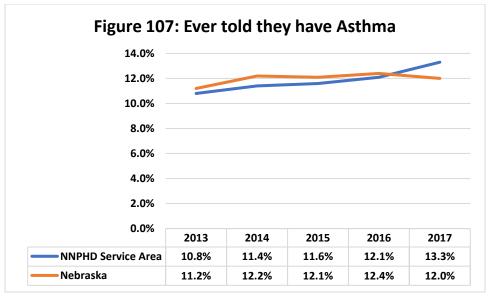
limited in any way because of arthritis or joint symptoms is about the same as the state of Nebraska.



(Source: Behavioral Risk Factor Surveillance System)

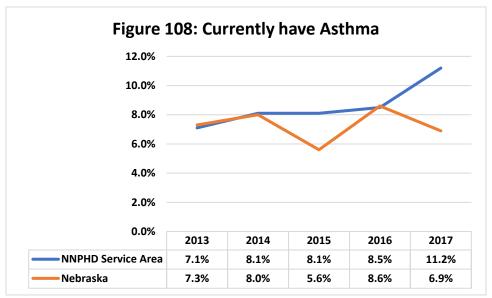
Asthma / COPD

According to the Centers for Disease Control and Prevention (CDC), about one in 12 people in the U.S. has asthma, or about 25 million people. The rate of asthma in the U.S. appears to be on the rise. Asthma affects people of all ages, but it most commonly starts in childhood. The percentage of adults 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they have asthma is listed below in the graph which shows that the percentage of adults with an asthma diagnosis ever is on the rise in the NNPHD area.



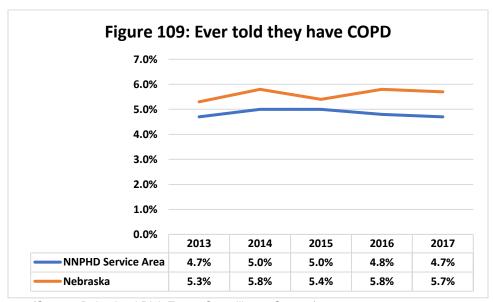
Also on the rise in the NNPHD area is the percentage of adults 18 and older who report that they currently have asthma, rising from 7.1% in 2013 to 11.2% in 2017

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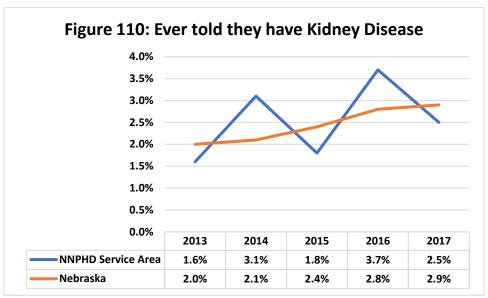


(Source: Behavioral Risk Factor Surveillance System)

Chronic obstructive pulmonary disease (COPD) is a group of diseases that are often linked to cigarette smoking. COPD includes emphysema and chronic bronchitis. According to the CDC, millions of Americans have the disease that are not diagnosed or treated. The BRFSS tracks the percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis. The rate is lower in the NNPHD area than in the state of Nebraska.



The last medical condition in this section is kidney disease. Major risk factors for kidney disease include diabetes, high blood pressure, and family history of kidney failure. The percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have kidney disease (excluding kidney stones, bladder infection, or incontinence) is shown below.



(Source: Behavioral Risk Factor Surveillance System)

Behavioral Health:

Behavioral health is a broad term that includes both mental health and substance abuse. Both of these issues were identified by the Northeast Nebraska Rural Health Network 2018-2019 Community Health Survey (electronic) as causes of "Much" concern for youth by the respondents. When asked the question: "What is needed to improve the health of your family and neighbors?" The number one response was Mental Health Services, with 50.35% answering this way. A third response from this same survey identified that Mental Health Services provision was "Very Little" in the service area, as reported by 32.87% of respondents.

The need for more services in this area was also brought up by the Community Focus Groups, the Forces of Change assessment and the Agricultural survey respondents.

Mental Health Shortage Areas

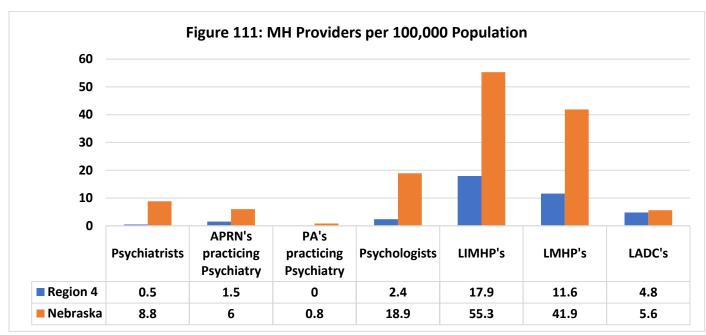
Federal health professional shortage areas (HPSAs) are designated by the Health Resources Services Administration (HRSA) as having shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), population (e.g., low income or Medicaid eligible) or facilities (e.g., federally qualified health centers, or state or federal prisons). All of the four counties in the NNPHD have a HPSA designation for mental health. Altogether, Cedar and Thurston counties have three additional designated rural federal HPSA's specific to facilities. See also Primary Care and Oral Health for more HPSA's.

Table 51: Designated Mental Health HPSA's in the NNPHD area						
HPSA Name Designation Type County						
Catchment Area 4	Geographic HPSA	All counties				
Avera Medical Group - Hartington	Rural Health Clinic	Cedar County				
Winnebago PHS Indian Hospital	Indian Health Service Facility	Thurston County				
	Native American/Tribal					
Carl T. Curtis Health Center	Facility/Population	Thurston County				

(Source: HRSA, HPSA find 2019)

All the counties in the NNPHD service area are part of the Nebraska Region 4 Behavioral Health Regional Service Center district. Region 4 includes the following counties: Antelope, Boone, Boyd, Brown, Burt, Cedar, Cherry, Colfax, Cuming, Dakota, Dixon, Holt, Keya Paha, Knox, Madison, Nance, Pierce, Platte, Rock, Stanton, Thurston, and Wayne.

The number of providers per 100,000 residents was much lower in Region 4 compared to the state overall. For example, there were only 0.5 psychiatrists per 100,000 residents in Region 4 compared to 8.8 psychiatrists per 100,000 residents for the state overall. The difference was also large for psychologists (2.4 vs. 18.9), LIMHPs (17.9 vs. 55.3), and LMHPs (11.6 vs.41.9).



(Source: BHECN Statistical Brief, Region 4, October 2017)

The behavioral health workforce in Region 4 is aging, 70% of LADCs, 60% of the psychologists, and 50% of the psychiatrists actively practicing in Region 4 in 2016 were 56 years or older in 2016. This will create workforce shortages when BH providers retire, unless they are replaced.

The University of Nebraska Medical Center, Health Professions Tracking Service (HPTS) tracks data on BH providers by county as well as by region. In total, NNPHD service area has 11 BH providers with only one provider available for BH medication management, a Psychiatrist practicing in Thurston County.

Table 52: Number of BH providers actively practicing in primary locations 2016						
	Cedar Dixon Thurston Wayne NNPH					
Psychiatrists	0	0	1	0	1	
APRN's practicing						
Psychiatry	0	0	0	0	0	
PA's practicing Psychiatry	0	0	0	0	0	
Psychologists	0	0	0	0	0	
LIMHP's	1	0	1	2	4	
LMHP's	0	1	0	3	4	
LADC's	0	0	2	0	2	
TOTAL	1	1	4	5	11	

(Source: UNMC Health Professions Tracking Service 2017 Region 4 report)

Providers may also practice in satellite locations. Some providers practice in both primary and satellite locations and the same provider may be counted more than once between tables 52 and 53.

Table 53: Number of providers actively practicing in satellite locations 2016						
	Cedar	Dixon	Thurston	Wayne	TOTAL	
Psychiatrists	0	0	1	0	1	
APRN's practicing Psychiatry	0	0	0	1	1	
PA's practicing Psychiatry	0	0	0	0	0	
Psychologists	0	0	0	0	0	
LIMHP's	0	0	0	1	1	
LMHP's	0	0	0	0	0	
LADC's	0	1	0	0	1	
TOTAL	0	1	1	2	4	

Mental Health Indicators

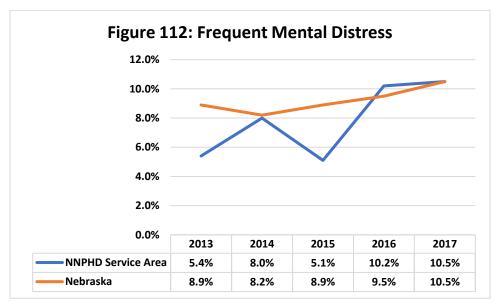
Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life. The first measure is the self-reported number of mentally unhealthy days reported in the past 30 days on the BRFSS survey. The specific BRFSS question is: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?". The Nebraska average in 2016 was 3.2 days, the range in Nebraska counties averages was from 2.8-4.4 days. Three counties of the NNPHD service area were below the Nebraska

average. Thurston County was at the upper threshold of responses in all Nebraska counties for poor mental health days.

Table 54: Individual County BRFSS Results 2016						
Cedar Dixon Thurston Wayne						
Number of Poor Mental Health Days 3.0 3.0 4.4 3.1						

(Source: County Health Rankings 2018)

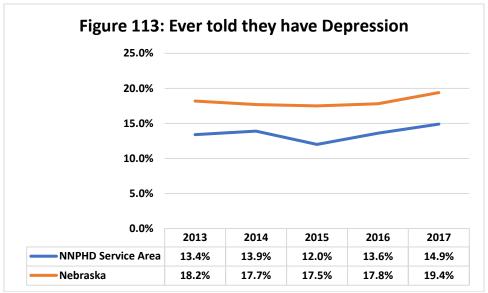
The percentage of adults 18 and older who report that their mental health (including stress, depression, and problems with emotions) was not good on 14 or more of the previous 30 days (also known as frequent mental distress) is also reported on the BRFSS. This measure known as frequent mental distress is a corollary measure to poor mental health days, people living in the NNPHD service area are generally less likely to report frequent mental distress than the general population of the state of Nebraska. It provides a slightly different picture that emphasizes those who are experiencing more chronic, and likely severe, mental health issues.



(Source: Behavioral Risk Factor Surveillance System)

In general, over the past five years, the percentage of adults in the NNPHD service area who experience frequent mental distress was lower or equal to the average for the State of Nebraska. On the chart below, frequent mental distress was rounded to a whole number with Nebraska having 10%, as well as three of the four counties at 10%. The range of Nebraska county averages was 9-16%, of note is Thurston County at 16% at the top of the range for percent of population with frequent mental distress, the next highest counties are at 11%.

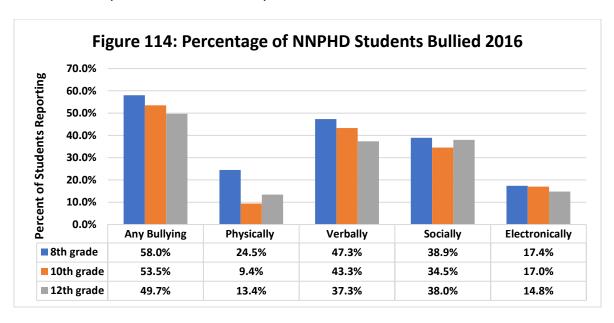
Table 55: Individual County BRFSS Results 2016					
Cedar Dixon Thurston Wayne					
% Reporting frequent mental distress	10%	10%	16%	10%	



(Source: Behavioral Risk Factor Surveillance System)

The percentage of adults 18 and older who report that they have ever been told by a doctor, nurse, or other health professional that they have a depressive disorder (depression, major depression, dysthymia, or minor depression) is lower in the NNPHD area than in the state of Nebraska, possibly linked to a shortage of providers.

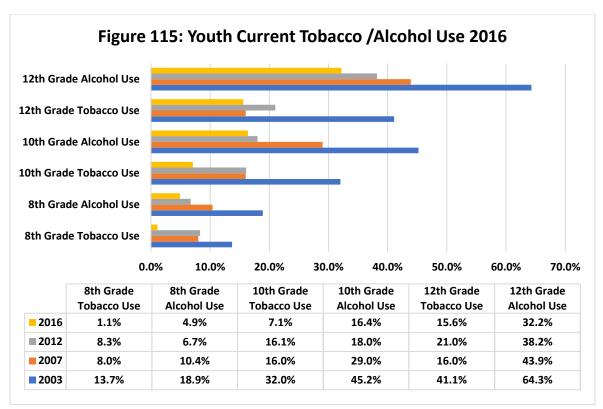
According to the stopbullying.gov website, bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. Bullying is repeated behavior or has the potential to be repeated over time. Both the kids who are bullied and who bully others may have serious mental health issues. Figure 114 is recreated from the NNPHD, Nebraska Risk and Protective Factor Student Survey Results for 2016 and is from a survey of 503 students in the four-county area. Younger students consistently received more bullying, the most common type of bullying was verbal followed by social bullying. Social bullying involves hurting someone's reputation or relationships.



Substance Abuse

Substance abuse is overindulgence in or dependence on an addictive substance, especially alcohol or drugs. The drugs may be illegal or legally available and may even be prescribed. The person using the substance may be of any age.

Youth substance abuse is a common concern for parents and communities. The NNPHD, Nebraska Risk and Protective Factor Student Survey Results for 2016 provided information about youth substance abuse.



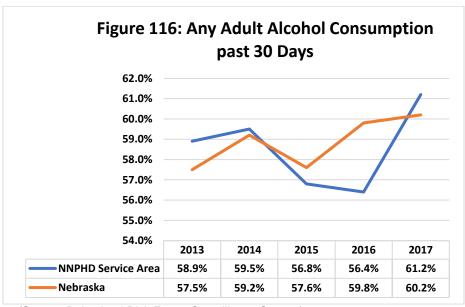
(Source: NNPHD, Nebraska Risk and Protective Factor Student Survey Results)

Alcohol and tobacco are two of the most commonly misused substances in NNPHD youth. This graph measures the percentage of students who used tobacco and those who used alcohol one or more times in the past 30 days. The rates of both youth tobacco and alcohol use in the NNPHD area is declining over previous years. The rate of both, however, increase as students' progress through higher grades.

The levels of both tobacco and alcohol use are lower than the State of Nebraska for 2016. The 2016 levels of current tobacco use for Nebraska youth are higher than the levels in the NNPHD area for 8th grade (3.5%) and 10th grade (10.3%). The NNPHD area is higher than the state of Nebraska for 2016 12th graders smoking (18.4% to 17.8%). The 2016 Nebraska levels of alcohol use in youth are higher than the NNPHD area for 8th grade (7.3%), 10th grade (20.0%), and for 12th grade (34.4%). Youth in the same survey reported on the ease of obtaining beer, wine and hard liquor. Those

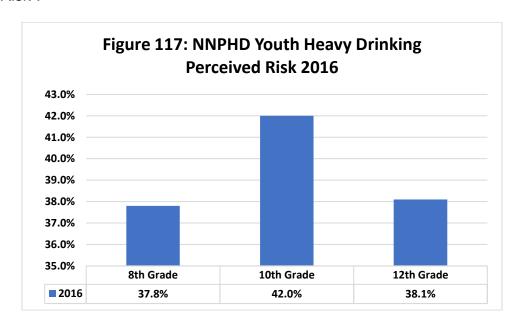
reporting these substances were sort of easy or very easy to obtain included 27.1% of all NNPHD 8th graders, 48.8% of all NNPHD 10th graders and 63.4% of all NNPHD 12th graders. The full report provides more information on where the alcohol was obtained.

The BRFSS has several adult alcohol related measures. One is the percentage of adults 18 and older who report having at least one alcoholic beverage during the past 30 days. The results are shown in the graph and out of the last five years were lower than the state of Nebraska average in two years, and higher in three years.



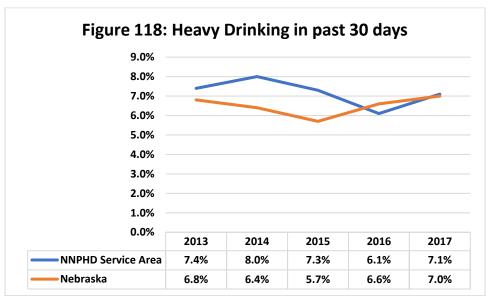
(Source: Behavioral Risk Factor Surveillance System)

The NNPHD, Nebraska Risk and Protective Factor Student Survey Results for 2016 provided information about youth perceived risk. The question asked was: *How much do you think people risk harming themselves (physically or in other ways) if they take 1 or 2 drinks of alcohol nearly every day.* The graph shows the percentage who chose "Great Risk".



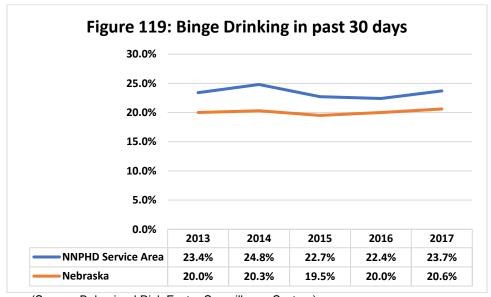
For adults a BRFSS alcohol related measure asked for self-reporting on the percentage of men 18 and older who report drinking more than 60 alcoholic drinks (an average of more than two drinks per day) during the past 30 days and the percentage of women 18 and older who report drinking more than 30 alcoholic drinks (an average of more than one drink per day) during the past 30 days was assessed and was higher than the state of Nebraska in four of the past five years

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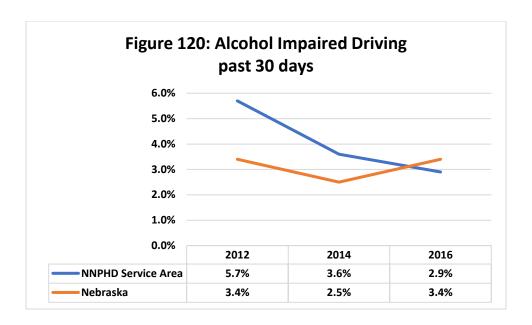


(Source: Behavioral Risk Factor Surveillance System)

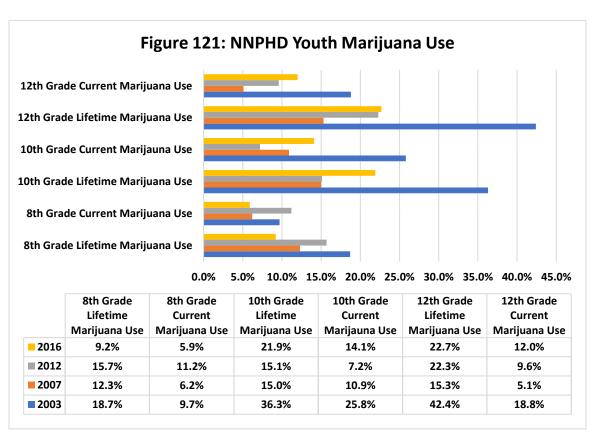
Excessive alcohol use, including binge drinking (drinking 5 or more drinks on an occasion for men or 4 or more drinks on an occasion for women), can lead to increased risk of health problems such as injuries, violence, high blood pressure liver diseases, and cancer. Alcohol use can also lead to social problems such as lost productivity, family problems and unemployment. The results of this measure were higher than the state of Nebraska in all five years reviewed.



The percentage of adults 18 and older who report driving after having had perhaps too much to drink during the past 30 days was also reported and was higher in two of the three years reviewed than the state of Nebraska. This BRFSS measure appears to be trending in a positive direction.



Marijuana was the most common illegal drug used by youth in the NNPHD service area according to the Nebraska Risk and Protective Factor Student Survey of 2016.



While once on the decline Marijuana use for the 10th and 12th grade is on the rise in the NNPHD service area according to the 2016 Nebraska Risk and Protective Factor Student Survey. The percentage of students that reported that Marijuana was sort of easy or very easy to obtain was 13.4% in the 8th grade, 32.7% in the 10th grade and 37.3% in the 12th grade.

The survey also reported on students who had tried at least once in their life other illicit drugs defined as LSD, cocaine/crack, meth, inhalants, steroids, other performance-enhancing drugs, and non-prescription over the counter drugs. Students reported any lifetime use included, 4.3% of 8th graders, 4.7% of 10th graders and 10.5% of 12th graders. The highest category per grade was inhalants at 3.8% for 8th grade, prescription drugs such as Valium, Xanax, Ritalin, Adderall, OxyContin, Vicodin or Percocet without a doctor telling them to take them at 3.5% for 10th grade, and the 12th had a tie for inhalants and the same prescription drugs as the 10th grade at 4.2%.

The United States is experiencing an epidemic of drug overdose deaths, making drug overdose deaths a leading contributor to premature death in the United States including rural areas. Increases in drug overdose deaths are largely preventable and transcend age, sex and race. Since 2000, the age-adjusted drug overdose death rate has more than doubled³¹, making this a pressing public health issue for all public health systems.

The National Center for Health Statistics has produced model-based age-adjusted death rates for drug overdose deaths per 100,000 population by county and year. The measure covers accidental, intentional, and of undetermined poisoning by and exposure to: 1) non-opioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs, medicaments and biological substances. In Nebraska in 2016, the rate per 100,000 was 6.4 overdose deaths, with a state county range of less than 2 to 18-19.9 drug overdose deaths per 100,000. Wayne had the lowest modeled drug overdose rates while Thurston County had the highest level in the NNPHD service area at 12-13.9 deaths per 100,000. Dixon County was above the state average as well.

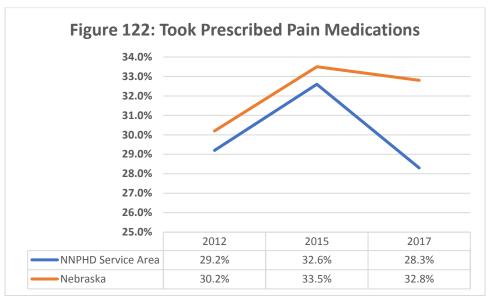
Table 56: Individual County Results 2016 per 100,000						
Cedar Dixon Thurston Wayne						
Drug overdose deaths-modeled	6-7.9	8-11.9	12-13.9	4-5.9		

(National Center for Health Statistics)

Other forms of substance abuse were also reviewed to include the percentage of adults 18 and older who report taking pain medication prescribed to them by a doctor during

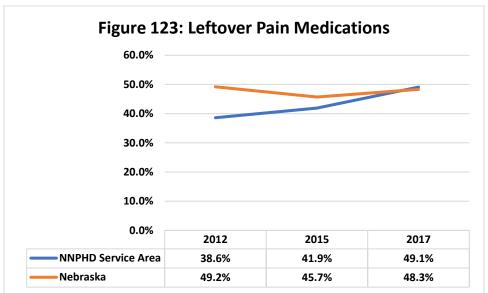
³¹ Centers for Disease Control and Prevention. Increases in drug and opioid overdose deaths -- United States, 2000-2014. MMWR Morbidity & Mortality Weekly Rep. 2016;64(50);1378-82.

the past year. Note that this measure has very little variation between NNPHD and the state of Nebraska until 2017.



(Source: Behavioral Risk Factor Surveillance System)

Among the adults 18 and older who report taking pain medication prescribed to them by a doctor during the past year, the percentage who report having leftover medication from their last filled prescription for pain medication was similar to the state of Nebraska in 2017.



(Source: Behavioral Risk Factor Surveillance System)

Oral Health

Oral health affects self-esteem, school performance, and attendance at work and school. In addition good oral health improves a person's ability to speak, smile, taste, chew, swallow and make facial expressions. Poor oral health has been linked with

chronic diseases like diabetes and heart disease. Poor oral health is also linked with risk behaviors like using tobacco and eating and drinking foods and beverages high in sugar. Tooth decay is one of the most common chronic diseases in the United States.

Dental Health Workforce Shortages

Shortages of dental professionals is a barrier to good oral health and this lack of access is a public health challenge. Dental access is especially difficult for those who are low-income. Nebraska has designated two of the four counties as shortage areas for dentistry.

Table 57: State of Nebraska Designated Dentistry Shortage Areas 2017						
Cedar Dixon Thurston Wayne						
General Dentistry	X	Х				

(Source: The Status of Healthcare Workforce in the State of Nebraska³²)

Federal health professional shortage areas (HPSAs) are designated by the Health Resources Services Administration (HRSA) as having shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), population (e.g., low income or Medicaid eligible) or facilities (e.g., federally qualified health centers, or state or federal prisons). Two of the four counties in the NNPHD have HPSA's for primary care, altogether they have three designated rural federal HPSA's. See also Primary Care and Mental Health for more HPSA's.

Table 58: Designated Dental HPSA's in the NNPHD area				
HPSA Name	Designation Type	County		
Avera Medical Group - Hartington	Rural Health Clinic	Cedar County		
Carl T. Curtis Health Center	Indian Health Service Facility	Thurston		
	Native American/Tribal			
Winnebago PHS Indian Hospital	Facility/Population	Thurston		

(Source: HRSA, HPSA find 2019)

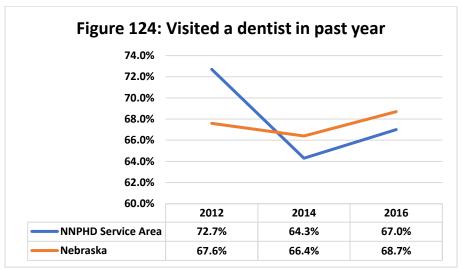
Dental Health Visits

Regular dental visits are important to maintaining oral health. Barriers known to limit a person visiting a dentist include limited availability of dental services, lack of awareness of the need for care, cost of services and fear of dental procedures.

In the NNPHD service area, the BRFSS survey has been used to determine overall oral health. The BRFSS question asks: "How long has it been since you last visited a dentist or a dental clinic for any reason?" The percentage of adults 18 and older who report that they visited a dentist or dental clinic for any reason within the past year is

³² Wilson FA, Wehbi NK, Larson J, et al. *The Status of Healthcare Workforce in the State of Nebraska*. Omaha, NE: UNMC Center for Health Policy, 2018

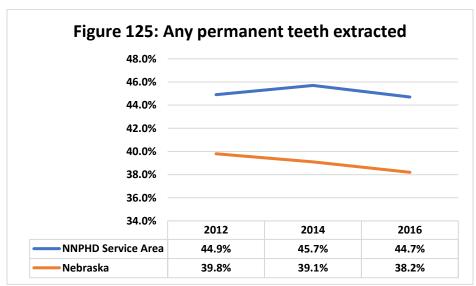
lower than the state of Nebraska since the 2014 survey. Figure 124 provides the results of the BRFSS which show NNPHD is currently trending below the state of Nebraska in this measure.



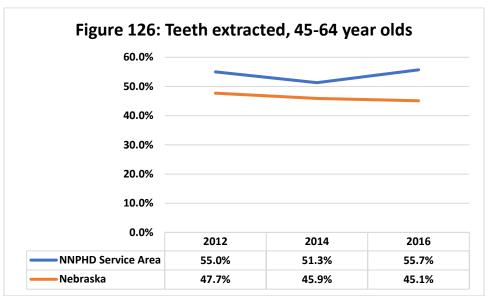
(Source: Behavioral Risk Factor Surveillance System)

Dental Extractions

BRFSS Question: "How many of your permanent teeth have been removed because of tooth decay or gum disease?" Percentage of adults 18 and older who report that they have had any of their permanent teeth extracted because of tooth decay or gum disease, including teeth lost to infection, but not those lost for other reasons, such as injury or orthodontics. In the NNPHD service area, there is a consistently higher percent of respondents who had one or more teeth extracted than the average percent for Nebraska.

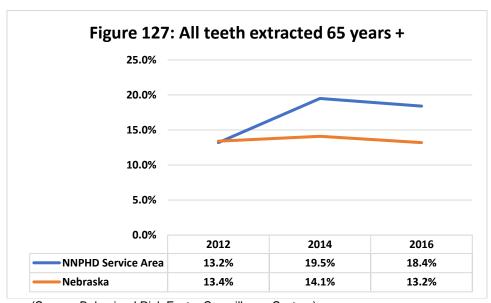


The percentage of adults 45-64 years old who report that they have had any of their permanent teeth extracted, is also higher than the state of Nebraska. The HP 2020 goal for this measure is 68.8%, NNPHD and Nebraska are below this goal.

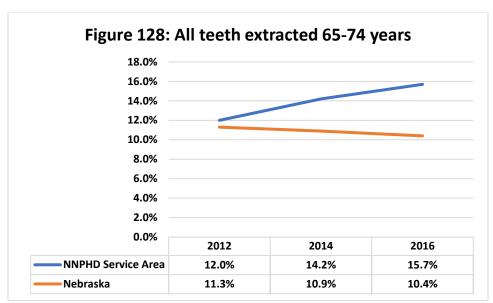


(Source: Behavioral Risk Factor Surveillance System)

Finally, the percentage of adults 65 and older who report that they have had all of their permanent teeth extracted because of tooth decay or gum disease, including teeth lost to infection, but not those lost for other reasons, such as injury or orthodontics, is also higher than the state of Nebraska.



The high rate of tooth extraction is also seen in the percentage of adults 65-74 years old who report that they have had all of their permanent teeth extracted. The HP 2020 goal for this is 21.6% and NNPHD and Nebraska are below this goal but trending upward.



Appendix I: Forces of Change Report

MAPP Forces of Change Assessment Northeast Nebraska Community Improvement Partners November 16th, 2018

The meeting was held virtually using the Adobe Connect platform and facilitated by RJR consulting. Due to the large number of expected attendees microphone privileges were limited to prevent echo's and audio interference. The meeting was recorded, and the recording is available at https://rjrconsulting.adobeconnect.com/pfevb4zepwxu/ The recording had a technical glitch and did not start at 9:30 and instead started a few minutes into the meeting, however the main focus of the meeting was recorded.

The Participants and who they represented:

The following was taken from the virtual sign in chat box where attendees were requested to include name, organization and e-mail address. Several of the participants did attend in person at the Northeast Nebraska Public Health Department (NNPHD). For these participants their responses were included by having staff from NNPHD type them in. In total there were 45 participants who represented 29 different agencies or businesses which are listed below in alphabetical order.

Dakota County Connections

Elkhorn Logan Valley Public Health Department

Emerson-Hubbard Schools

Haven House

Heartland Counseling Services

Legacy Garden & Prairie Breeze Assisted Living

Madison County Juvenile Services

Midtown Health Center

Nebraska Extension

Northeast Nebraska Behavioral Health Network

Northeast Nebraska Community Action Partnership

Northeast Nebraska Public Health Department

Pender Community Hospital

Pender Medical Clinic

Pender Public Schools

Ponca Mercy Medical Clinic

Providence Medical Center

Region 4 Behavioral Health System

State Nebraska Bank

Thurston County Emergency Management

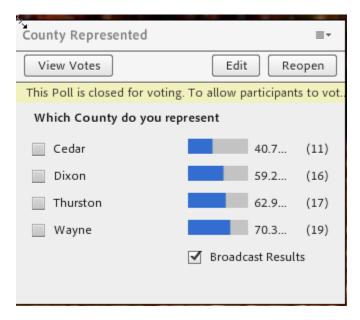
Wakefield Community Schools

Wayne Community Schools

Wayne County Emergency Management

Wayne Family Practice
Wayne Food Pantry
Wayne State College
Wealth Firm
Winnebago Tribal Health Department

Participants were asked to record which county they represented and were encouraged to select all counties applicable based on where they lived or worked in. All four NNPHD counties were well represented. The screen shot below represents the results of the poll question.



Participants were also asked to record where they fit within the Public Health System. The health of the community is influenced by many different agencies, not just the public health department. Participants were instructed to choose all the types of agencies within the public health system that they represented. The participants who attended the Forces of Change assessment represented a wide variety of public health system partners. The only sector not represented was elected officials. The screen shot represents the results of the poll question.

Where do you fit in the public health system (choose all that a $\hfill \equiv \hfill \neg$					
View Votes	Edit	Reop	en		
This Poll is closed for voting. To allow participants to	vote, click R	eopen.			
Where do you fit in the public health system (cho	ose all that a	ipply)?			
Public Health Department		20%	(6)		
Hospital or Health Clinic		30%	(9)		
School	2	3.3	(7)		
Fire, EMS or Law Enforcement	3.	.33%	(1)		
Nursing Home	6.	.67%	(2)		
Faith Institution	3.	.33%	(1)		
Tribal Health	6.	.67%	(2)		
College	1	6.6	(5)		
Business	6.	.67%	(2)		
Behavioral Health		30%	(9)		
Non-profit Organization	3	3.3	(10)		
Elected Official		0%	(0)		
Other	1	3.3	(4)		
[✓ Broadcast	t Results			

Input about what was influencing the health of Cedar, Dixon, Thurston and Wayne Counties

The purpose of the meeting was to gather input from the community about the trends, factors and events that are now influencing or could influence the health of the four-county area over the next three years. While the meeting organizers wanted to gather information on overall health there was an emphasis on obesity. Prior to gathering input, information was provided on the Mobilizing for Action through Planning and Partnerships (MAPP) and a power-point about the local, state and federal statistics on obesity and its consequences. In addition, participants also provided other information on obesity and the local programs available to address it. Participants also suggested some additional data that may be available for the CHNA. Answers below are as posted except for correction of spelling errors and removal of the participants name who submitted the comment. The following information was gathered using "chat pods" where the participants typed answered to the question: What are the trends, factors and events that are influencing or will influence childhood obesity in our community in the next three years 2019-2022?

Obesity-Local Domain factors that are influencing childhood obesity

Stress

Lack of healthy options when eating out Families are too busy to eat healthy Fresh food availability in small rural communities Access to local food, education to how to use. Single parenting affects time to prepare

Education and understanding of appropriate diet- parents

Eating Healthy costs more.

Cost of fresh foods and availability of fresh foods

Challenges to accessing fresh fruits & vegies

Healthy food could be expensive

Financial instability for the purchase of fresh foods. However, the WIC Program does allow the purchase of fruits and vegetables for those who qualify for Program.

Technology/ screen time

Providing alternative options for exercising in afterschool programs, fun things to do Pender Community Center. Getting more kids assess to indoor opportunities for physical activity.

24 Hour Fitness opened in last year also in the community center.

Camps for kids to learn healthy habits.

Looking at healthy cooking classes at Pender Community Center

Youth seem to have lack of control in their diet as they do not have choices.

Pender Community Hospital: access to healthy food options and pricing.

Bad food is cheaper.

Better education for families to help teach about healthy food options.

Obesity-State Domain factors that are influencing childhood obesity

Stress

Medicaid Expansion

Technology to deliver health care - how does that affect nutrition education Hopefully people will be able to access healthcare that were limited after the Medicaid expansion.

Lack of funding for free/reduced cost programs/classes

Maybe small business incentives towards those that offer healthy food choices or grocery stores?

Encouraging employers to support employee wellness.

Obesity-Federal Domain factors that are influencing childhood obesity

Technology replacing active play

Stress

Chronic Care Management

Cost of fresh food vs. processed

Social media is increasing psychosocial vulnerability - mental health, etc.

Eating Healthy costs more.

As an educator, I realized knowledge alone doesn't solve the problems. Without understanding and addressing obstacles and opportunities for access to healthy food and lifestyles we fail. And if we don't understand and work with the cultural values of a community, we shout into the wind...

Fewer grocery stores in rural communities

The media push for unhealthy choices

Targeted marketing

Food Deserts

Marketing campaigns that target processed food

As mentioned the meeting had a focus on both obesity and overall health, the following information was gathered about overall health.

Overall Health-Local Domain factors that are influencing overall health

Well child checks, immunizations, hand washing

Families struggle to meet basic needs. There are programs to assist with this, however, sometimes the families may not know how to access those services.

Limited job market and salary

Prevention on substance abuse

Basic things at school like when hanging up coats at don't let coats touch

Educate on not letting sick children come to school,

Teaching how to not spread germs

Mental Health is also a key indicator of overall health status. The access to mental health is very limited.

Teach about mental health, stigma on mental health, campaign ads on smoking, drugs, People don't stay home when they are sick anymore

Also seeing that older adults that are retired are struggling to make ends meet due to high utility bills and other cost of living items

Continued loss of locally owned companies (especially ag based), partially offset by positive trend in local retail

Binge drinking/ Alcohol seems to be socially acceptable in many rural communities for both adults and teens

Suicide awareness, talking about it

Increased bullying trends, especially with social media

The Northeast Nebraska Juvenile Justice Partnership Plan has funding for youth between the ages of 11 to 18 to access mental health services.

Stigma of acknowledging/accepting mental health challenges

Bancroft Rosalie and Pender Emerson Hubbard are planning to start STUDENT

DRIVEN groups for prevention and healthy choices at the school.

Positive things-substance abuse prevention at Emerson Hubbard for all sixth graders, Wakefield for sixth graders and 9th graders

People don't have medical insurance

I am also working with student driven health initiatives - equipping and empowering youth as a health resource rather than a target for intervention.

Increased use of screen time

Another positive-mental health therapist in Wakefield schools, working with other rural schools as well

Lack of knowledge on behavioral health services available to communities-

Lack of focus on preventive health screenings

Infectious diseases - increased prevalence of zoonotic diseases & ruralness of the area

Overall Health-State Domain factors that are influencing overall health

Expanded Medicaid creates a key opportunity to expand access to health care How does expanded Medicaid challenge current systems of delivery and need for some programs Pediatric Mental Health and access to services is a priority and an Advisory Team has been established.

I have a pediatric psychologist who is not full. He offers telehealth as well.

Vote on Medicaid Expansion only the first half of the game. Still need a state budget for the state share of costs. State budget will be tough due to revenue shortfalls.

Increased use of screen time leads to decreased physical activity

Overall Health-Federal Domain factors that are influencing overall health

Increasing trend toward bullying and disrespect for others

Increased trend of Vaping

Continued widening of wealth gap, changes in tax laws

As a society we do not have a good way to communicate social issues. We need to be able to have civil discourse.

Increased work toward awareness of dangers for antibiotic overuse

Opioid addiction treatment opportunities to springboard additional behavioral health

Mass shootings and overall safety

Insurance-high copays, lack of coverage

Food Policy changes - support and promotion of organic farming

Overall cost of health insurance and the fact that people are going on health sharing plans

Were the factors, trends or events an Opportunity or Threat?

Participants were then asked to look at the previous six lists of factors, trends or events that were influencing health in the local, state or federal domains and try to place them into two categories, opportunities or threats. Participants were given the following information about the sorting process: Some of the items listed may be both opportunities and threats to the health of Cedar, Dixon, Thurston and Wayne counties and there are no wrong answers.

Opportunities

Getting more kids assess to indoor opportunities for physical activity. 24 Hour Fitness opened in last year also in the Pender community center. Camps for kids to learn healthy habits. Looking at healthy cooking classes there also.

Increase knowledge on behavioral health services available to communities.

Sharing of ideas, resources and partnering

Financial instability for the purchase of fresh foods. However, the WIC Program does allow the purchase of fruits and vegetables for those who qualify for Program.

Encouraging employers to support employee wellness

Medicaid expansion providing more opportunities for people. But insurance does not equal access.

Positive things-substance abuse prevention at Emerson Hubbard for all sixth graders, Wakefield for sixth graders and 9th graders

The Northeast Nebraska Juvenile Justice Partnership Plan has funding for youth between the ages of 11 to 18 to access mental health services.

Maybe small business incentives towards those that offer healthy food choices or grocery stores?

Expanded Medicaid

In some of the smaller schools located in the Northeast Nebraska Juvenile Justice Partnership Plan we have used grant funds to pay for a therapist to come to the schools once a week.

Maybe small business incentives towards those that offer healthy food choices or grocery stores? Encouraging employers to support employee wellness

Look at Blue Zones communities and what can be implemented here. (Power 9 Healthy Lifestyle Habits)

Access to healthy food options and pricing.

Teach about mental health, stigma on mental health, campaign ads on smoking, drugs, Challenges to accessing fresh fruits & vegies

Bancroft Rosalie and Pender Emerson Hubbard are planning to start STUDENT DRIVEN groups for prevention and healthy choices at the school.

Introduce more community gardens

Substance abuse prevention at Emerson Hubbard for all sixth graders, Wakefield for sixth graders and 9th graders

Heartland provides mental health in Bancroft Rosalie schools

Involving faith-based communities in promotion on physical, mental and spiritual health

Threats

Increased use of screen time

Lack of focus on preventive health screenings

Continued widening of wealth gap, changes in tax laws

Increasing trend toward bullying and disrespect for others

Also seeing that older adults that are retired are struggling to make ends meet due to high utility bills and other cost of living items

High co pays for those who are insured and lack of coverage

Marketing campaigns that target processed food

As a society we do not have a good way to communicate social issues. We need to be able to have civil discourse.

Infectious diseases - increased prevalence of zoonotic diseases & ruralness of the area Prevalence of drugs and other addictions

What are the top Opportunities to improve health in the community?

Participants were given the ability to only provide one answer for each of the questions, in other words they could select only one top priority, one second and one third. The facilitator grouped these into topics after the meeting. The actual responses are included in the boxes below. Using the groups it appears that Obesity has the most overall responses at 24, Behavioral Health at 18, Non-specific Health Promotion at 7, Sharing and Partnering at 5 and Access to Care at 4 responses.

Topic	Top Opportunity	2 nd Highest	3 rd Highest	Count
Behavioral Health	Mental & Behavioral Health Needs	Behavioral/Mental Health	mental health care	18 Total Responses
	Increase knowledge on behavioral health services available to communities	Motivation and behavioral health.	Increase knowledge and access of behavioral health	6 Priority 1 6 Priority 2 6 Priority 3

			services available to	
	Increase mental health services	mental health	communities. More offerings for improved mental health, better access. In ther rural areas there seems to be very few options.	
	Increase knowledge on behavioral health services available to communities.	Greater access to behavioral health/mental health services	Alcohol and drug treatment/counseling options	
	more mental health services exp. psychiatry, alternative healing activities	Increase in mental health services	Mental Health Services	
	understanding fully the resources available re: both obesity and BH in order to maximize exiting services	repeat or work to encourage best practice to other communities - i.e. school based behavioral health funded by Sherri could be repeated in more communities	Involving Faith Based communities in promotion on physical, mental and spiritual health	
Obesity	Obesity	Obesity	healthy food options and education	24 Total Responses
	Less screen time with devices taken away at a certain time every night. Children need a good nights sleep as well as adults.	Increase assess to physical fitness opportunities	access to healthy food options and pricing	10 Priority 1 7 Priority 2 7 Priority 3
	Providing the education to the younger generations regarding nutrition and living a healthy lifestyle - not just 1-2 times but multiple times.	access to more opportunities for physical activities and healthy classes for all ages	Community options for family exercise	
	Pender Community Center. Getting more kids assess to indoor opportunities for physical activity. 24 Hour Fitness opened in last year also in the community center. Camps for kids to learn healthy habits. Looking at healthy cooking classes there also.	A less crazy schedule so that we can actually make quality meals.	access to healthy food options and pricing	
	access to healthy food options and pricing.	Access to healthy food Options and Pricing	Involving Faith Based communities in promotion on physical, mental and spiritual health	
	Access to healthy food options in our grocery stores that is affordable.	Options for physical activity in our communities that does	Maybe small business incentives towards those that offer healthy food choices or grocery	

		not cost so much and is easily accessible.	stores? Encouraging employers to support employee wellness	
	Accessing healthier food options	affordable healthy foods	Incentives for grocery stores/healthy foods	
	Regarding Obesity getting more information our to communities about obesity and effects on children, adults, etc. understanding fully			
	the resources available re: both obesity and bh in order to maximize exiting services			
	Continued education for youth and families on healthy eating options and physical activity options-making healthy choices			
Sharing & Partnering	Sharing of ideas, resources and partnering Sharing of ideas, resources and partnering	Sharing of ideas, resources and partnering Sharing of ideas, resources and partnering	Sharing of ideas, resources and partnering Collaborative marketing campaigns	5 Total Responses 3 Priority 1 1 Priority 2 1 Priority 3
	Sharing of ideas, resources and partnering Sharing Ideas, resources			
Non- Specific Health Promotion	Assess to services and education for health promotion	Encouraging employers to support employee wellness Encouraging employers to support employee wellness	encouraging employers to support employee wellness Focus on Students in High School and below for creating changes.	7 Total Responses 1 Priority 1 4 Priority 2 2 Priority 3
		Look at Blue Zones communities and what can be implemented here		
		Healthy decision making		
Assess to Care	access to services		advocate with elected officials on how to maximize expanded Medicaid for rural	4 Total Responses 3 Priority 1
	Effective implementation of Medicaid expansion Affordability			0 Priority 2 1 Priority 3

What are the top threats to the health of the community?

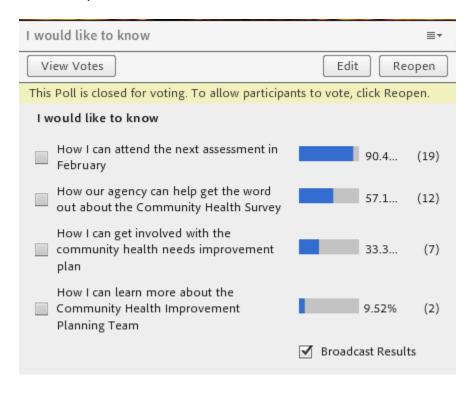
Participants were given the ability to only provide one answer for each of the questions, in other words they could select only one top threat, one second and one third. The facilitator grouped these into topics after the meeting. The actual responses are included in the boxes below. Using the groups obesity was viewed as the top threat (24 responses) followed by behavioral health (16 responses), access to care (8 responses) and other economic factors (6 responses) followed by health promotion (5 responses). In addition heart disease-priority 1, cancer – priority 2, and diabetes-priority 3, were all listed once by the same participant.

Topic	Top Treat	2 nd Highest	3 rd Highest	Count
Behavioral Health	Mental Illness (the continuum) and the issues that go along with it.	Lack of mental health services in rural areas	lack of awareness of quality behavioral health services available in the counties.	16 Total Responses 6 Priority 1 4 Priority 2 6 Priority 3
	Drugs and mental health.	Our inability to have Civil discourse to resolve conflicts.	culture of stress, overwork, overschedule etc	
	Stress and Time management.	Increasing need for behavioral health/mental health services coupled with lack of services	Behavioral Health	
	Lack of access to behavioral health/mental health services	Increasing need for behavioral health/mental health services coupled with lack of services	increasing trend toward bullying and disrespect for others. As a society we do not have a good way to communicate social issues. We need to be able to have civil discourse.	
	As a society we do not have a good way to communicate social issues. We need to be able to have civil discourse.		Bullying, increased school violence, stigma on mental health.	
	Less family together time because all members of the family are going in various directions throughout their day		Families are too busy	
Obesity	Families are too busy to eat healthy	Busy families-not enough time to prepare, sit down and enjoy family meal time	Increase in screen time amongst students and parents	24 Total Responses 9 Priority 1 7 Priority 2 8 Priority 3
	cost and availability of healthy foods	Obesity and its causes	Families are too busy to eat healthy	
	Eating Healthy costs more	Obesity	Access to healthy food	
	lack of fresh, not expensive produce -	technology / screen time	Lack of physical activity	

	cheaper to buy junk food			
	Lack of grocery stores in rural communities	Families are too busy to eat healthy	increased use of screen time	
	Eating Healthy costs more.	Kids are more involved with their phones and on a screen rather than doing physical activity.	access to healthy food	
	Lack of affordable healthy food and time to prepare it	Lack of grocery stores/healthy food choices in rural communities	Fewer grocery stores in rural communities	
	technology/ screen time		Diabetes	
	ease of prepackaged food over fresh			
Access to Care and/or	High cost of health care/lack of insurance	copays and lack of insurance or lack of coverage	Health insurance system = premiums, deductibles, choices	8 Total Responses
Insurance	high co pays for those who are insured and lack of coverage	high co pays for those who are insured and lack of coverage	mismanaging our input and role in the expanded Medicaid opportunity	2 Priority 1 4 Priority 2 2 Priority 3
		people can't afford or do not have medical insurance		
		competitive health care environment - how committed are we to make a difference or protecting our turf		
Other Economic	Lack of resources or knowledge to assess these resources within the community	Lack of income to be able to afford a "healthy lifestyle"	Inability of people to afford a healthy lifestyle.	6 Total Responses 1 Priority 1 3 Priority 2 2 Priority 3
		Also seeing that older adults that are retired are struggling to make ends meet due to high utility bills and other cost of living items	Continued widening of wealth gap, changes in tax laws	
		Continued widening of wealth gap, changes in tax laws, lack of affordable health care		
Health Promotion	Lack of knowledge	lack of focus on preventive health screenings	lack of focus on preventive health screening	5 Total Responses
		Being aware of individual health risks	lack of knowledge at all ages	1 Priority 1 2 Priority 2 2 Priority 3

Desire for Future Involvement by Participants

22 participants completed the poll regarding the desire for more involvement in the MAPP process being conducted by the Network Core Team, of those 19 wanted to be invited to the next assessment, 12 wanted to know how they could help the Network Core Team get the word out about the CHNA. Seven participants wanted to get involved with the CHIP process which will follow the CHNA. Two participants were interested in learning more about the network team. The screen shot below represents the end results of this poll.

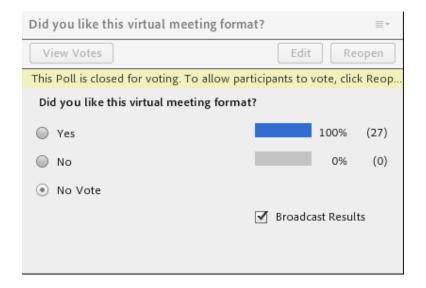


Forces of Change Meeting Evaluation:

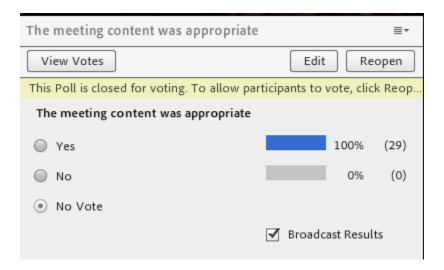
The meeting was evaluated virtually with 29 participants completing some part of the evaluation polls. The evaluation was simple requiring only a Yes or No answer. All of the questions received a 100% -Yes or positive score.

Do you like the meeting format?

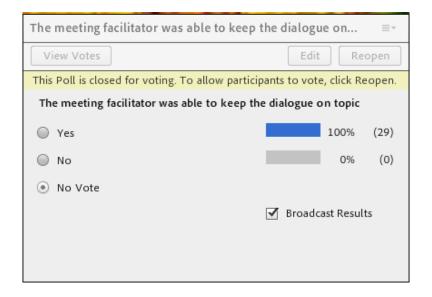
This was answered by 27 participants, while the rest of the questions were answered by 29 participants.



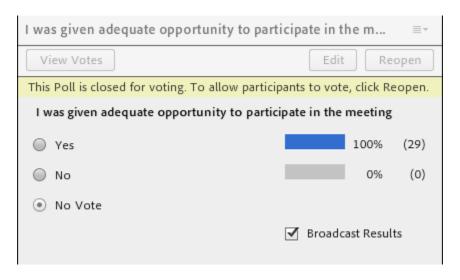
The meeting content was appropriate



The meeting facilitator was able to keep the dialogue on topic.



I was given adequate opportunity to participate in the meeting.



Appendix II: Northeast Nebraska Rural Health Network Survey

Northeast Nebraska Rural Health Network 2018-19 Community Health Survey Summary

Background:

A survey development committee made up of 5 members of the Northeast Nebraska rural Health Network Core Planning Team reviewed 11 different community health surveys to determine possible questions for this process. The committee completed their work both online via email and with one in-person meeting. The final questions were reviewed and approved by the Core Planning Team. The team was in consensus that the survey should be succinct comprising no more than four pages and yet be as inclusive as possible. Team members were careful to avoid similar questions being used and much thought was given to ensure the questions would provide information that would truly be helpful to our work. An equal amount of thought was given to the answer options to ensure consistency across similar questions and that they be organized thoughtfully. Once finalized, the survey was translated into Spanish.

The survey was developed in Survey Monkey and linked to the health department's website and both hospital websites. Survey Monkey offers a QR tool that provides a code that can be scanned by smart phones or tablets which was placed on outreach documents. A distribution plan was drafted and approved by the Core Planning Team. The plan included:

- A postcard was developed and distributed by Core Partners to employees and clients/patients. Several area clinics agreed to have the postcards available in their waiting areas.
- An English/Spanish flyer was used to complete an Every Door Direct Mailing to the communities in the health district large enough to be able to offer that service. A total of 3,441 mailers were distributed through this method.
- Paper surveys were taken to area WIC and public immunization clinics and offered to participants.
- Core Partners emailed links to the survey along with a request to complete and share the link with others.
- NNPHD staff took the paper survey to several area Sr. Centers and assisted Sr. Citizens complete the survey.
- A Facebook post was developed and shared with partners for further distribution. A
 Facebook push was completed at the beginning of the survey distribution time and
 then again toward the end of the survey distribution period.
- Community Health Workers took paper surveys and electronic tablets to Hispanic businesses and offered assistance to complete the survey.
- Newspaper ads and an article were distributed in the area papers. The local radio station picked up on the ads and put an article on their radio's Daily News webpage.

The survey contained 14 assessment questions; multiple choice questions also offered an "other" option for respondents to include their own ideas; one question was open ended. There were six demographic questions. Respondents were also asked to provide a way to contact them for a prize drawing. The drawing was an opportunity to win one of four \$50

"healthy living" prizes which would be something of the winner's choice such as up to \$50 toward a pair of exercise shoes, a gym membership, etc. In order to have a 95% confidence level for health district data, a total of 378 surveys were needed. The survey was open from mid-December 2018 and closed March 7, 2019 with 554 total surveys.

Survey Questions and Data:

Question #1: How do you rate your own personal health?

- 51.45% (285) of respondents rated their health as either "Healthy" (235) or "Very Healthy" (50).
- 39.89% (221) rated their health as "Somewhat Healthy."

Question #2: Please select ALL of the health challenges you face.

- 25.27% reported that they "do not have any health issues."
- Of the 74.7% (414) respondents who did report health issues:
 - 45.49% (252) reported "Overweight/Obese."
 - 31.59% (175) reported "Joint or Back Pain."
 - 22.56% (125) reported "High Blood Pressure."

Question #3: How do you rate the overall health of your community?

- 62.82% (348) thought their community was "Somewhat Healthy."
- 24.73% (137) rated their community as either "Healthy" (132) or "Very Healthy" (5).

Question #4: What do you think are the top five areas that need to be improved for your community to make it healthier? (Check Only Five):

- 64.44% (357) identified "Overweight/Obesity" as an area of need.
- 36.82% (204) identified "Mental Health Problems.:
- 32.31% (179) "Heart Disease, Stroke & High Blood Pressure"
- 31.41% (174) "Healthy Choices When Eating Out"
- 29.96% (166) "Cancers"

Question #5: What is your level of concern for YOUTH in your community for the issues listed below? The rating scale used was: 1-Not At All, 2-Very Little, 3-Somewhat, 4-Much, 5-Very Much and 0-Do Not Know.

- The issues identified as "Very Much" a concern included:
 - o Amount of Screen Time (Phones, Computers, Video Games, etc.) 57.4% (318)
 - o Phone Use While Driving 50.36% (279)
- Issues identified as "Much" concern included:
 - Substance Use 32.49% (180)
 - Mental Health 29.78% (165)
- Issues identified as "Somewhat" a concern included:
 - Teen Driving 36.46% (202)
 - Changes in Family Structure 34.66% (192)
 - Unsafe Sex / Teen Pregnancy 33.94% (188)
 - o Bullying 31.23% (173)
 - Suicide 28.7% (159)
- Issues identified as "Very Little" concern included:
 - Youth Crime 32.67% (181)
 - School Dropout Rates / Truancy 39.71% (220)

No issues were rated as either "Not At All" a concern or "Do Not Know."

Question #6: What do you think are the top five "unhealthy behaviors" for YOUTH in your community? Check up to Five:

- The #1 response was "Poor Eating Habits" 62.64% (347)
- Alcohol Use 60.65% (336)
- Lack of Exercise 52.71% (292)
- Bullying 45.49% (252)
- Being Overweight 45.31% (251)

Question #7: What do you think are the top five "unhealthy behaviors" for ADULTS in your community? Check up to Five:

- The #1 response was "Being Overweight" 81.59% (452)
- Lack of Exercise 76.35% (423)
- Alcohol Use 70.76% (392)
- Poor Eating Habits 68.77% (381)
- Tobacco Use 37.36% (207)

Question #8: What is needed to improve the health of your family and neighbors? Check up to Five:

- The #1 response was "Mental Health Services" 50.36% (279)
- Free or Affordable Health Screenings 48.38% (268)
- Healthier Food 48.19% (267)
- Wellness Services 45.13% (250)
- Safe Places to Walk / Play / Exercise 34.48% (191)

Question #9: How well do you feel these services are being provided in your community? Rate each of the following services: The rating scale used was: 1-Not At All, 2-Very Little, 3-Somewhat, 4-Much, 5-Very Much and 0-Do Not Know.

- The only issue identified as provided "Very Much" was:
 - o Emergency Services (e.g. Ambulance and 911) 41.16% (228)
- Issues identified as provided "Somewhat" included:
 - Health Services for the Elderly 42.24% (234)
 - Health Screenings & Preventive Services 38.45% (213)
 - Health Services for Heart Disease 38.27% (212)
 - Health Services for Cancer 36.46% (202)
 - o Coordination & Communication Between Providers 36.46% (202)
 - Health Services for Diabetes 36.28% (201)
 - Availability of Healthcare Providers and Specialists 32.67% (181)
- Issues identified as provided "Very Little" included:
 - Mental Health Services 32.67% (181)
 - Services for Obesity 37.36% (207)
 - Controlling the Cost of Health Care 37.36% (207)
- No issues were rated as provided "Not At All", "Much" or "Do Not Know."

Question #10: Where do you get most of your health information? Check up to Five:

- Doctor / Health Care Provider 77.98% (432)
- Internet 64.62% (358)

- Family or Friends 37.18% (206)
- Hospital 34.48% (191)
- Newspaper / Magazines 28.34% (157)

Question #11: Please choose ALL statements below that apply to you. (The answers having at least 50% compliance with best practices are highlighted in yellow.)

- I exercise at least three times per week. 44.77% (248)
- I eat at least five servings of fruits and vegetables most days of the week. 33.39% (185)
- I eat fast food more than once per week. 32.49% (180)
- I drink more than one sugar-sweetened drink per day most days of the week. 23.1%
 (128)
- I smoke cigarettes. 5.42% (30)
- I smoke e-cigarettes. 1.08% (6)
- I chew tobacco. 0.72% (4)
- I use marijuana. 1.44% (8)
- I overuse prescription drugs. 0%
- I use prescription drugs that were prescribed to someone else. 0.18% (1)
- I use street drugs. 0.18% (1)
- I have more than one alcoholic drink (if female) or two (if male) per day. 7.22% (40)
- I get a flu shot every year. 70.58% (391)
- I use insect repellant when outdoors most of the time from spring through fall. 39.53%
 (219)
- I use sunscreen when outdoors most of the time. 48.38% (268)
- I have access to a wellness program through my employer. 42.78% (237)
- The place where I work has a disaster plan. 59.03% (327)
- My family has a family disaster plan (e.g. for fires, severe weather, etc.) 34.48% (191)
- I get regular Colon Cancer screenings starting at age 50 (or earlier if advised by your doctor) – 26.53% (147)
 - Note: When data was adjusted for age, the percentage of respondents ages 50-84 who report receiving colon cancer screenings was 56%.
- I get regular Mammograms starting at age 40 (or as advised by your doctor); adjusting for age and gender (354), the percentage of respondents who receive regular mammograms starting at age 40 is 63.56% (225).
- I get regular Pap Smears starting at age 21 (or as advised by your doctor). adjusting for age and gender, the percentage of respondents ages 20-69 (402) who receive regular pap smears is 72.21% (291).

Question #12: Which of the reasons below have kept you or your family from getting medical, dental, or mental health services in the past 12 months? Check ALL that Apply: (The top five responses are highlighted in yellow.)

- I have not had any problems with this in the past 12 months. 56.68% (314)
- I am not sure where to find health services. 1.26% (7)
- I do not have health insurance. 4.33% (24)
- My health insurance deductible is too high. 22.02% (122)
- Local health providers do not take my insurance. 2.71% (15)
- I do not have a way to get there. 0.9% (5)
- Clinic is not open when I can go. 9.39% (52)

- I choose not to go. 8.84% (49)
- I do not have a phone to call for appointments. 0.54% (3)
- My health provider has not told me to get any screenings or services. 3.07% (17)
- There is no interpreter for my language at the clinic / hospital. 0.54% (3)
- I could not get an appointment. 1.62% (9)
- I do not have time or I forget. 12.45% (69)
- Health services are not close to where I live. 3.97% (22)
- I have a disability that keeps me from going. 0.18% (1)
- I do not know which health services I need. 2.71% (15)
- I do not feel comfortable with the healthcare providers. 6.5% (36)
- Other, please describe: 8.48% (47)

Question #13: What do you think are the top five things your community has now that make it healthy? Check up to Five:

- Great Place to Raise Children 66.06% (366)
- Good Schools 65.88% (365)
- Low Crime / Safe Place to Live 54.51% (302)
- Access to Healthcare 45.85% (254)
- Religious or Spiritual Values 32.31% (179)

Question #14: I live in:

- Wayne County 43.36% (235)
- Another County in Nebraska; which one: 15.13% (82)
 - o Cuming (21), Madison (7), Stanton (3), Burt (2), Pierce (3), Knox (1), Dakota (2)
 - o Numerous responses indicated "Nebraska"
- Thurston County 16.05% (87)
- Cedar County 13.65% (74)
- Dixon County 11.44% (62)
- A State other than Nebraska 0.37% (2) (Iowa)

Question #15: Zip Code specific data omitted from this summary.

Question #16: I am:

- Female 80.26% (435)
- Male 19.74% (107)

Question #17: I am:

- White 90.04% (488)
- African American / Black 0.55% (3)
- Asian 0% (0)
- Hawaiian / Pacific Islander 0.37% (2)
- Hispanic / Latino 4.43% (24)
- American Indian / Alaska Native 3.14% (17)
- 2 or more races 0.92% (5)
- Other 0.55% (3)

Question #18: My age is:

Under 19 years – 0.37% (2)

- 20-24 years 5.9% (32)
- 25-29 years 7.2% (39)
- 30-39 years 20.66% (112)
- 40-49 years 19.19% (104)
- 50-59 years 20.66% (112)
- 60-69 years 17.71% (96)
- 70-79 years 7.01% (38)
- 80-84 years 0.74% (4)
- 85+=0.55% (3)

Question #19: Please tell us if you or your family members serve/served in the military: Mark ALL that apply:

- I serve / served 11.63% (30)
- My Spouse / Partner 22.87% (59)
- My Sibling 25.58% (66)
- My Child 13.57% (35)
- My Parent 58.53% (151)

Question #20: Mark one that best explains where you work:

- Agriculture 5.72% (31)
- Education 26.57% (144)
- Retail 3.14% (17)
- Healthcare 28.78% (156)
- Social / Human Services 4.43% (24)
- Government 6.46% (35)
- Manufacturing 3.87% (21)
- Construction 1.11% (6)
- Arts / Entertainment 0.37% (2)
- Retired / Choose Not to Work 8.67% (47)
- Unable to Work 0.37% (2)
- Unemployed but Looking for Work 1.29% (7)
- Other, please describe 9.23% (50)

Question #21 & 22: Not included in this summary; both questions relate to the prize drawing.

Question #23: Please share any final comments or suggestions about improving the health of your community:

Notes:

- Names included in survey comments which can identify a specific community or person have been omitted for all comments in this summary which have a negative connotation.
- Any identifying information about survey respondents have been omitted from these comments.

Health and Wellness Education & Programs:

I like the health/wellness programs in the community. I have late stage diabetes which I developed when I worked [omitted]. I was a foster parent and working in human services. I believe all things could be improved but I like living here compared to the cities and other rural places i lived.

Need more education starting with young people and students about STD's, healthy eating, avoiding fast food, texting, online safety.

More awareness on healthy issues

Thanks for asking! I would LOVE to see more group activities and fitness classes at the Community Activity Center in Wayne.

I would really like to see during flu season that people would stay home from both schools and work. Too, many don't care or understand that when they are sick they risk getting many others sick as well. This is very frustrating to me. Simple hand washing and staying home would go along way to keeping this community much more healthy.

Nutrition / Healthy Eating:

Send out letters with healthy eating ideas.

Take junk food out of school system and supply healthy snacks in school for our youth and community to benefit and flourish.

more education/action on addressing childhood and adult obesity.

I would love healthier eating options in town

Most restaurant food choices are not very healthy.

More variety at the grocery stores.

I appreciate the support and services provided by our public health agencies and would encourage you to continue support for low income families (especially). I'm not sure that some of them eat a balanced diet (too much starch and sugar) and I think it is impacting child development.

More health food or organic food choices would be nice.

Promote & educate about organic farming and gardening.

Overall, this is a good town. I wish that there were more food options, cheaper or more fresh foods and groceries,

I think the biggest need is access to healthy foods that are affordable. Many people choose fast, easy, processed foods over fresh because it is more cost effective and will last in the fridge/freezer longer.

Access to Healthcare:

lowering instead of increasing hospital charges and

I believe we have a great hospital and clinic, would like to see more specialty clinics

The dr in [omitted] needs to be in the office all day more than 1 day a week

insurance premiums need to be lower

I feel our community has many resources available for access regarding healthcare.

What Emergency Room means and what it is used for (ex: not a clinic, take colds and sore throats to the clinic.)

I do think that we have several healthcare services in the area but people may not be familiar with what is actually available, not necessarily for lack of advertising them but more of a lack of effort from individuals/people to take an initiative to look or ask what is offered in the community. If things are not posted on social media (Facebook) the younger generation does not pay attention. I would also add that the expectation of people is sometimes unreasonable. Not all health conditions are a quick fix and if the individual/patient is not willing to put some effort in to improving their own health and situation, it is difficult for a healthcare provider or facility to "fix" them.

The doctors here are good, but health screenings are non existent. Insurance doesn't let you get checked for anything unless you are already near death, lol.

We do not have ACA insurance - too high. We are 'stuck in the middle' (husband and I) The cost out of pocket to see doctor for basic care (blood pressure pills / allergy shot) is too expensive. We are seriously looking outside of this community for lower cost healthcare - we don't not qualify for any subsidies from government for healthcare via ACA. It's a terrible position to be. Self Employed

Having more low cost dental.

Need for more pharmacy options in our area!!

an urgent care service that could serve the community during evenings/weekends that would be more economical than the ER

This area needs a full-time Endocrinologist.

General knowledge through various means is always good. I feel the hospital does a good job bring outpatient Drs here.

Mental / Behavioral Health:

Improve community access to smoking cessation programs,

Youth health with drugs & alcohol is a major change that needs to happen.

Dementia services and housing for dementia patients

I know many people who need counseling or other mental health services but can't seem to afford it.

Mental health facilities are needed. Many troubled individuals in the community who do not have access to health care and can't afford to get help.

Wayne is a wonderful community and a fine place to raise a family. Because I work in the education field, I have come to realize the drug issues in our community. It saddens me. Our kids in high school have to be getting them somewhere. It needs to stop.

My biggest concerns are mental health access and the upkeep of rental properties.

We need the whole court system and police to follow thru with criminal activity. Those selling drugs need more strict charges [omitted]. Parents need to go thru parenting skills to get their children back and alcohol or drug abuse treatment. We need a stronger police force and not just giving out tickets for parking wrong on a side street.

more active "crack-down" on drug use/sale,

Lifestyle:

Access to exercise services that don't require driving very far

Open up the gyms to free access and availability.

Evening transportation, when my mom was alive she wanted to be able to go out to dinner or anywhere with a friend, but they couldn't drive and wanted to be independent. Senior van was okay but nothing in the evening.

Incorporate physical activities for families which have little or no cost, especially during the winter months, i.e., use of a gym, family 'Dance Nights', dodge ball, jump rope, etc., for old and young alike, for fun and fellowship.

Gym memberships are very expensive

I think people would be more willing to workout to be healthy if a single parent could get cheaper memberships to the Activity center

We have an overall healthy community. But, I feel our community needs a full time social worker in the schools to help families. That would help prevent a lot of neglect. Our families who are low income struggle to lead healthy lifestyles through eating, exercise, cleanliness, and mental health. The stress of living day-to-day or paycheck-to-paycheck takes a toll mentally, as well as physically. Schools are seeing more families struggle to make ends meet. Finding ways to help them understand money management, how to cook healthy meals on a budget and time constraints (maybe healthy crock pot meals), how to manage a job, cleaning, laundry, cooking, homework, etc., while raising a family would be helpful.

People spend too much time on electronic devices and not enough time finding things to do outside

increased rec and wellness programs and classes, and more sports options for children as well.

It would be VERY helpful if the Wayne Activity Center would treat single older adults the same as married. The cost to join should be 1/2 price as a married couple.

Making the cost of membership for seniors more affordable at wellness/workout facilities.

Progress is being done in Pender - Pender Community Center for kids to play recreational sports; Anytime Fitness

Built Environment:

A major part missing for [omitted] is the ability to walk on sidewalks all around town. Everywhere you look there are streets without sidewalks or if they have sidewalks they are a walking hazard. Something as simple as good sidewalks would keep individuals safe and encourage walking areas all throughout town. It would also improve valuations as it becomes more welcoming.

Our sidewalks are horrible. Lots of areas where there are no sidewalks on either side of the street. Sidewalks removed on [omitted] and never replaced.

Street repair is needed for safe walking (not many sidewalks.)

More fitness opportunities

I also think a bike/running trail that is well-lit around town would be beneficial for families!

A bike trail would be beneficial for exercise/fitness/family time...esp. for the kids! (They're gaining wt. as they are driven anywhere they have to go, by overly indulgent parents that let them overeat junk food.)

When the community spent all that money on a nice community pool, they missed an opportunity for many things by not making year round including helping the older population with exercise, partnering with school for swim meets, activity for PE, community \$ for membership year round, etc. I think this is so important especially with the college not having an indoor pool anymore.

an indoor pool

Get an indoor pool to be open year round.

We need to encourage seniors to utilize the pool with appropriate steps into it.

Additional Comments:

It's up to an individual to take care of their body.

I think we live in a great community with lots of ways to be healthy, but you have to do it yourself.

There is little or no support for those in the community who identify as gay, lesbian, bisexual, or transgender.

I think EVERY age group could use help.

Wayne is a great community to be part of.

I am very thankful for the quality healthcare available in Wayne. Thank you to all who provide it.

Reasonable pricing

I identify as of the human race and would really like to see the day when this question is no longer asked

I think our community has a good healthcare clinic, a good grocery store available, and a good community of caring people.

A performing arts center would enhance our community.

Keep doing what you are doing. We are going the right direction!

I'm excited to hear about any changes that may be happening to improve the area communities health.

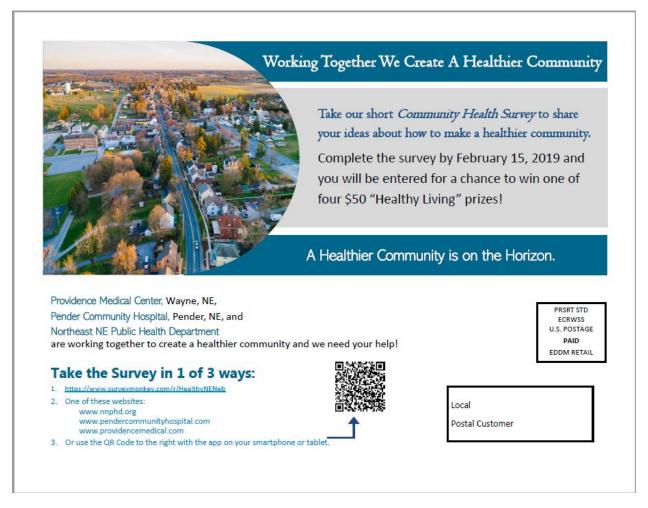
You can not live off what you are being paid as a support staff.

Respectfully Submitted, Julie Rother, BSN, RN, CPH March 8, 2019

Electronic Community Health Survey

The Community Health Survey was disseminated to those living in Cedar, Dixon, Thurston and Wayne Counties using two primary delivery methods; 1) Postal mailing of a flyer that included how to access the survey in English and Spanish and 2) A post card that the Core Network Team partners used to hand out to clients who utilized their services.

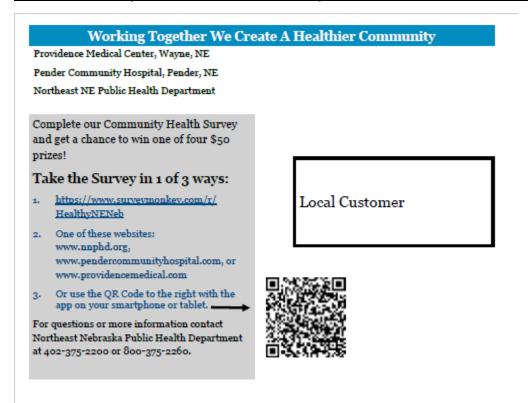
Electronic Survey Flyer delivered by the USPS to households.



A total of 3,441 mailings went to the following towns located in Cedar, Dixon, Thurston and Wayne Counties:

- Hartington
- Laurel
- Pender
- Ponca
- Wakefield
- Wayne
- Winside

Electronic Survey Postcard disseminated by Network Core Team Partners



In addition to the USPS mailing, the partners were provided with PDF and Publisher files of the postcard above to display on their website or photocopy and use for dissemination. The survey monkey link was also provided to all partners to disseminate via e-mail.

Appendix III: Focus Group Report

Focus Group Report

- 1. First, I would like to start by getting an idea of how you would describe your community. If you were talking with a friend or family member who had never been here, how would you describe your community to him or her?
 - a. Wayne State College:
 - i. Small, safe, kind people, easy to get around, tight-knit community, a lot of familiar faces around town, welcoming, friendly
 - b. Allen Senior Center:
 - i. Friendly, Boring, helpful, cold, fresh, feel likes home
 - c. Pender parent Group:
 - i. Growing, Active, Budget go getters, Advancing, Progressive, Family Friendly, Small, Mighty
 - d. Hartington Senior Center:
 - i. Wonderful, great place to live, friendly, helpful
 - e. Wakefield Hispanic Group:
 - i. Small community that is safe, good jobs, Police officers take care of the kids, helpful neighbors, feels included in the community despite living in the country, none/limited transportation available.

2. What are some positive things in your community that contribute to your health?

- a. Wayne State College:
 - i. One individual works at the CAC states that people that work out in the morning are very dedicated to their health and work out.
 - ii. Multiple places to work out
 - iii. Quick response to safety issues in the community and use a variety of sources to get the message out to community members
 - iv. Wild Cat Wheels
 - v. Negatives:
 - 1. Financial burden for healthy food options
 - 2. Not all generations are willing to try new options

b. Allen Senior Center:

- i. Fire/Rescue
- ii. Community Center
- iii. Therapy Table
- iv. Churches
- v. Food Pantry
- vi. Convenient Store for groceries
- vii. Different backgrounds (Democrats)

c. Pender Parent Group:

- i. Hospital
- ii. Clinic
- iii. Doctors
- iv. Businesses growing
- v. Community center
- vi. Fitness center

- vii. Youth sports
- viii. Backpack program
- ix. NENCAP in town
- x. WIC program
- xi. PTO (Pender booster club supporting the school)
- xii. Weightlifting at the school during the summer
- xiii. Afterschool program
- xiv. Community with fitness center
- xv. Jail partnership with the clinic (healthier conditions for inmates)
- xvi. Youth sports (participation falls off after 8th grade burn out among students)
- xvii. Free/Reduced lunch
- xviii. Early Childhood Program
- xix. Strong Thrift Store puts money back into the community.

d. Hartington Senior Center:

- i. Rehab Center
- ii. Medical Center
- iii. Eye doctor
- iv. Dentist
- v. Good grocery store
- vi. Good meals at senior center
- vii. Churches
- viii. Schools
- ix. Daycares
- x. Community complexes/gym/football
- xi. Activities at senior center
- xii. Yoga classes

e. Wakefield Hispanic Group:

- i. New playground at the school and park for kids to be active
- ii. walking trail
- iii. school nurse provides hygiene/cleaning lessons to each class
- iv. need to learn how to cook healthier meals
- v. safe to walk to work (not a lot of crime)
- vi. City only cleans part of the town when it snows hard on people
- vii. Need parenting classes parents give kids whatever they want so they are quiet
- viii. Cattle near town can bring diseases
- ix. Community is safe parents become to carefree with their children.

3. How would you describe the interactions between community members of different backgrounds?

a. Wayne State College:

- i. Racism in the community
- ii. Not as much racism on campus of WSC
- iii. Older generation (50+) more apt to have racism in the community
- iv. Not a lot of diversity
- v. Not many hate crimes
- vi. Homosexual's don't feel represented and feel alone on campus.

b. Allen Senior Center:

- i. School kids include people of all backgrounds/ethnicities.
- ii. They get picked on.

c. Pender Parent Group:

- i. Kids inclusive of minority students, rarely see parents (language barrier?)
- ii. Don't see many Native American students/parents
- iii. Mostly Caucasian not a lot of diversity in the town
- iv. Not a lot of involvement from those families that are from another culture.
- v. No main employer in town other than farm hand.

d. Hartington Senior Center:

i. Teachers correct bullying

e. Wakefield Hispanic Group:

- i. Communication isn't good between Latinos (Mexicans, Guatemalans, Hondurans). In Wayne you feel part of the community, in Wakefield you can sense friction.
- ii. School helps with Hispanic activities
- iii. Have all experience racism, sometimes within own race.
- iv. Need more meetings, so more people come
- v. Need parenting classes, especially the youth.

4. Where do you get most of your health information?

a. Wayne State College:

i. Professor, research online, internet, mind pump(pop?) podcast, friends – peer to peer discussions, speeches in speech class, Ted Talks, WSC Library, Men's Health Magazine, peer review articles.

b. Allen Senior Center:

i. Doctor, Internet, Friends, Services that come to town, Parents go to children, blood pressure clients, family members.

c. Pender Parent Group:

- i. School nurse
- ii. Clinic
- iii. Doctors (very accessible)
- iv. Internet
- v. Health Screenings for a health program for staff

d. Hartington Senior Center:

- i. Doctors
- ii. Senior center
- iii. Web-MD
- iv. Online

e. Wakefield Hispanic Group:

- i. Clinics, health department, doctor, social media (Facebook), Internet, Television, Google.
- ii. Latino's still believe in home remedies
- iii. Sometimes take your kids to the doctor and don't get anything waste of money.
- iv. If we didn't have household remedies, then we would have never found the use of marijuana.

5. When you look around, what kinds of problems do you see in your community? *Probes: drugs, poverty, health, crime, safety, pregnancy, entertainment*

a. Wayne State College:

i. Obesity, alcohol, same movie at the movie theater, business/activities that no one knows about, vaping, smoking, unsafe housing, not enough activities on campus/community

b. Allen Senior Center:

- i. Use of Chemicals in fields
- *ii.* Nitrates in the water
- iii. Radon
- iv. Dust in the Air
- v. High rate of Cancer (due to chemicals in fields)
- vi. Cellphones
- vii. Drugs
- viii. Small town = Small # of kids in schools, forced to join other schools for sports, limit the opportunities for different sports.
- ix. Alcohol use
- x. Smoking youth
- xi. Vaping
- xii. Younger families moving away in search of jobs and better sources of income.

c. Pender Parent Group:

- i. Participation of youth sports falls off after 8th grade possible burn out, competition, need balance
- ii. Eldercare no one to care for them
- iii. No transportation
- iv. Psychiatric care nothing in town, big problem during a crisis, stigma in a small town so people are afraid to get help in the community because it is too public.
- v. Language barrier with parents
- vi. Healthy food it hard to get and is more expensive in a small town.
- vii. No low income housing
- viii. Assisted Living, Fixed Income, Independent Living are not options.
- ix. Drugs area out there, not seen in school but know its out there.
 - 1. No drug dog or police to check on drugs at the school
 - 2. Kids seeing drugs through parents
 - 3. Kids doing prescription drugs instead of marijuana.
 - 4. Kids only get a slap on the wrist from cops, kids feel bold and brave
- x. Gym is not 24/7
- xi. No variety of sports so parents/kids are traveling.

d. Hartington Senior Center:

- i. Ice on the Streets
- ii. 25 miles to Yankton for an Emergency
- iii. Kids transportation needed, no transportation services on the weekends
- iv. Parents drive kids everywhere, they don't walk much.

- v. Not housing available for low-income.
- vi. Local dentist doesn't have Medicaid
- vii. No good paying jobs, jobs always available

e. Wakefield Hispanic Group:

- i. Housing prices going up need to control how many live per house; roaches and pests are bad. Some have black mold called the city they don't help.
- ii. Need better security at the park with kids riding bikes to the pool.
- iii. Drug problems are very high with minors school does drug testing but sometimes they just test the Hispanic kids
- iv. Kids know who are doing drugs but don't say anything because of the repercussions.
- v. Someone buys kids alcohol; need to work with the cops to find the people that area buying alcohol and drugs
- vi. Security is good, not much crime
- vii. Would love to a pharmacy or hospital
- viii. Would like to have someone come and do dental cleanings a lot of people don't have Medicaid, Medicare, or Insurance so they don't go to the doctor.
- ix. People are aware of Siouxland and Midtown; prefers Midtown because it is cheaper, and they have dentists/counseling.
- x. Kids need a safe place to play (ex: indoor playground or gated playground).

6. What do you think can be done about some of the problems you just mentioned?

a. Wayne State College:

- *i.* Smoking campus security should enforce their policies, raise awareness with the Truth Campaign, demonstrations/science experiments of what smoking can do to your lungs
- *ii.* Stress management class/activities (stress leads to smoking, drinking, vaping)
- *iii.* WALK honors program at WSC with weekly meetings/challenges, challenge to be active in the community.
- iv. Options for activities Thursday-Saturday, decrease amount of drinking
- v. Needing support for the drinkers and non-drinkers.

b. Allen Senior Center:

- i. Starts at home
- ii. Its their own choice
- *iii* Iail
- iv. Discipline
- v. Guidance on how to set boundaries
- vi. More parent supervision
- vii. Less TV/Media time
- viii. Fewer video games

c. Pender Parent Group:

 Need more hours for the school nurse – low-income families rely on the school nurse rather than send to the clinic – get regular texts to check on the kids

- ii. Employers should pay for 24hr fitness
- iii. Organizing driving services for the elderly
- iv. Education about drugs for kids
- v. Clinics are doing health coaching
- vi. Teammates mentoring program is great
- vii. Early Childhood program keeps growing.
- viii. Free preschool program at school
- ix. Police force has improved and new jail.

d. Hartington Senior Center:

- i. Use cedar county van service
- *ii.* Good Housing rebuild

e. Wakefield Hispanic Group

- i. Indoor or Gated Playground
- ii. Control housing
- iii. Work with the cops to find the people that are buying alcohol and drugs.

7. In your opinion, what are some things that could make the community better?

a. Is there anything in particular that you would like to see happen that is not currently being done?

- 1. Wayne State College:
 - 1. Weekend Events (Thurs-Sat)/ places that don't serve alcohol stay open later than 6p.m.
 - 2. Improve communication
 - 3. Students being informed about the community

2. Allen Senior Center

- 1. More entertainment/activities for kids
- **2.** Have transportation service
- 3. Keep our kids engaged and get them jobs
- 4. Utilization of the Cedar County Bus

3. Pender Parent Group:

1. Low income housing

4. Hartington Senior Center:

1. Rebuild housing

5. Wakefield Hispanic Group:

- 1. Need more housing
- 2. Need bus transportation
- 3. Get connected to parties like quinceaneras.
- 4. Have more meetings and try to force parents to attend have some at different times so those that work opposite shifts can maybe attend.
- 5. Provided education on travel people get sick and travel with no vaccines.

b. How could community healthcare services be improved?

- 1. Wayne State College:
 - 1. Health care is top-notch in the community/ many options
 - 2. More accountability-based groups

- 3. Mental Health Services are very good on campus
- 4. Continue to refer to Student Health
- 5. Help people be responsible for their actions society is making it ok to be obese.

2. Allen Senior Center:

- 1. Better/Improve 911 system
- 2. More People in town trained for EMS calls having to transfer calls to other towns.

3. Pender Parent Group:

- 1. Pender has really good healthcare Eye Doctor comes once a week; Dentist is now a provider for insurance
- 2. No mental health access have had meetings regarding this.
- 3. Not a lot of housing
- 4. Community has plans for walking trail, lake, new fire hall in the next 20 years.

4. Hartington Senior Center:N/A

5. Wakefield Hispanic Group:

- 1. Have a pharmacy/hospital
- 2. Mobile clinics low cost services
- 3. Kids Health Education

8. If you had a friend who had never visited your community before and they asked you what some of the best things about it were, what would you tell them?

- a. Wayne State College:
 - **i.** Small, safe, kind people, easy to get around, tight-knit community, welcoming, friendly
- b. Allen Senior Center:
 - i. Friendly, Boring, Helpful, Feels like Home.
- c. Pender Parent Group:
 - i. Good healthcare, Very active community, Thrift Store, Very Progressive
- d. Hartington Senior Center:
 - i. Friendly, wonderful, great place to live, helpful

9. Of all the issues we've talked about today, which do you think are the most important for your community to deal with?

- a. Wayne State College:
 - i. Mental Health
 - ii. Healthy Eating
 - iii. Activities
 - iv. Food pantry on campus not used
 - v. Not easy to eat healthy on campus.
 - vi. Building networks of health companions

b. Allen Senior Center:

- i. Medical Services
- ii. Transportation

c. Pender Parent Group:

- i. Eldercare/Transportation
- ii. Focus on the youth

- d. Hartington Senior Center:
 - i. Emergency Healthcare Services Closer
 - ii. Low-Income Housing
- e. Wakefield Hispanic Group: N/A

Appendix IV: Northeast Nebraska Network Agricultural Survey

Northeast Nebraska Rural Health Network 2018 Agricultural Health & Safety Survey Summary

In 2018, NNPHD chose to reach out to the area agricultural population to ask them what their preferred method of contact in the event of a public health emergency is as well as their input on health and safety needs of their community. The survey was distributed via postcards at community events, area businesses, the NNPHD Facebook page and website and via email. The survey was open from July to the end of October, 2018. A total of 135 surveys were returned. Some of the results are as follows:

- 1. Preferred method of contact in the event of a public health emergency is:
- 2. Please select your top 3 choices for health and safety information:
 - 74.07% (100) reported "Medical Provider"
 - 70.37% (95) reported "Internet"
 - 65.19% (88) reported "Friends and Family"
- 3. Please rate the following items specific to your community: Circle One Answer for each question:
 - Water in my community is:
 - Very Clean 51
 - \circ Clean 40
 - Somewhat Clean 26
 - Rarely Clean 9
 - Not Clean 5
 - \circ I don't know 0
 - Air in my community is:
 - Very Clean 54
 - \circ Clean 51
 - Somewhat Clean 25
 - Rarely Clean 1
 - Not Clean 1
 - \circ I don't know -0
 - Fresh Fruits and Vegetables are easy to buy in my community:
 - o Always 45
 - \circ Often 35
 - Sometimes 35
 - \circ Rarely -12
 - \circ Never -8
 - \circ I don't know 0
 - Healthy choices are available when eating out in my community:
 - \circ Always 25
 - \circ Often 25
 - \circ Sometimes 60

- o Rarely 17
- \circ Never -8
- \circ I don't know 0
- Jobs in my community pay enough to cover the cost of living.
 - \circ Always 5
 - \circ Often 41
 - Sometimes 63
 - o Rarely 18
 - \circ Never -6
 - \circ I don't know -0
- Quality education is available in my community.
 - \circ Always 70
 - \circ Often 34
 - \circ Sometimes 21
 - \circ Rarely -33
 - \circ Never -3
 - \circ I don't know 0
- There are safe places for kids to play outdoors in my community.
 - \circ Always 69
 - \circ Often 43
 - Sometimes 16
 - \circ Rarely 6
 - \circ Never 1
 - o I don't know -
- Quality childcare options are available in my community.
 - \circ Always -43
 - \circ Often 41
 - Sometimes 38
 - \circ Rarely 7
 - \circ Never -4
 - o I don't know –
- There are plenty of clubs and activities for people in my community.
 - \circ Always 33
 - Often 39
 - \circ Sometimes 34
 - o Rarely 21
 - \circ Never -7
 - \circ I don't know 0
- My community is safe.
 - \circ Always 33
 - \circ Often 74
 - \circ Sometimes 24
 - \circ Rarely -4
 - \circ Never -0
 - o I don't know − 0
- People in my community care about each other.
 - \circ Always 43
 - Often 62
 - \circ Sometimes 22
 - \circ Rarely 5
 - \circ Never -2
 - I don't know 1

- In general, my community is:
 - Very Healthy 19
 - \circ Healthy 51
 - o Somewhat Healthy 59
 - Rarely Healthy 4
 - \circ Not Healthy 2
 - \circ I don't know 0
- 4. Which of the following have kept you or your family from getting medical, dental or mental health services in the past 23 months? (Mark ALL that Apply):

(The top three responses are highlighted in blue.)

- A. I have not had any difficulty getting health services in the past 12 months. 68.89% (93)
- B. I don't know where to find health services. -0.74% (1)
- C. I don't have health insurance. 5.93% (8)
- D. My health insurance deductible is too high. -30.37% (41)
- E. Local health providers do not take my insurance. -2.22% (3)
- F. My health provider has not recommended any screenings or services. -5.93% (8)
- G. I don't have transportation to get to health services. -0.74% (1)
- H. My health provider's clinic is not open when I am available. -4.44% (6)
- I. Language/Interpretation services are not provided at the health care facility. -0.00% (0)
- J. I couldn't get an appointment. 1.48% (2)
- K. I don't trust the health providers where I live. -5.93% (8)
- L. I don't have time to get health screenings or services. 8.89% (12)
- M. Health services aren't close to where I live. 2.22% (3)
- N. I have a disability that keeps me from getting health services. -0.74% (1)
- O. I do not know which health services I need. -1.48% (2)
- P. I choose not to go for recommended health screenings or services. 2.96% (4)
- Q. Other, please specify: 5.93% (8)
- 5. How do you include the following into your regular routine? The rating scale used was: 1-Always, 2-Often, 3-Sometimes, 4-Rarely, 5-Never and an option of "I am Not 50 or Older" was available for the Colon Cancer Screening question.
 - A. Get a Flu Shot every year:
 - Always 43.28% (58), Never 19.40% (26), Often 14.93% (20)
 - B. Get a Tetanus Shot at least every 10 years:
 - o Always 43.28% (58), Often 23.88% (32), Sometimes 17.91% (24)
 - C. Use sunscreen when outdoors:
 - o Often 34.33% (46), Sometimes 33.58% (45), Always 20.15% (27)
 - D. Use insect repellent when outdoors:
 - o Sometimes 35.07% (47), Often 25.37% (34), Rarely 17.91% (24)
 - E. What is the estimated amount of time you ear plugs or ear muffs when around loud noise?
 - o Rarely 30.60% (41), Often 20.15% (27), About Half the Time 17.91% (24)
 - F. What is the estimated amount of time you wear a mask in dusty conditions?
 - About Half the Time 24.63% (33), Often 23.13% (31) Rarely – 22.39% (30),
 - G. Drink water rather than soda pop, coffee, energy drinks, etc. when working outdoors:
 - Always 44.03% (59), Often 36.57% (49), About Half the Time 12.69% (17)
 - H. My family has a family disaster plan (e.g. for fires, severe weather, etc.):
 - Yes 58.21% (78), No 41.79% (56)
 - I. How many days each week do you exercise to the point of heavy breathing for at least 30 minutes per day?
 - \circ 3 29.10% (39), 2 19.40% (26), 1 16.42% (22)

- J. The ag operation where I work has a disaster plan:
 - Yes 40.30% (54), No 21.64% (29), I don't work for an ag operation 38.06% (51)
- 6. The most important health or safety need for my community is:
 - A. Access to Healthier Foods & Restaurants (12)
 - B. Child Safety & Protection (8)
 - C. Clean/Safe Water (7)
 - D. Doctors (6)
 - E. Affordable Places to Exercise (6)

Respectfully Submitted, Julie Rother, BSN, RN, CPH March 14, 2019

Nebraska Risk and Protective Factor Student Survey Results for 2016

Profile Report:

Northeast Nebraska Public Health Department



Sponsored by:

Nebraska Department of Health and Human Services
Division of Behavioral Health

Administered by:

Bureau of Sociological Research University of Nebraska-Lincoln

NRPFSS is part of the Student Health and Risk Prevention (SHARP) Surveillance System that administers surveys to youth enrolled in Nebraska schools

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Introduction and Overview

This report summarizes the findings from the 2016 Nebraska Risk and Protective Factor Student Survey (NRPFSS). The 2016 survey represents the seventh implementation of the NRPFSS and the fourth implementation of the survey under the Nebraska Student Health and Risk Prevention (SHARP) Surveillance System. SHARP consists of the coordinated administration of three school-based student health surveys in Nebraska, including the NRPFSS, the Youth Risk Behavior Survey (YRBS), and the Youth Tobacco Survey (YTS). The Nebraska SHARP Surveillance System is administered by the Nebraska Department of Health and Human Services and the Nebraska Department of Education through a contract with the Bureau of Sociological Research at the University of Nebraska-Lincoln. For more information on the Nebraska SHARP Surveillance System please visit http://bosr.unl.edu/sharp.

As a result of the creation of SHARP and its inclusion of the NRPFSS, the administration schedule shifted from the fall of odd calendar years to the fall of even calendar years. The first three administrations of the NRPFSS occurred during the fall of 2003, 2005, and 2007, while the fourth administration occurred during the fall of 2010, leaving a three-year gap (rather than the usual two-year gap) between the most recent administrations. The 2012, 2014, and 2016 administrations also occurred during the fall, as will future administrations, taking place during even calendar years (i.e., every two years).

The NRPFSS targets Nebraska students in grades 8, 10, and 12 with a goal of providing schools and communities with local-level data. As a result, the NRPFSS is implemented as a census survey, meaning that every public and non-public school with an eligible grade can choose to participate. Therefore data presented in this report are not to be considered a representative statewide sample. The survey is designed to assess adolescent substance use, delinquent behavior, and many of the risk and protective measures that predict adolescent problem behaviors. The NRPFSS is adapted from a national, scientifically-validated survey and contains information on risk and protective measures that are locally actionable. These risk and protective measures are also highly correlated with substance abuse as well as delinquency, teen pregnancy, school dropout, and violence. Along with other locally attainable sources of information, the information from the NRPFSS can aid schools and community groups in planning and implementing local prevention initiatives to improve the health and academic performance of their youth.

Table 1.1 provides information on the student participation rate for Northeast Nebraska Public Health Department and the state as a whole. The participation rate represents the percentage of all eligible students who took the survey. If 60 percent or more of the students participated, the report is generally a good indicator of the levels of substance use, risk, protection, and delinquent behavior in Northeast Nebraska Public Health Department. If fewer than 60.0 percent participated, a review of who participated should be completed prior to generalizing the results to your entire student population.

2016 NRPFSS Sponsored by:

The 2016 NRPFSS is sponsored by Grant #5U79SP020162-04 under the Strategic Prevention Framework Partnerships for Success Grant for the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention through the Nebraska Department of Health and Human Services Division of Behavioral Health.



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SHARP | NRPFSS 2016

The Bureau of Sociological Research (BOSR) at the University of Nebraska – Lincoln (UNL) collected the NRPFSS data for this administration as well as the 2010, 2012, and 2014 administrations. As part of BOSR's commitment to high quality data, BOSR is a member of the American Association of Public Opinion Researchers (AAPOR) Transparency Initiative. As part of this initiative, BOSR pledges to provide certain methodological information whenever data are collected. This information as it relates to the NRPFSS is available on BOSR's website (www.bosr.unl.edu/sharp).

Table 1.1. Survey Participation Rates, 2016

	Northeast Nebraska Public Health Department 2016					
	Number Participated	Number Enrolled	Percent Participated	Number Participated	Number Enrolled	Percent Participated
Grade						
8th	188	432	43.5%	10803	25792	41.9%
10th	172	411	41.8%	9580	25029	38.3%
12th	143	433	33.0%	8327	25541	32.6%
Total	503	1276	39.4%	28710	76362	37.6%

Note. The grade-specific participation rates presented within this table consist of the number of students who completed the NRPFSS divided by the total number of students enrolled within the participating schools. For schools that were also selected to participate in the YRBS or YTS, the participation rate may be edjusted if students were only allowed to participate in one survey. In these cases, the number of students who completed the NRPFSS is divided by the total number of students enrolled that were not eligible to participate in the YRBS or YTS.

Again, the goal of the NRPFSS is to collect school district and community-level data and not to collect representative state data. However, state data provide insight into the levels of substance use, risk, protection, and delinquent behavior among all students in Nebraska. In 2016, 37.6 percent of the eligible Nebraska students in grades 8, 10, and 12 participated in the NRPFSS.

The 2016 participation rate for the state as a whole remains lower than the 60.0 percent level recommended for representing students statewide, so the state-level results should be interpreted with some caution. Failure to obtain a high participation rate statewide is, in part, due to low levels of participation within Douglas and Sarpy Counties, which combined had a 17.2% participation rate in 2016 compared to 51.3% for the remainder of the state.

Table 1.2 provides an overview of the characteristics of the students who completed the 2016 survey within Northeast Nebraska Public Health Department and the state overall.

Table 1.2. Participant Characteristics, 2016

	Publi Depa	Northeast Nebraska Public Health Department 2016		State 2016	
	n	%	n	%	
Total students	506		28940		
Grade					
8th	188	37.2%	10803	37.3%	
10th	172	34.0%	9580	33.1%	
12th	143	28.3%	8327	28.8%	
Unknown	3	0.6%	230	0.8%	
Gender					
Male	257	50.8%	14737	50.9%	
Female	248	49.0%	14129	48.8%	
Unknown	1	0.2%	. 74	0.3%	
Race/Ethnicity					
Hispanic*	37	7.3%	4702	16.2%	
African American	12	2.4%	953	3.3%	
Asian	2	0.4%	587	2.0%	
American Indian	82	16.2%	783	2.7%	
Pacific Islander	3	0.6%	88	0.3%	
Alaska Native	2	0.4%	35	0.1%	
White	360	71.1%	21376	73.9%	
Other	8	1.6%	341	1.2%	
Unknown	0	0.0%	75	0.3%	

Notes. "Hispanic can be of any race. In columns, n=number or frequency and %=percentage of distribution.

Overview of Report Contents

The report is divided into the following three sections: (1) substance use; (2) violence, bullying, and mental health; and (3) feelings and experiences at home, school, and in the community. Within each section, highlights of the 2016 survey data for Northeast Nebraska Public Health Department are presented along with state and national estimates, when available.

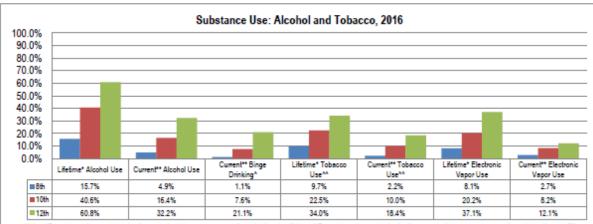
When there are less than 10 survey respondents for a particular grade, their responses are not presented in order to protect the confidentiality of individual student participants. However, those respondents are included in regional- and state-level results. Furthermore, if a grade level has 10 or more respondents but an individual question or sub-group presented in this report has less than 10 respondents then results for the individual item or sub-group are not reported.

A number of honesty measures were also created to remove students who may not have given the most honest answers. These measures included reporting use of a fictitious drug, using a substance during the past 30 days but not in one's lifetime, answering that the student was not at all honest when filling out the survey, and providing an age and grade combination that are highly unlikely. Students whose answers were in question for any one of these reasons were excluded from reporting. For Northeast Nebraska Public Health Department, 12 students met these criteria.

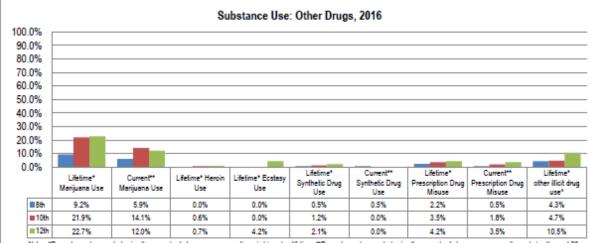
Substance Use

This section contains information on the use of alcohol, tobacco, and other drugs among 8th, 10th, and 12th grade students in Nebraska. In addition, there is information on the sources and places of use, attitudes and perceptions, sources for help with problems, and awareness of prevention messages. To provide greater context for the results from Northeast Nebraska Public Health Department, overall state and national results are presented when available. As discussed earlier, the state results are not to be considered a representative statewide sample. The national data source is the Monitoring the Future survey, administered by the Institute for Social Research at the University of Michigan and sponsored by the National Institute on Drug Abuse and National Institutes of Health.

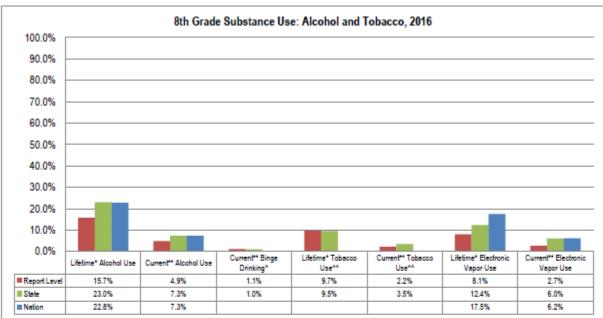
Substance Use



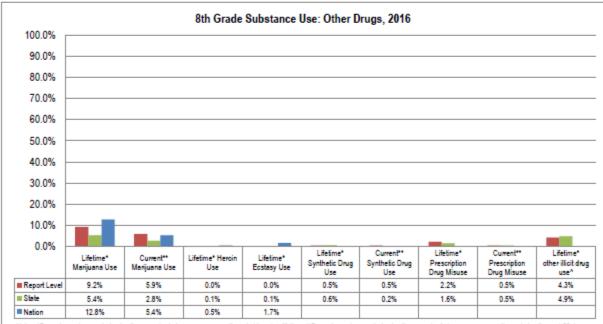
Notes. "Percentage who reported using the named substance one or more times in his or her lifetime. "Percentage who reported using the named substance one or more times during the past 30 days." Percentage who reported having five or more drinks of alcohol in a row, within a couple of hours. ""Tobacco use includes cigarettes and smokeless tobacco. Individual results for each can be found in Appendix A.



Notes. "Percentage who reported using the named substance one or more times in his or her lifetime." Percentage who reported using the named substance one or more times during the past 30 days. "Other illiait drugs includes LSD or other psychodelics, cocainelorack, meth, inhalants, sterioids, other performance-enhancing drugs, and non-prescription over the counter drugs. Results by these drugs can be found in Appendix A.

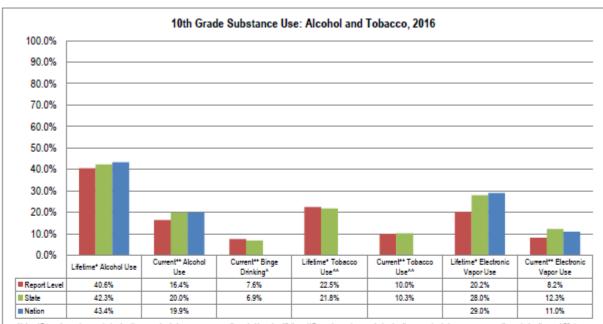


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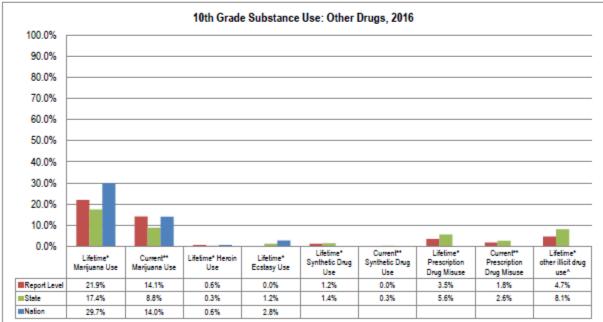
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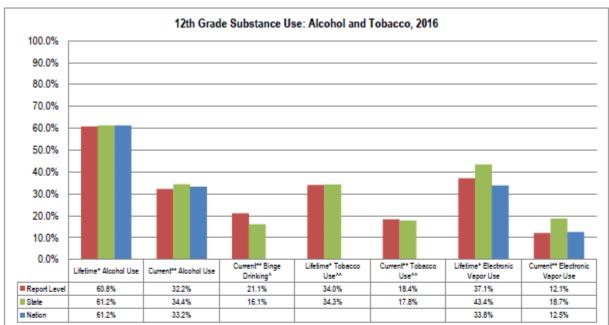
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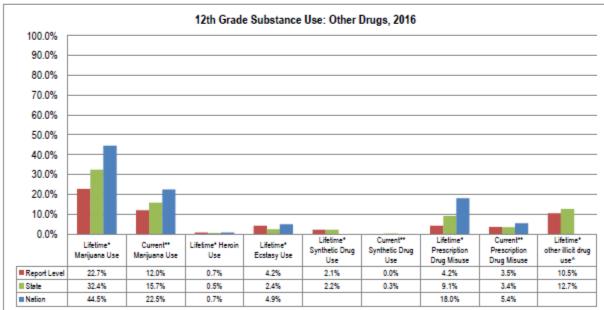
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SHARP | NRPFSS 2016



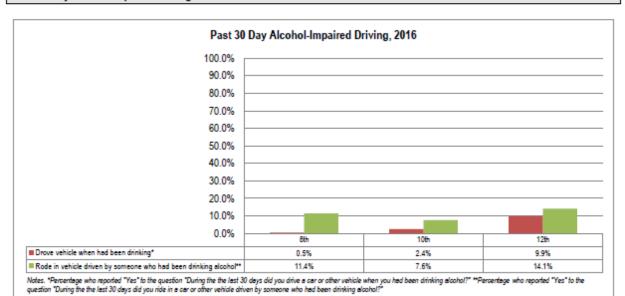
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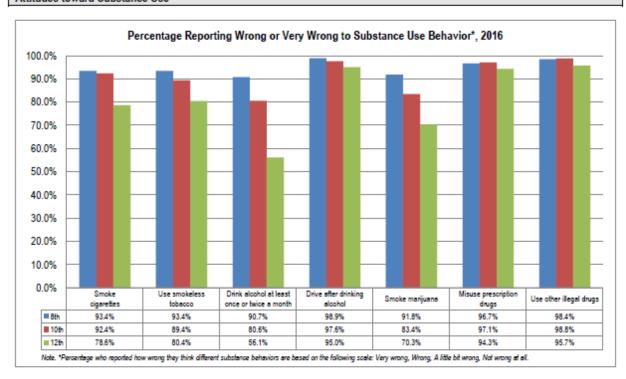
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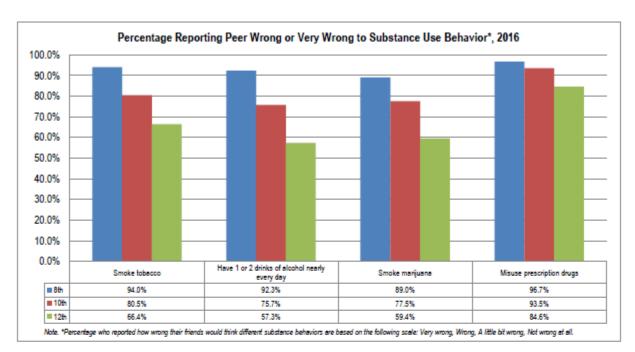
Past 30 Day Alcohol-Impaired Driving

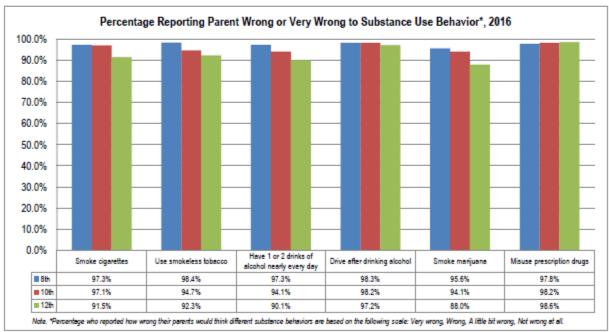


Attitudes toward Substance Use

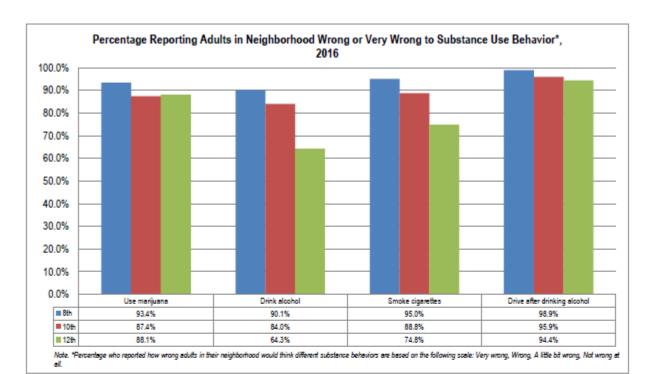


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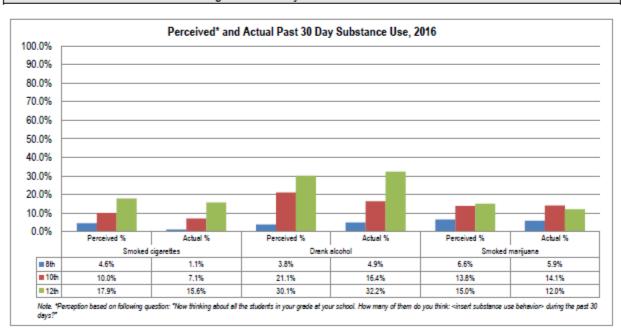




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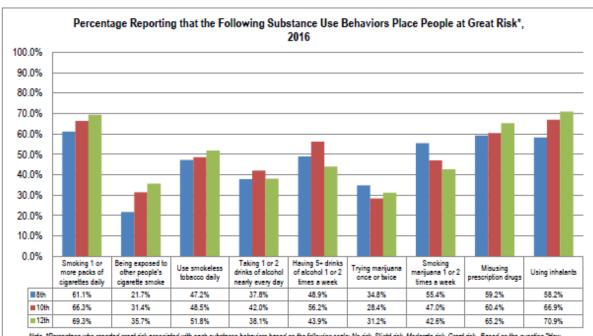


Perceived and Actual Substance Use during the Past 30 Days



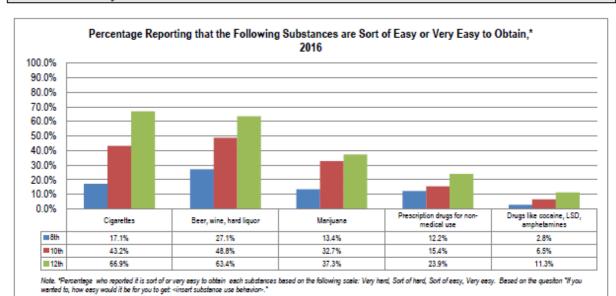
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Perceived Risk from Substance Use



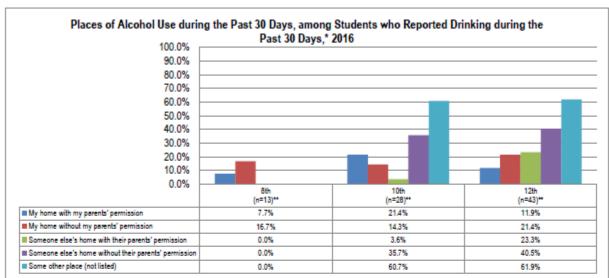
Note. "Percentage who reported great risk associated with each substance behaviors based on the following scale: No risk, Slight risk, Moderate risk, Great risk. Based on the question "How much do you think people risk harming themselves (physically or in other ways) if they: "insert substance use behavior»."

Perceived Availability of Substances

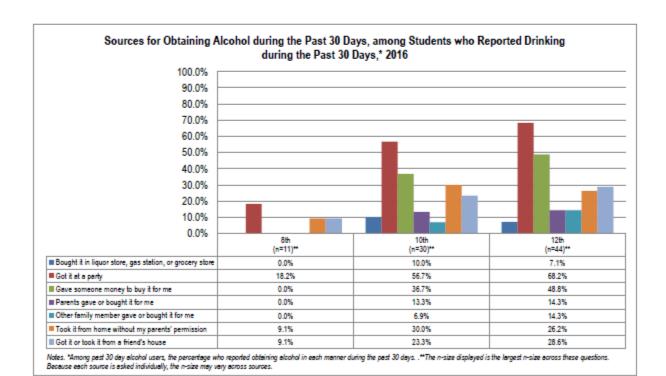


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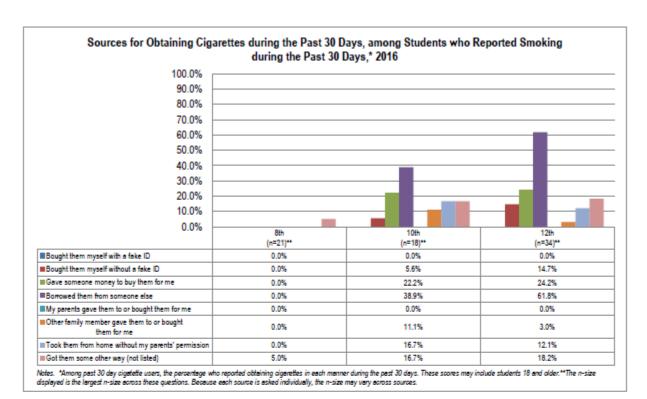
Places and Sources of Substance Use during the Past 30 Days

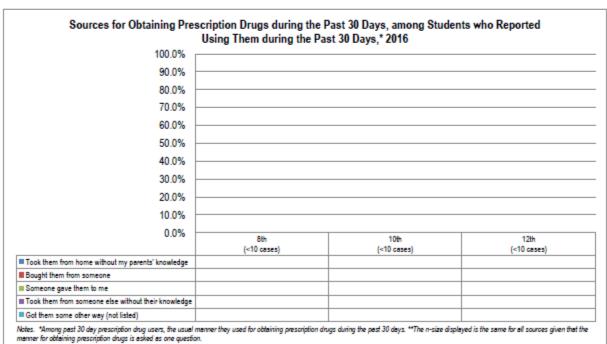


Notes. "Among past 30 day alcohol users, the percentage who reported using alcohol in each manner during the past 30 days. "The n-size displayed is the largest n-size across these questions. Because each place is asked individually, the n-size may vary across places.



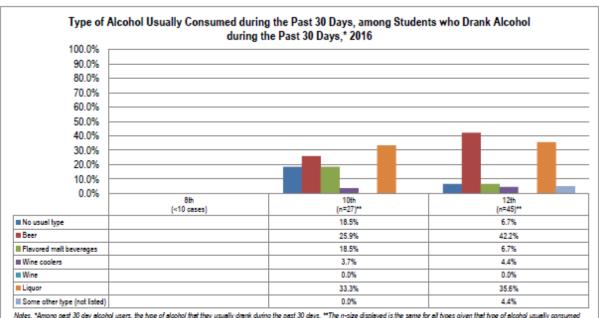
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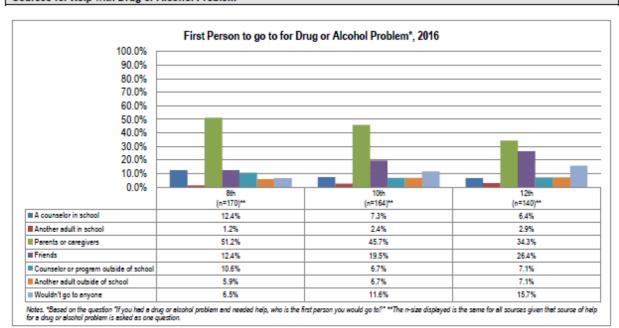
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Types of Alcohol Used Among Those Who Used Alcohol during the Past 30 Days



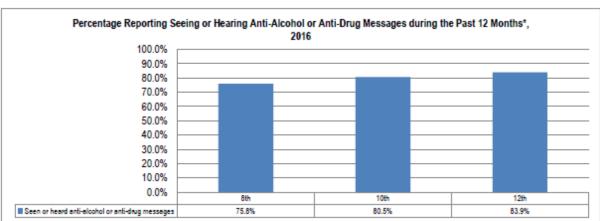
Notes. "Among pest 30 day alcohol users, the type of alcohol that they usually drank during the pest 30 days. "The n-size displayed is the same for all types given that type of alcohol usually consumed is asked as one question.

Sources for Help with Drug or Alcohol Problem



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Anti-Alcohol and Anti-Drug Message Awareness

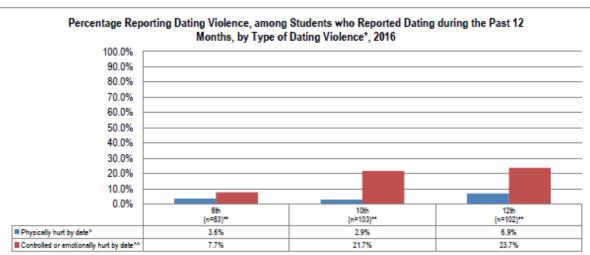


Notes. "Percentage who reported "Yes" to the question "in the past 12 months, have you seen or heard any anti-alcohol or anti-drug messages on TV, the internet, the radio, or in newspapers or magazines?"

Violence, Bullying, and Mental Health

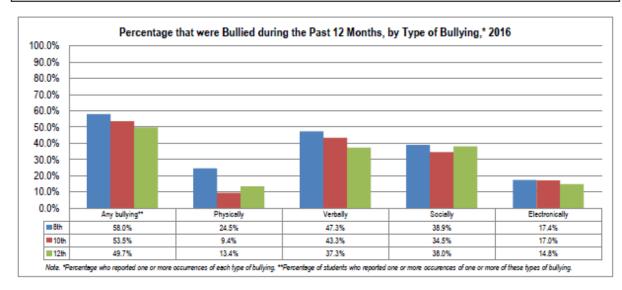
This section contains information on dating violence, bullying, anxiety, depression, and suicide among 8^{th} , 10^{th} , and 12^{th} grade students in Nebraska. In addition, there is information on sources for help with depression and suicide ideation and attitudes toward the future.

Dating Violence during the Past 12 Months



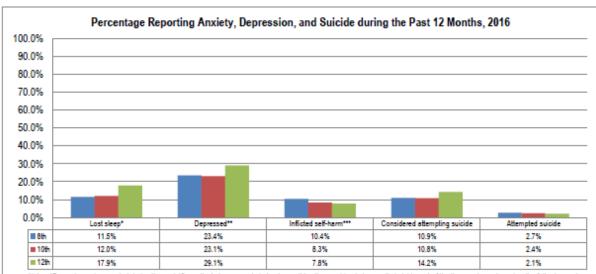
Notes. "Among students that dated or went out with anyone during the past 12 months, the percentage who reported experiencing each type of dating violence. "Percentage who reported "Yes" to the question "During the past 12 months, did someone you were dating or going out with physically hurt you on purpose?" "Percentage who reported one or more occurrences of being purposely controlled or emotional hurt by someone they were dating or going out with during the past 12 months. "The n-size displayed is the largest n-size across these questions. Because each type is asked individually, the n-size may very across types.

Bullying during the Past 12 Months



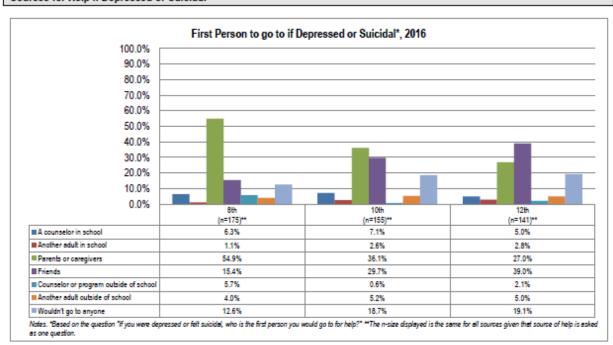
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Anxiety, Depression, and Suicide during the Past 12 Months



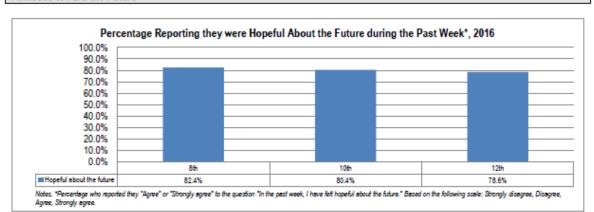
Notes. "Percentage who reported during the past 12 months being so womied about something they could not sleep well at night most of the time or always based on the following scale: Never, Rarely, Sometimes, Most of the time, Always. "Percentage who reported "Yes" to the question "During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?" ""Percentage who reported "Yes" to the question "During the past 12 months, did you hurt or injure yourself on purpose without wanting to die?"

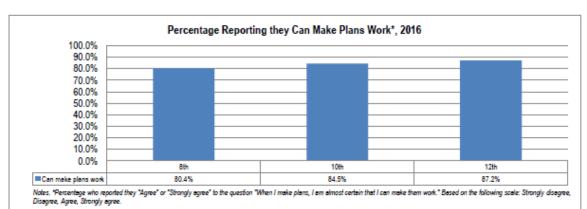
Sources for Help if Depressed or Suicidal



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Attitudes toward the Future

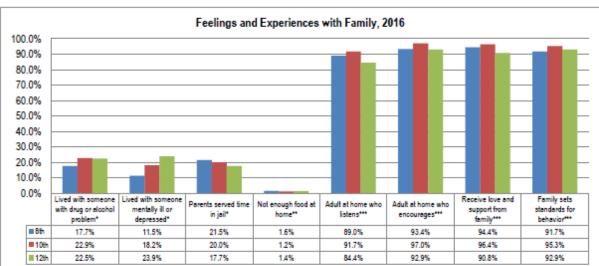




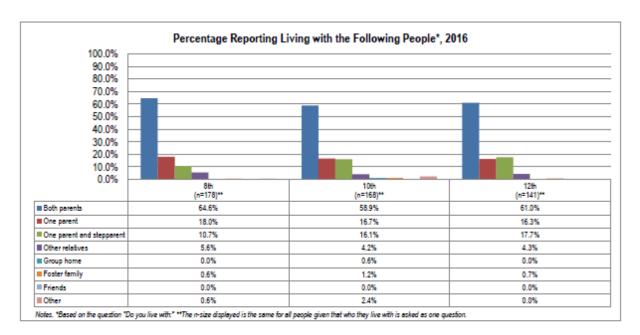
Feelings and Experiences at Home, School, and in the Community

This section contains information on feelings and experiences with family, at school, and in the community for 8th, 10th, and 12th grade students in Nebraska.

Feelings and Experiences with Family

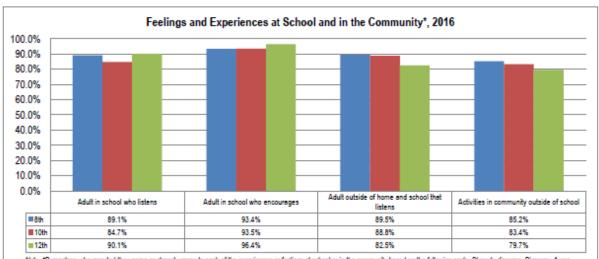


Note. "Percentage who reported Yes" to the experience with family based on the following scale: Yes, No, Not sure. ""Percentage who reported during the past 30 days they went hungry because there was not enough food in their home most of the time or always based on the following scale: Never, Rarely, Sometimes, Most of the time, Always. ""Percentage who reported they agree or strongly agree to the experience or feeling with family based on the following scale: Strongly disagree, Disagree, Agree, Strongly agree.



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Feelings and Experiences at School and in the Community



Tips for Using the NRPFSS Results

As a valued stakeholder in your community, you play an important role in prevention by teaching skills, imparting knowledge, and in helping to establish a strong foundation of character and values based on wellness, including prevention of substance use, suicide, and other risky behaviors. Preventing mental and/or substance use disorders and related problems in children, adolescents, and young adults is critical to promoting physical health and overall wellness.

There are a variety of strategies (or interventions) that can be used to increase protective factors and reduce the impact of risk factors. Prevention in schools is often completed through educational programs and school policies and procedures that contribute to the achievement of broader health goals and prevent problem behavior.

Prevention strategies typically fall into two categories:

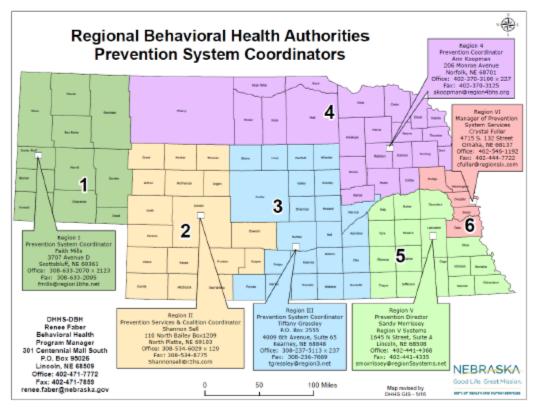
Environmental Strategies

- These strategies effect the entire school environment and the youth within it.
 - An example of an environmental strategy would be changing school policy to not allow athletes to play if they are caught using substances.

Individual Strategies

- These strategies target individual youth to help them build knowledge, wellness, and resiliency.
 - An example of an individual strategy would be providing a curriculum as part of a health class about the harms of substances.

If you would like to implement strategies in your school or community, please contact your regional representative as shown on the map below.



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You may also wish to do your own research. The following websites provide listings of evidence-based practices:

· The National Registry of Evidence-based Programs and Practices (NREPP)

- This is a searchable online evidence-based repository and review system designed to provide the public with reliable information on more than 350 mental health and substance use interventions that are available for implementation.
- Website: http://nrepp.samhsa.gov/landing.aspx

The Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Model Programs Guide (MPG)

- This contains information about evidence-based juvenile justice and youth prevention, intervention, and reentry programs. It is a resource for practitioners and communities about what works, what is promising, and what does not work in juvenile justice, delinquency prevention, and child protection and safety.
- Website: https://www.ojidp.gov/mpg/

. The Suicide Prevention Resource Center

- This has a variety of suicide prevention resources available.
- Website: http://www.sprc.org/

In accordance with LB923, public school staff in Nebraska are required to complete at least 1 hour of suicide awareness and prevention training each year. To learn more, visit the Nebraska Department of Education website at https://www.education.ne.gov/Safety/index.html. Resources on Bullying Prevention and Suicide Prevention are listed.

A variety of print materials on behavioral health topics including depression, trauma, anxiety, and suicide are available from the Substance Abuse and Mental Health Services Administration (SAMHSA). Materials include toolkits for school personnel, educational fact sheets for parents and caregivers, wallet cards and magnets with the National Suicide Prevention Lifeline. The direct link to the SAMHSA store is https://store.samhsa.gov/home.

Another resource for kids, teens, and young adults is the **Boys Town National Hotline**, specifically the **Your Life Your Voice campaign**. Wallet cards and other promotional materials are available at no cost for distribution to students, school staff, parents, etc. http://www.yourlifeyourvoice.org/Pages/home.aspx. Remember, talking about suicide with a student does not put an idea of attempting suicide in a student's mind.

Additional contacts for tips on data use and prevention resources can be found in Appendix B.

APPENDIX A: Trend Data

Outcomes	Definition	Grade 8							Grade 10								Grade 12						
		2003	2005	2007	2010	2012	2014	2016	2003	2005	2007	2010	2012	2014	2016	2003	2005	2007	2010	2012	2014	2016	
	Alcohol	41.9%	60.2%	31.7%	34.1%	22.9%	19.2%	15.7%	66.3%	70.6%	70.1%	52.7%	42.9%	40.5%	40.6%	89.3%	81.0%	76.4%	70.1%	67.7%	68.8%	60.8%	
	Cigarettes	34.4%	55.0%	19.8%	14.3%	18.2%	10.0%	9.7%	53.9%	59.1%	27.1%	27.4%	27.3%	26.0%	18.2%	74.7%	67.9%	32.7%	42.7%	36.9%	44.4%	30.9%	
	Smokeless tobacco	14.4%	18.1%	5.6%	7.6%	3.4%	4.9%	1.6%	27.5%	27.9%	20.8%	12.3%	16.2%	13.2%	10.7%	46.3%	50.9%	27.6%	34.0%	22.3%	26.2%	14.9%	
	Marijuana ¹	18.7%	45.0%	12.3%	6.8%	15.7%	8.8%	9.2%	36.3%	35.8%	15.0%	14.2%	15.1%	20.0%	21.9%	42.4%	50.0%	15.3%	26.3%	22.3%	24.6%	22.7%	
	LSD/other psychedelics	0.8%	2.4%	0.0%	0.4%	1.1%	0.4%	0.0%	5.8%	2.9%	3.4%	1.8%	1.4%	1.0%	2.4%	7.5%	1.7%	1.9%	2.5%	4.5%	1.2%	3.5%	
	Cocaine/crack	1.7%	1.2%	0.0%	0.0%	0.0%	0.4%	0.0%	6.7%	2.9%	2.0%	0.7%	0.0%	1.5%	0.0%	1.2%	6.9%	1.9%	1.7%	2.5%	0.0%	2.8%	
	Meth ²	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%	7.7%	4.3%	1.4%	0.7%	0.7%	1.0%	0.0%	6.2%	15.5%	1.9%	1.7%	0.6%	0.6%	1.4%	
	Inhalants	8.9%	14.5%	4.3%	6.1%	3.9%	3.5%	3.8%	7.8%	6.0%	6.1%	8.0%	1.4%	5.7%	0.6%	10.4%	5.2%	1.9%	5.8%	5.1%	1.2%	4.2%	
	Steroids	NA	2.4%	0.0%	0.4%	0.6%	0.4%	0.5%	NA	0.0%	1.4%	0.0%	0.7%	1.0%	0.0%	NA	0.0%	0.0%	0.8%	1.3%	0.0%	0.0%	
	Other performance- enhancing drugs	NA	1.2%	0.0%	1.1%	0.0%	0.0%	0.0%	NA	4.4%	11.6%	4.0%	5.0%	1.5%	0.0%	NA	14.0%	4.5%	6.6%	1.9%	2.9%	0.7%	
	Prescription drugs ³	NA	7.2%	3.1%	1.4%	0.6%	0.4%	2.2%	NA	13.0%	7.5%	5.5%	3.6%	2.6%	3.5%	NA	14.0%	5.1%	8.3%	7.6%	6.4%	4.2%	
	Non-prescription drugs ⁴	NA	NA	2.5%	1.4%	1.1%	0.4%	1.6%	NA	NA	3.4%	1.8%	3.6%	2.1%	2.9%	NA	NA	4.5%	5.0%	1.9%	2.9%	5.6%	
	Alcohol	18.9%	31.7%	10.4%	9.7%	6.7%	4.6%	4.9%	45.2%	29.0%	29.0%	18.6%	18.0%	20.0%	16.4%	64.3%	41.4%	43.9%	40.4%	38.2%	40.9%	32.2%	
	Binge drinking	NA9	NA9	6.2%	2.9%	4.5%	1.9%	1.1%	NA9	NA9	19.3%	11.0%	11.4%	11.8%	7.6%	NA9	NA9	27.6%	32.8%	28.7%	30.0%	21.1%	
	Cigarettes	13.7%	26.3%	8.0%	3.9%	8.3%	3.8%	1.1%	32.0%	29.9%	16.0%	9.2%	16.1%	11.2%	7.1%	41.1%	28.6%	16.0%	23.7%	21.0%	24.6%	15.6%	
	Smokeless tobacco	5.6%	9.6%	2.5%	2.5%	2.2%	3.4%	1.6%	12.0%	20.9%	8.3%	5.9%	14.5%	8.7%	7.1%	14.9%	29.8%	15.4%	15.8%	13.5%	21.3%	9.2%	
	Marijuana ¹	9.7%	20.7%	6.2%	2.5%	11.2%	4.2%	5.9%	25.8%	19.1%	10.9%	4.0%	7.2%	10.3%	14.1%	18.8%	21.1%	5.1%	11.3%	9.6%	8.8%	12.0%	
	Prescription drugs ³	NA	7.2%	1.9%	0.4%	0.0%	0.0%	0.5%	NA	5.9%	2.7%	2.9%	1.4%	2.1%	1.8%	NA	5.3%	1.9%	2.9%	3.2%	0.6%	3.5%	
Past 30 Day Perceived Substance Use	Other illegal drugs	NA ⁵	NA ⁵	NA ⁵	1.8%	4.2%	2.4%	0.9%	NA ⁵	NA ⁵	NA ⁵	6.4%	9.8%	6.2%	4.0%	NA⁵	NA ⁵	NA ⁵	8.9%	9.0%	7.1%	7.3%	
	Smoked cigarettes	23.8%	44.4%	16.5%	11.4%	13.3%	8.1%	5.5%	24.2%	39.1%	15.0%	9.1%	6.4%	11.4%	7.7%	29.3%	36.2%	11.5%	12.3%	8.9%	8.8%	7.9%	
	Drank alcohol	35.8%	39.0%	26.8%	21.4%	16.0%	12.1%	8.8%	15.2%	27.5%	12.2%	12.4%	7.0%	7.3%	10.6%	20.4%	17.2%	8.9%	9.1%	5.7%	7.1%	2.9%	
	Drank alcohol regularly	2.4%	7.3%	6.1%	1.8%	1.7%	0.4%	0.0%	2.0%	1.4%	0.7%	0.4%	0.0%	0.5%	0.6%	2.2%	3.4%	0.0%	2.5%	1.3%	0.6%	0.0%	
	Smoked marijuana	11.5%	36.6%	9.8%	4.6%	10.0%	3.9%	5.0%	14.0%	17.4%	9.5%	2.5%	4.3%	5.7%	6.5%	5.4%	20.7%	0.6%	3.3%	3.8%	3.6%	5.1%	

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	Definition	Grade 8							Grade 10							Grade 12						
Outcomes		2003	2005	2007	2010	2012	2014	2016	2003	2005	2007	2010	2012	2014	2016	2003	2005	2007	2010	2012	2014	2016
	Grades were A's and B's	NA	NA	79.8%	84.5%	78.9%	84.8%	75.7%	NA	NA	79.5%	82.2%	80.6%	76.0%	73.8%	NA	NA	86.6%	81.1%	80.0%	78.7%	77.6%
	Interesting courses	28.2%	41.5%	45.7%	32.7%	36.3%	33.5%	31.2%	17.5%	44.9%	27.7%	26.1%	31.7%	34.0%	30.2%	17.9%	34.5%	38.9%	36.2%	36.3%	34.9%	35.7%
	Learning important for future	66.1%	68.7%	66.7%	75.1%	76.9%	65.8%	75.0%	51.0%	68.1%	57.8%	55.1%	58.2%	53.8%	59.3%	38.9%	63.8%	52.6%	49.0%	46.3%	41.5%	45.5%
	Enjoy being in school	38.1%	34.1%	46.7%	42.0%	51.6%	43.4%	44.1%	33.7%	39.7%	39.9%	30.0%	34.8%	33.2%	40.1%	33.0%	48.3%	40.1%	26.8%	37.7%	36.3%	40.6%
	Teacher acknowledgement ⁶	NA	NA	NA	74.6%	76.2%	74.8%	82.1%	NA	NA	NA	66.7%	68.8%	69.9%	72.4%	NA	NA	NA	71.1%	78.1%	70.0%	75.9%
	Chances to get involved ⁶	92.0%	85.4%	93.9%	91.9%	92.8%	94.6%	92.4%	95.2%	91.3%	94.6%	96.0%	95.1%	92.2%	92.9%	88.9%	86.2%	97.5%	89.3%	93.8%	95.3%	93.6%
	Chances to talk with teachers ⁶	87.1%	78.3%	83.6%	82.4%	87.3%	82.7%	87.5%	73.1%	82.4%	83.8%	83.9%	86.5%	85.0%	84.1%	80.8%	82.8%	91.8%	83.9%	90.0%	90.6%	87.9%
	Feel safe ⁶	NA	NA	NA	93.0%	88.8%	91.5%	89.7%	NA	NA	NA	91.3%	88.7%	87.0%	88.2%	NA	NA	NA	93.4%	95.6%	87.6%	92.9%
	Okay to cheat ⁶	21.4%	37.3%	24.4%	15.9%	14.9%	9.7%	14.1%	48.5%	51.5%	34.5%	32.0%	17.6%	21.4%	26.6%	46.5%	39.7%	43.9%	34.3%	32.5%	21.3%	25.7%
	Parents know where I am ^{6,7}	88.5%	78.9%	92.1%	89.5%	87.4%	94.5%	88.4%	85.4%	89.4%	88.3%	87.6%	87.1%	88.1%	89.3%	80.6%	87.5%	82.2%	79.6%	87.1%	90.1%	91.5%
	Clear substance use rules ⁶	92.6%	81.9%	93.3%	89.7%	90.2%	93.7%	89.5%	90.3%	91.2%	89.7%	92.0%	82.7%	91.2%	91.1%	82.8%	89.5%	84.7%	86.3%	88.4%	87.1%	85.0%
	Help for personal problems ^{6,7}	77.9%	71.2%	79.8%	81.5%	82.8%	87.4%	89.5%	72.8%	75.0%	72.1%	79.1%	81.9%	80.8%	89.9%	72.0%	80.7%	76.9%	71.5%	83.9%	87.1%	82.7%
	Ask about homework ^{6,7}	87.6%	82.2%	84.0%	92.4%	89.1%	88.6%	90.1%	79.6%	76.5%	85.7%	83.9%	83.3%	81.9%	91.7%	65.6%	70.2%	70.7%	68.6%	76.8%	77.1%	75.7%
	Important to be honest with parents ^{6,7}	93.7%	83.3%	93.9%	91.6%	91.3%	92.5%	89.6%	90.4%	79.4%	87.1%	89.1%	87.7%	92.7%	97.0%	91.8%	93.0%	84.1%	82.1%	85.7%	90.6%	89.4%
	Discussed dangers of alcohol ⁷	NA	NA	NA	50.9%	49.1%	51.4%	42.9%	NA	NA	NA	51.3%	49.3%	53.1%	53.5%	NA	NA	NA	43.5%	48.7%	47.5%	35.9%
	Hard to buy alcohol from store	NA	NA	NA	80.7%	84.7%	82.7%	84.1%	NA	NA	NA	76.4%	82.2%	76.3%	86.3%	NA	NA	NA	75.9%	83.2%	86.8%	80.3%
	Caught by police if drinking ^{6,8}	52.0%	34.2%	49.4%	NA	52.3%	59.2%	64.8%	31.7%	44.8%	26.3%	NA	33.8%	41.1%	61.2%	39.6%	26.3%	32.1%	NA	39.4%	36.5%	59.4%
	Caught by police if drinking and driving ^{6,8}	NA	NA	NA	NA	72.7%	79.2%	77.5%	NA	NA	NA	NA	55.9%	64.2%	80.0%	NA	NA	NA	NA	59.4%	63.5%	78.3%
	Caught by police if smoking marijuana ^{6,8}	50.8%	32.9%	67.5%	NA	60.0%	68.8%	70.3%	27.7%	35.8%	35.8%	NA	41.2%	51.1%	61.2%	27.4%	35.1%	40.8%	NA	40.0%	39.4%	60.6%
	Adults I can talk to ⁶	69.1%	52.0%	70.9%	NA	67.3%	70.3%	77.5%	58.4%	64.2%	60.0%	NA	71.0%	67.2%	66.9%	60.2%	63.2%	69.4%	NA	74.4%	66.9%	68.6%
	Okay to steal ⁶	10.3%	31.3%	8.8%	5.3%	7.7%	2.7%	4.9%	19.2%	24.6%	9.0%	6.5%	7.7%	7.3%	4.1%	14.4%	12.1%	7.0%	9.5%	6.9%	3.0%	4.3%
	Okay to beat people up ⁶	41.3%	65.1%	29.2%	28.5%	26.1%	22.7%	20.7%	61.2%	59.4%	44.8%	39.3%	24.1%	31.3%	26.6%	53.1%	63.8%	36.3%	35.5%	41.3%	28.6%	36.4%
	Gang involvement	8.0%	15.9%	9.1%	5.1%	8.3%	3.9%	2.2%	8.7%	16.7%	8.8%	4.4%	6.2%	2.7%	3.6%	7.3%	8.6%	5.8%	2.9%	7.1%	4.4%	2.8%

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Notes

*This indicates that there were less than 10 cases.

**This indicates that the criteria for a report were not met.

1Prior to 2010, the question asked students if they had "used marijuana (grass, pot) or hashish (hash, hash oil)." In 2010, the wording was changed to "used marijuana."

²Prior to 2010, the question asked students if they had "laken 'meth' (also known as 'crank', 'crystal', or 'ice'." In 2010, the wording was changed to "used methamphetamines (meth, speed, crank, crystal meth, or ice)."

³Prior to 2010, the question asked students if they had "laken 'meth' (also known as 'crank', 'crystal, or 'ice'." In 2010, the wording was changed to "used methamphetamines (meth, speed, crank, crystal meth, or ice)."

³Prior to 2010, the question asked students if they had "used prescription drugs (such as Valium, Xanax, Ritalin, Adderall, Oxycotin, or sleeping pills without a doctor telling you to take them." In 2010, the wording was changed to "used prescription drugs (such as Valium, Xanax, Ritalin, Adderall, Oxycotin, vicodin, or Percocet) without a doctor telling you to take them."

Prior to 2010, the question asked students if they had "used a non-prescription cough or cold medicine (robos, DMX, etc.) to get high and not for medical reasons." In 2010, the wording was changed to "used a nonprescription cough or cold medicine (robo, robo-tripping, DMX) to get high and not for medical reasons."

In 2010, this question was changed significantly. As a result, trend data are not available prior to 2010.

Prior to 2016, the question was asked using the following scale: NOI, no, yes, YESI. In 2016, the question scale changed to the following: Strongly disagree, Disagree, Agree, Strongly agree.

Prior to 2016, the question asked students about their "parents" or "mom or dad". In 2016, the wording was changed to "parents or caregivers".

Prior to 2016, the question asked students "Would a kid be caught by police, if he or she:". In 2016, the wording was changed to "you would be caught by the police if you.".

Prior to 2007, the question asked students about binge drinking "during the past 2 weeks". In 2007, the wording was changed to ask students about binge drinking "during the past 2 weeks". In 2007, the wording was changed to ask students about binge drinking "during the past 2 weeks". In 2007, the wording was changed to ask students about binge drinking "during the past 2 weeks". In 2007, the wording was changed to ask students about binge drinking "during the past 2 weeks". In 2007, the wording was changed to "parents or caregivers". trend data are not available prior to 2007.

Note. The number of students and/or school districts included from year to year could vary due to schools participating in some administrations and not others. As a result, these trend findings should be approached with some caution.

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APPENDIX B: Contacts for Prevention

Division of Behavioral Health

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Tobacco Free Nebraska

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