Community Health Needs Assessment

Box Butte General Hospital

2017

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Letter from the CEO

Box Butte General Hospital is committed to serving the community and enhancing the quality of life for individuals, families, and communities we serve. Our goal, with the attached community health needs assessment, is to better understand the range of issues affecting our health. We look forward to working with you and our community partners to optimize health and continue to meet our mission, which is *"To Lead and Innovate in Healthcare Delivery and Community Wellness."*

The significance of better understanding our community's needs was highlighted with the Patient Protection and Affordable Care Act requirements passed in March 2010. New requirements for tax-exempt hospitals include that we regularly conduct a community health needs assessment to adopt implementation strategies to address applicable need detected during the assessment process. The Rural Nebraska Healthcare Network worked together with Panhandle Public Health District to complete the Mobilizing for Action through Planning and Partnership for each of the Nebraska Panhandle hospital services areas during 2017. The results are summarized in the attached report and align with the priorities in the regional Panhandle Community Health Improvement Plan, December 2017-December 2020.

A special thank you to the community members who took the time to attend a focus group, listened to presentations on the process, or participated in stakeholder meetings. It is our desire that our community be healthy today and even healthier tomorrow.

Lori Mazanec, ACHE

Chief Executive Officer

About Box Butte General Hospital

Box Butte General Hospital is the successor of St. Joseph Hospital, taking over the mission of serving the health care needs of Box Butte County and the surrounding area in 1976. The hospital is a non-profit facility, owned by the citizens of Box Butte County, dedicated to serving the needs of residents and visitors alike.

BBGH is accredited by The Joint Commission, the nation's predominant standards-setting and accrediting body in health care since 1976.

Box Butte General Hospital, a Critical Access Hospital, recently completed a new addition and renovation including 25-beds for all patient types - acute, observation, swing, intensive care and OB, with a staff of nearly 300 employees providing a variety of services:

- 24/7 Emergency Department
- Orthopedic Surgery
- Laboratory
- Medical Imaging (X-ray, CT, MRI, Nuclear Medicine, Mammography, Advanced Ultrasound Imaging, Bone Density/DEXA Scan, Fluoroscopy)
- Diabetic Education
- Dialysis
- Obstetrics
- Oncology
- Rehabilitation (including Cardiac-Pulmonary Rehab, Occupational Therapy, Physical Therapy, Sports Rehab and Speech Therapy)
- Respiratory Therapy
- ElectroDiagnostics
- Wound Care
- Swing Bed
- Behavioral Health

BBGH offers a variety of outpatient services through its Multi-Specialty Clinic. Current specialties offered include: Cardiology; ENT; General Surgery; Gynecology; Oncology; Ophthalmology; Orthopedic Surgery; Oral Surgery; Physiatry; Urology; Behavioral Health; and Podiatry.

The Hospital also has three Rural Health Clinics. Named, Greater Nebraska Medical & Surgical Services (GNMSS), one of the clinics is in the Medical Arts Plaza in Alliance and includes Family Medicine and Orthopedic Surgery & Sports Medicine. Two satellite GNMSS clinics are located in Hemingford and Hyannis: the Hemingford Clinic and the Hyannis Clinic (located in the Cow Country Health Center).

Introduction

Panhandle Public Health District (PPHD) is accredited by the Public Health Accreditation Board (PHAB), which requires the health department to conduct a comprehensive Nebraska Panhandle Community Health Needs Assessment (CHNA) every five years. However, Internal Revenue Service (IRS) regulations require tax-exempt hospitals to conduct a CHNA every three years. In 2014, PPHD made the decision to collaborate with hospitals on the CHNA process by syncing the health department process with the hospital process, meaning that PPHD completes a CHNA every three years, in tandem with area hospitals. Thus, PPHD now facilitates a joint CHNA and planning process with the eight hospitals in the Nebraska Panhandle, all of which are members of the Rural Nebraska Healthcare Network (RNHN).

The purpose of the CHNA process is to describe the current health status of the community, identify and prioritize health issues, better understand the range of factors that can impact health, and identify assets and resources that can be mobilized to improve the health of the community.

Update on Panhandle Public Health District

Scotts Bluff County, previously not a part of PPHD but geographically contiguous with Panhandle Public Health District, joined the District in December 2016. The County was previously served by Scotts Bluff County Health Department (SBCHD). SBCHD is now a department within the district health department. PPHD was approached by the commissioners and retiring health director for Scotts Bluff County Health Department with a request to join PPHD. The addition was completed with approval by PPHD's board of health, as well as approval from each of the county boards for the other 11 counties PPHD serves and the county board for Scotts Bluff. Approval was also received from the Nebraska Department of Health of Health and Human Services. As a department within the district health department, SBCHD maintains its own board of health.

Overview of Mobilizing for Action through Planning and Partnerships (MAPP)

Mobilizing for Action through Planning and Partnerships (MAPP), a partnership-based framework, has been used for the CHNA and Community Health Improvement Plan (CHIP) development process in the Panhandle since 2011, and continued to be used for this round of the CHNA and CHIP. MAPP emphasizes the partnership with all sectors of the public health system to evaluate the health status of the region it serves, identify priority areas, and develop plans for implementation.

The MAPP model has six key phases:

1. Organize for success/Partnership development
2. Visioning
3. Four MAPP assessments
    a. Community Themes and Strengths Assessment (CTSA)
    b. Local Public Health System Assessment
    c. Forces of Change Assessment
    d. Community Health Status Assessment
4. Identify strategic issues
5. Formulate goals and strategies
6. Take action (plan, implement, and evaluate)

This document encompasses phases one through four.

MAPP Phase 1: Organize for Success/Partnership Development

A MAPP Steering Committee was formed in 2014, made up of representatives from each of the eight Panhandle hospitals (see list of members in Appendix A). Committee members provide guidance throughout the MAPP process and are charged with reviewing data and progress on the chosen priority areas, using quality improvement to modify implementation plans as needed, and sharing results with stakeholders.

Two new representatives joined the committee in 2017: a representative from the Panhandle Partnership, serving as a representative of a variety of community-based organizations, and a representative from the local economic development district, Panhandle Area Development District (PADD).

Local Public Health System Collaborative Infrastructures

The Panhandle region enjoys a robust, well-established collaborative infrastructure, which provides the foundation for the local public health system communication and engagement process. This infrastructure includes:

- **Rural Nebraska Healthcare Network (RNHN)** which includes all eight hospitals in the region, all rural health clinics, and assisted living/nursing homes that are a part of the RNHN member systems, including the Trauma Network. See Appendix B for a list of RNHN members.
- **Public health partnerships** including collaborative work groups such as the Panhandle Regional Medical Response System (PRMRS) and Panhandle Worksite Wellness Council (PWWC), as well as the two public health Boards of Health (PPHD and SBCHD), which include elected officials.
- The **Panhandle Partnership** (previously known as the Panhandle Partnership for Health and Human Services [PPHHS]) is a large, not-for-profit organization which promotes collective impact through planning and partnership. This inclusive, membership-based organization has and continues to be an integral part of the regional assessment and planning process. See Appendix C for a list of Panhandle Partnership members.

MAPP Phase 2: Visioning

A formal visioning process was completed on January 19, 2017, at the 2017 Health Summit: For a Healthy, Safe, and Prosperous Panhandle. The Health Summit took place at the Gering Civic Center. This day served as the kick-off for the Panhandle's 2017 Community Health Assessment. PPHD coordinated the Health Summit in partnership with the Panhandle Partnership and the Rural Nebraska Healthcare Network.

Sara Hoover (with PPHD) led the group in a 3-year visioning session using a Technology of Participation (ToP) consensus workshop to establish the collective vision for health in the Panhandle (see Appendix D for the full 2017 Nebraska Panhandle Three-Year Visioning Process).

The main points from the 3-year vision are:

- Culturally Sensitive and Peer-Driven Services
- Environments and Events for Active Living
- Promoting Emotional Resilience
- Creating and Supporting a Culture of Wellness
- Healthy Eating
- Establishing Healthy Habits Early On
- Improving Access
- Community- Oriented Healthcare
- Financing Our Future
- Prevent and Reduce Substance Use

Find the agenda and list of participants from the 2017 Health Summit in Appendices E and F, respectively.

MAPP Phase 3: Four MAPP Assessments

The four MAPP assessments are:

1. The **Community Health Status Assessment** identified priority community health and quality of life issues using health data compiled by PPHD, and incorporated economic and demographic data provided by the Panhandle Area Development District (PADD).
2. The **Community Themes and Strengths Assessment** consisted of focus groups and a survey addressing the community's concerns about what is important, how quality of life is perceived, and the assets that exist and can be used to improve community health.
3. The **Forces of Change Assessment** identified what is occurring, or might occur, that affects the health of the community, as well as the opportunities and threat factors that are currently at play.
4. The **Local Public Health System Assessment** identified the components, activities, competencies, and capacities of the public health system and how the essential services are being provided.

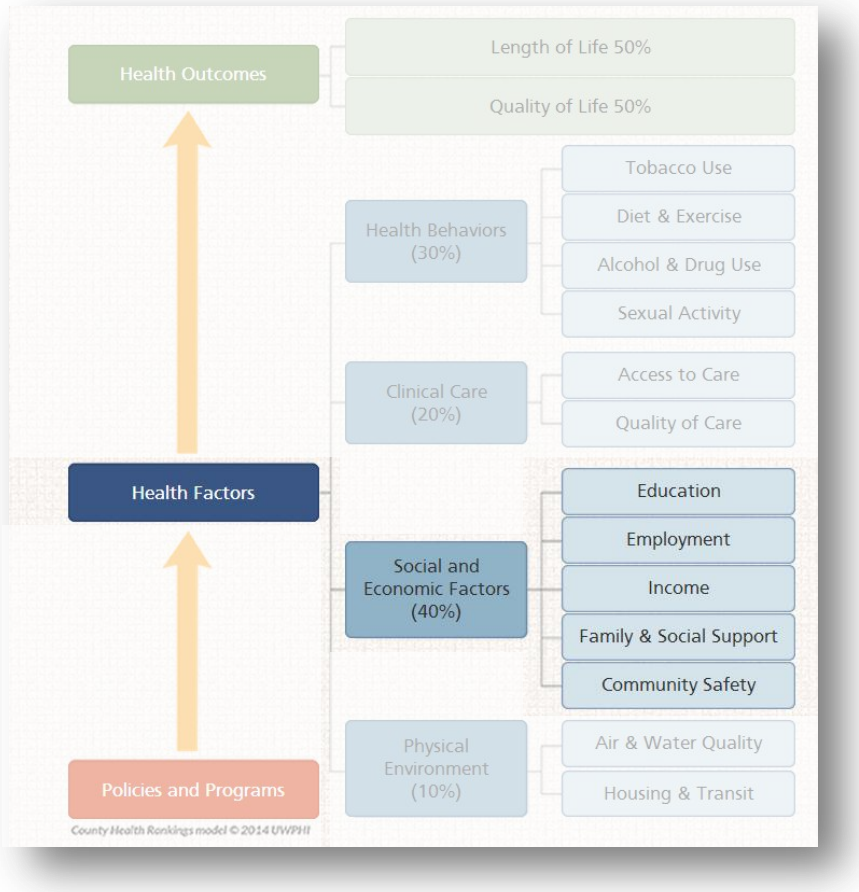
Community Health Status Assessment

Community Profile

Overview

Social and Economic Factors in Population Health

Some of the biggest predictors of health in an individual's life come from social and economic factors. This section addresses what social and economic factors of health such as education, income, and social support look like in the Nebraska Panhandle and what the data indicate about the health of Panhandle citizens.



Key Trends and Patterns

Population Consolidation

One prevalent on going trend is population consolidation, driven by increasing agricultural productivity and the shift towards more information, service, and technology occupations, which tend to be located in urban areas. The City of Alliance and Box Butte County have benefitted from this trend but it has also contributed to population loss in rural areas of that county and surrounding, more rural counties such as Grant.

Decrease in Population

If past trends continue, Grant County is projected to have a 27% decrease of its current population by 2035 and a 40% decrease in its population under 18 by that time. All aspects of community life including business, government, service providers, and schools should plan ahead to deal with a decreased population while also taking steps to make the county attractive places to live to retain population. Rural areas of Box Butte County are more susceptible to this trend as well, while Alliance is positioned to gain or hold its population steady unless shake-ups with major employers change that. It should be noted, however, that incorporated communities, even small ones, are better retaining population than rural areas and may have more potential to slow population loss or make modest gains as other rural Nebraska communities have done in recent years through strong economic and community

development initiatives. Some indications show that Hemingford has been successful in slowing population loss, or event gaining, in recent years.

Aging Population
Another trend that continues is the general aging of the population through both outmigration of youth and aging of the still large baby boom cohorts. The population age 65+ will continue to grow for years to come, resulting in a much higher dependency ratio. For communities in Box Butte and Grant Counties, this means increasing demand for medical and living assistance services as well as a call to get creative about how to engage young adults in the community.

Higher rates of poverty, especially among children and minority populations
Box Butte County has one of the highest overall poverty rates in the state and one of the highest childhood poverty rates. Both of these statistics are likely contributed to by the very high poverty rate for Hispanic and Latino persons (33%), the county's largest minority group. Married couple headed families with children also account for a majority of families in poverty in the county. Efforts to alleviate poverty in the county and better ensure positive health outcomes for low income individuals must consider that youth and minority populations make up an outsized proportion of those in economic hardship.

Communities with larger populations and diversified economies fared better in recent years
Communities which were not dependent upon one employer weathered the recession better than those who had less diverse economies. Box Butte County and Grant County both have industries that have been vulnerable to economic downturns which make up a large part of their workforce. Counties with more diversified economies have tended to fare better in recent years.

Steadily declining labor force
While Grant County has slightly grown its labor force since 2000 and 2010, Box Butte County has seen a decline in its labor force continue steadily since before the recession, through the recession, and continue even while the national economy has recovered. The cause of this decline is not clear, but could be attributed to an aging population or people who, rather than stay in the county to look for other work, leave the county or labor force altogether.

Health Disparities among Lower-Income Levels linked with Health Behaviors
New research is revealing the differences in life expectancy between low and high income earners. Decreasing disparities in life expectancy by income will likely require local efforts to improve health behaviors among low-income people.

Basics

Box Butte County is located at the intersection of US Highway 385, Nebraska highway 71, and the scenic Sandhills byway, Nebraska Highway 2. Major industries in the county are agriculture, manufacturing, and transportation. Alliance, the county seat, and Hemingford, are the only two incorporated communities in the county. The population is concentrated mainly in Alliance, driven by some of the county's largest employers, Burlington Northern Sante Fe Railroad, Box Butte General Hospital, and Parker Hannifin manufacturing. While the population of the county has generally held stable in most recent years, it has historically seen the same patterns of consolidation that rural areas have seen in the Panhandle and across the country. Grant County is a sparsely populated county in the Sandhills of Nebraska on Highway 2, with an estimated 769 people in 2015. Other than its one incorporated community and county seat, Hyannis, it is a beautiful, ranching and agriculture county with abundant natural beauty and solitude.

Box Butte County and Grant County are a part of the larger regional community of the Nebraska Panhandle which also consists of Banner, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux counties.

Quick Facts for Box Butte and Grant Counties

	Box Butte	Grant
Population (2015 ACS Estimates)	11,310	769
Population change (2000-2010)	+7.0%	-7.8%
Incorporated municipalities	2	1
Unemployment Rate (2016 Average)	3.8%	2.4%
Total Land Area	1,075 sq. miles	783 sq. miles

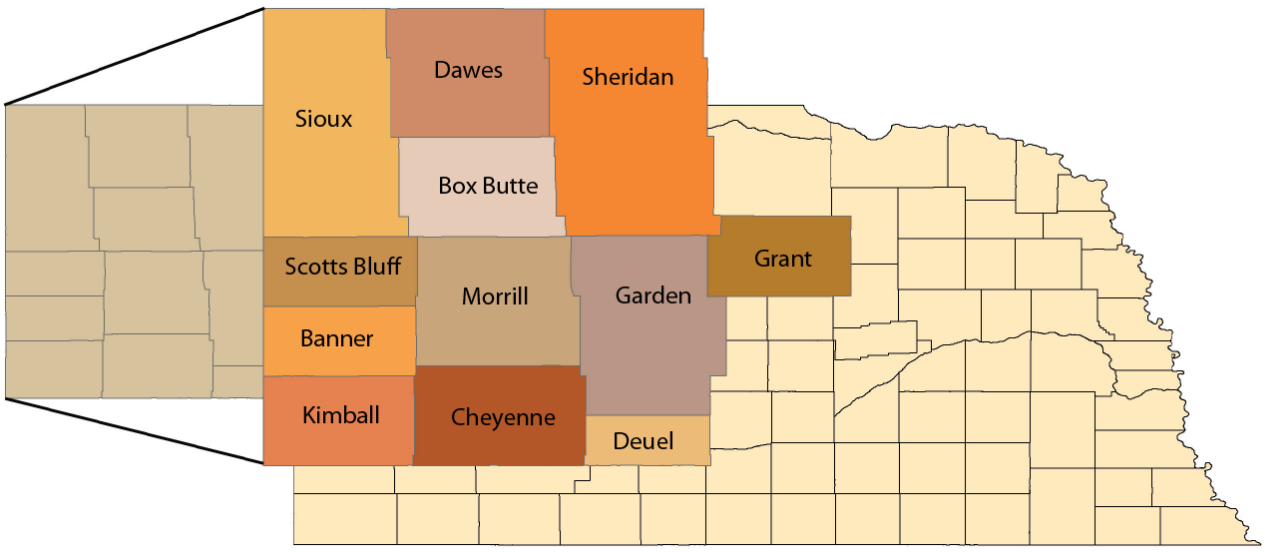


Figure 1: Map of Panhandle Public Health District Region

Population

While the population of Nebraska has been slowly but steadily increasing over the past 60 years, the Panhandle's population peaked in the 1960s. In Box Butte County and Grant County, the population has decreased in recent decades after a significant boost in population in Box Butte County from 1970 to 1980.

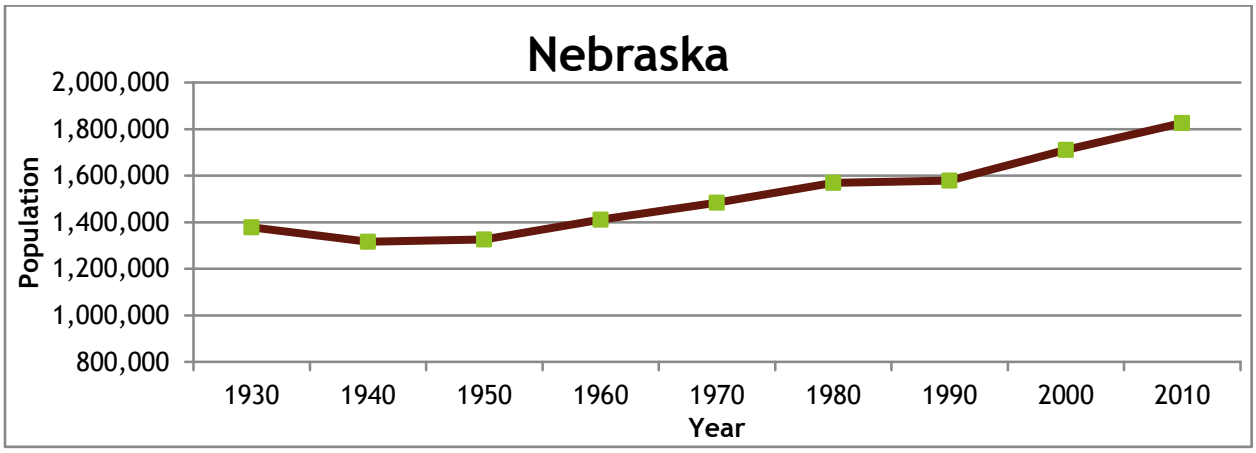


Figure 2 Nebraska population 1930-2010

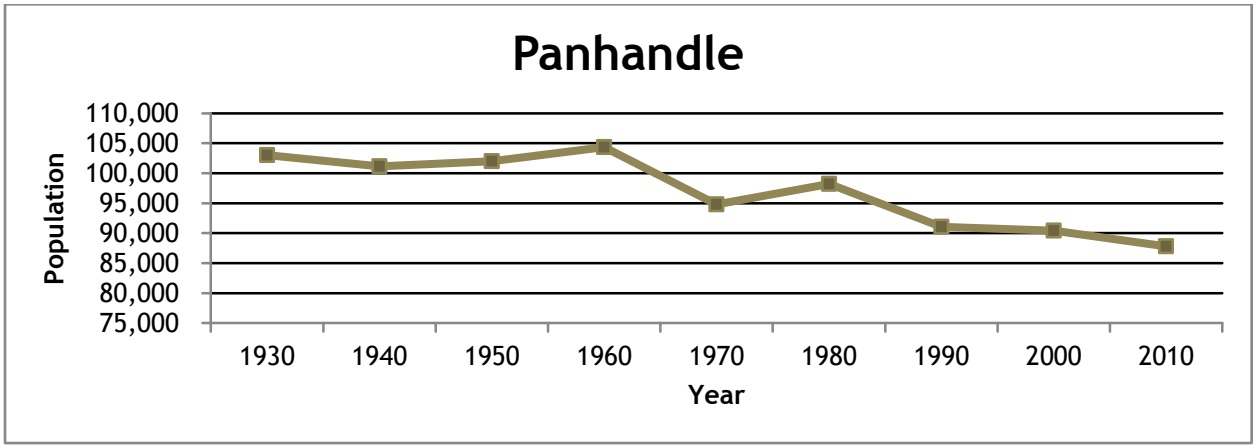
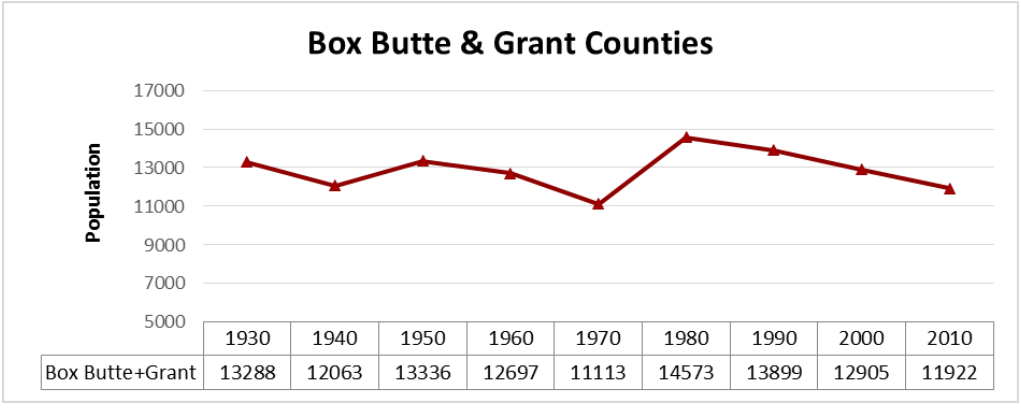


Figure 3: Panhandle population 1930-2010



	1930	1940	1950	1960	1970	1980	1990	2000	2010
Box Butte+Grant	13288	12063	13336	12697	11113	14573	13899	12905	11922

Figure 4: Box Butte and Grant County population 1930-2010

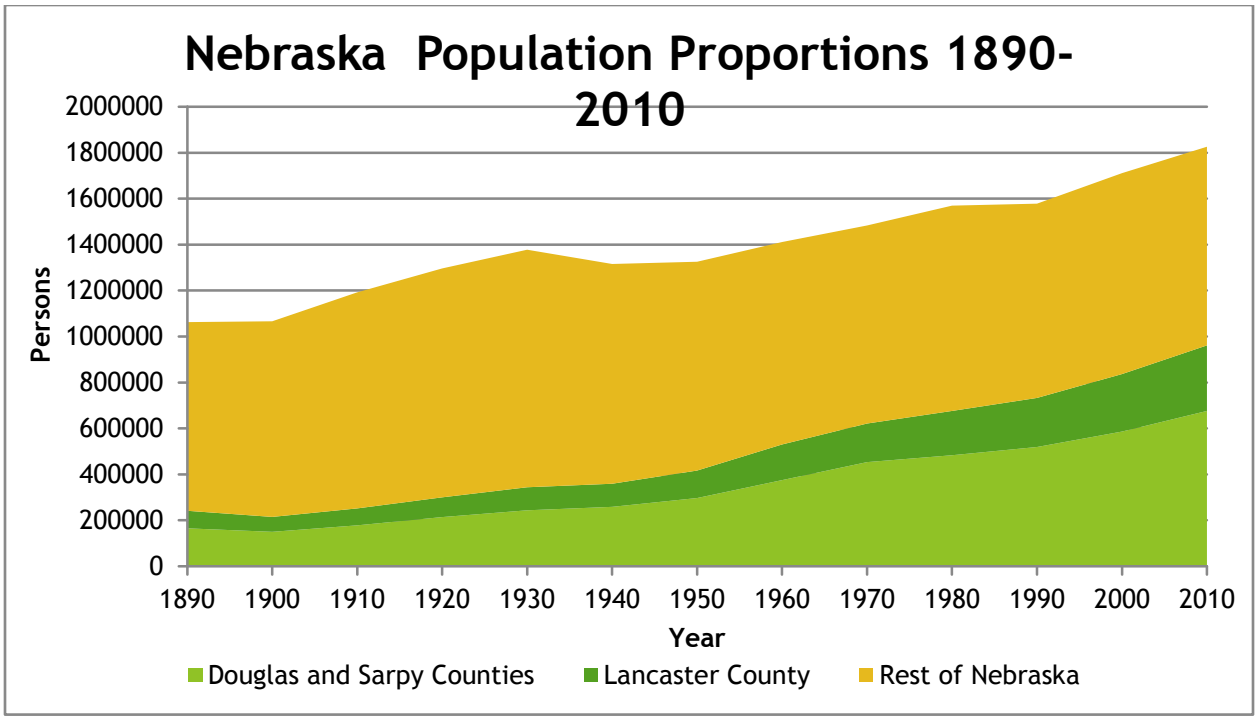


Figure 5 Metropolitan County Share of Nebraska Population

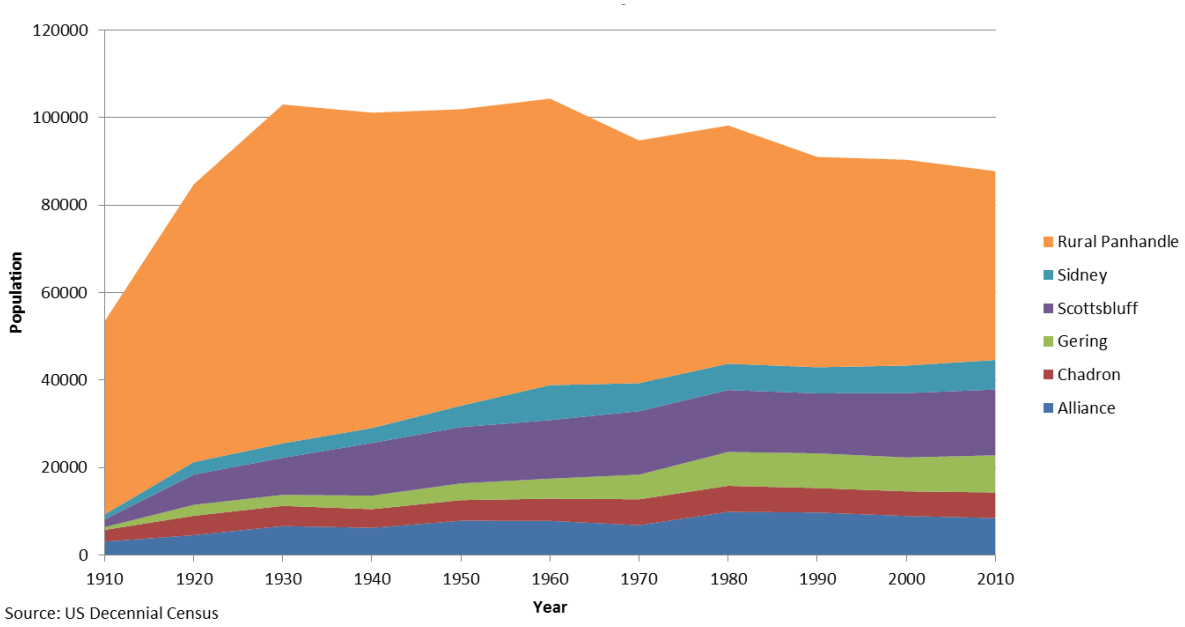
Figure 5 shows how Nebraska's population growth has been concentrated almost entirely in the metropolitan counties of Douglas, Sarpy, and Lancaster in the eastern part of the state. These counties are home to the Omaha metropolitan area and the state capital metropolitan area of Lincoln.

What does a declining population mean for our region?

- Decreased political influence in the state
- Impacted share of resources
- Threat of decreased vitality
- Need to reassess infrastructure needs vs. capacity

Box Butte and Grant Counties have not been immune to the worldwide trend of population consolidation. Alliance has been one of the larger communities in the region which has benefited from the shift to a more urban population composition, although this benefit has been reduced from time to time due to volatility in employment connected with the Railroad. Box Butte and Grant Counties both have lost population in the later half of the 20th Century and early 2000s but has seen an overall slowing of this trend from 2010 to now. County residents and leaders should continue to build from their community assets and strengths, undergoing measured strategies which aim to steadily improve their quality of life and building on the area's strong workforce.

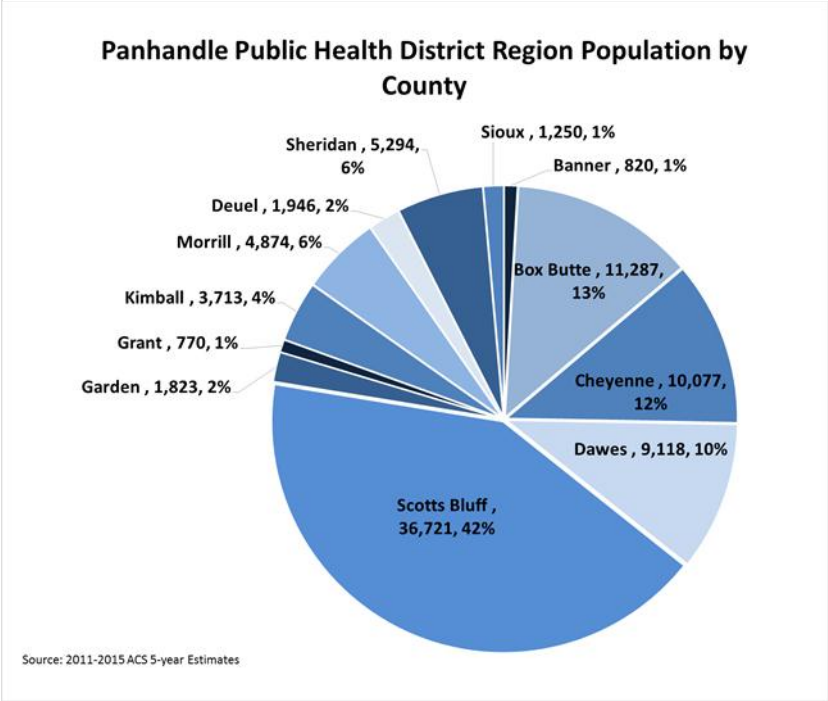
Figure 6: Nebraska Panhandle Population Consolidation



Source: US Decennial Census

Box Butte County is one of the 'big four' trade counties in the Panhandle and accounts for about 13% of the region's population. It serves as a population, employment, and service hub for the Central Panhandle and western Nebraska Sandhills, drawing workers from as far as Hay Springs, Scottsbluff, and Grant County. Grant County makes up just one percent of the region's population with fewer than 800 residents. Box Butte County's other incorporated community of Hemingford has not faired too poorly in recent years either, with an estimated slower decline or even gain in population since 2010. Connecting rural Box Butte and Grant County residents to services and opportunities in larger communities in the region will help them to remain viable places to live. Collaboration among governments and service providers in these communities helps stretch resources further.

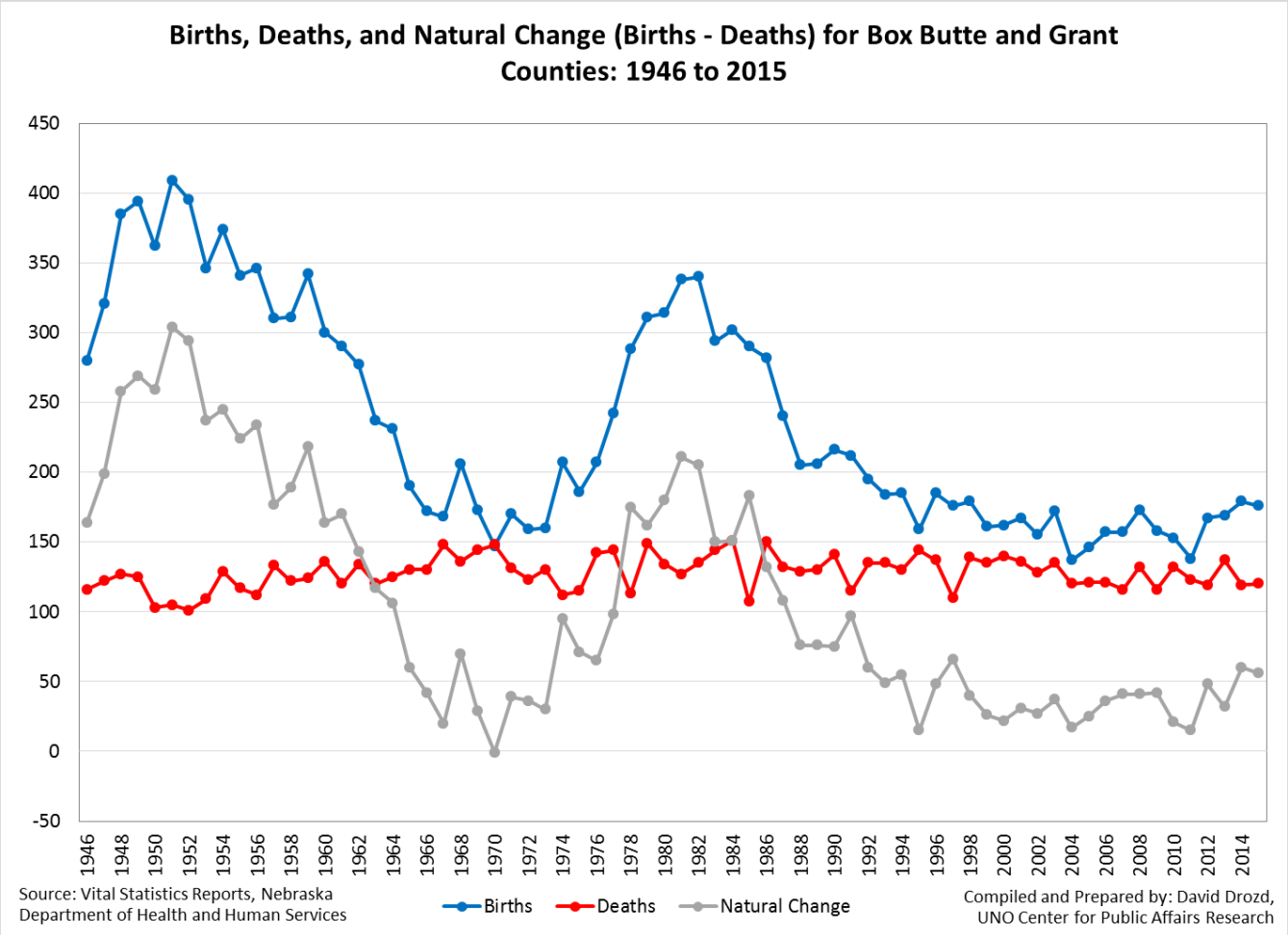
Figure 7: PPHD Region Population by County



Components of Change

The graph in figure 8 shows that natural change reached close to zero in 2000 but has since rebounded with positive natural change (more births than deaths). While this number will likely decrease as large baby boom cohorts reach older age, continued attraction of younger families can mitigate this decline.

Figure 8: Natural change for Box Butte and Grant Counties



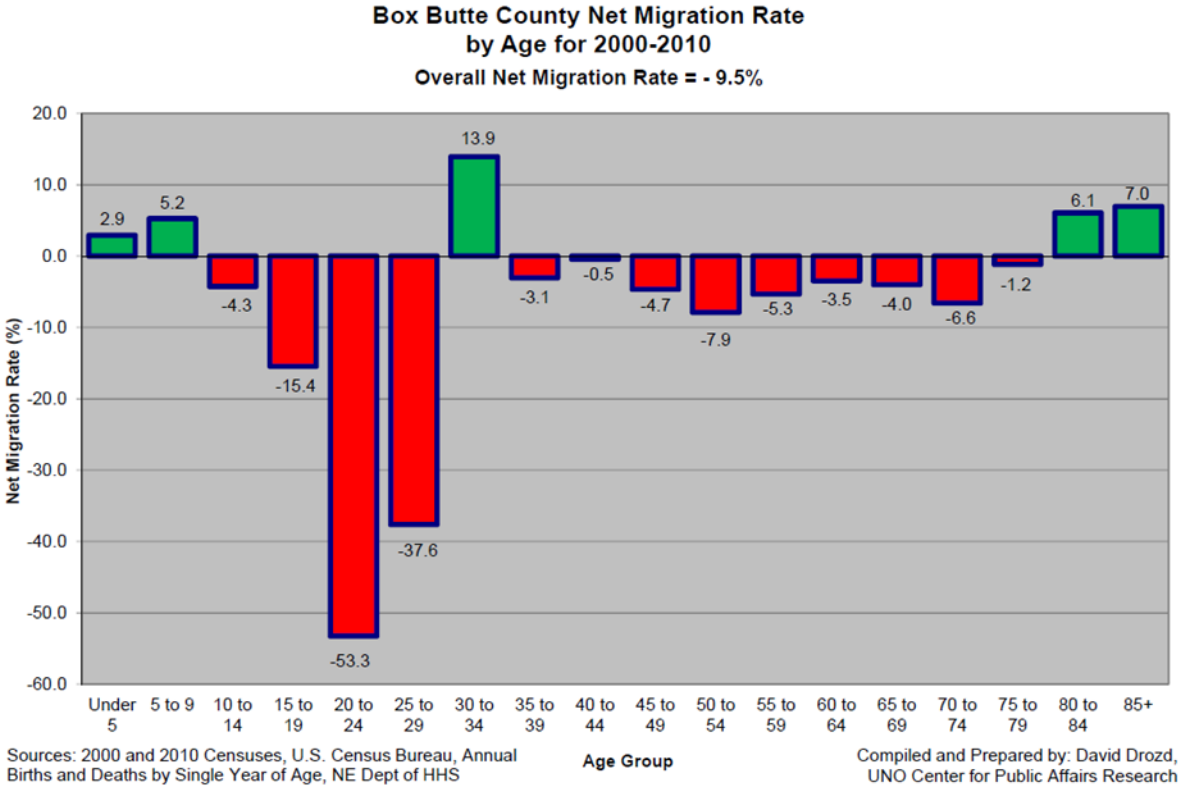
Box Butte and Grant Counties, Natural Change (Births - Deaths), 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Box Butte and Grant Counties	36	41	41	42	21	15	48	32	60	56

Source: Nebraska Health and Human Services System Vital Statistics Reports

Migration patterns show the out-migration for young adults as the economic, educational, and social opportunities of metropolitan and other areas draw them away. In Box Butte County and across the Panhandle, some in migration occurs for age groups in their mid-20s to 30s, as people either find job opportunities or come back to raise their family in their home town. However, it is still not enough to make up for the outmigration of people in their late teens and early twenties. Box Butte County also showed particularly high outmigration in age ranges from 35-75 as well for this time period. The migration rates shown below in Figure 8 only show the rates from 2000-2010. Recent trends could differ and locals have mentioned an influx of new workers to the county and ACS estimates show a stable population.

Figure 9: Box Butte County Net Migration Rate by Age for 2000-2010



The population pyramid from 2010 shows the general age make-up of Box Butte and Grant Counties with a still strongly pronounced baby boom generation and, different than the region, also a sizeable baby boom echo generation. This pyramid and the migration trends both show larger numbers of school age children than in the 20-44 age cohorts. The first cohorts of baby boomers reached age 65 in 2015 and the service and mobility needs of a growing elderly population will provide opportunities and challenges for the county.

Figure 10: Population by Sex and 5-year age group, 2015 estimates

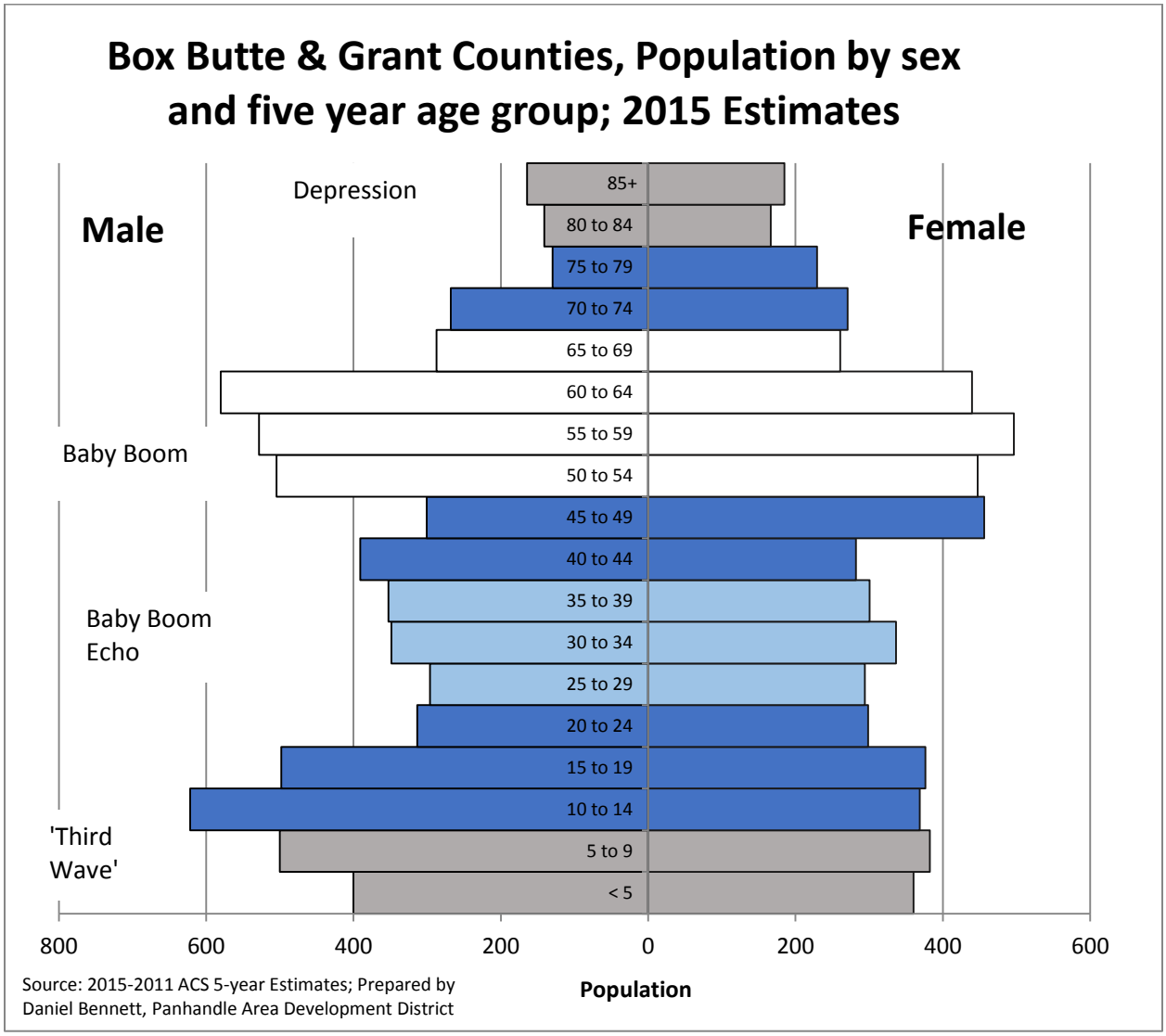
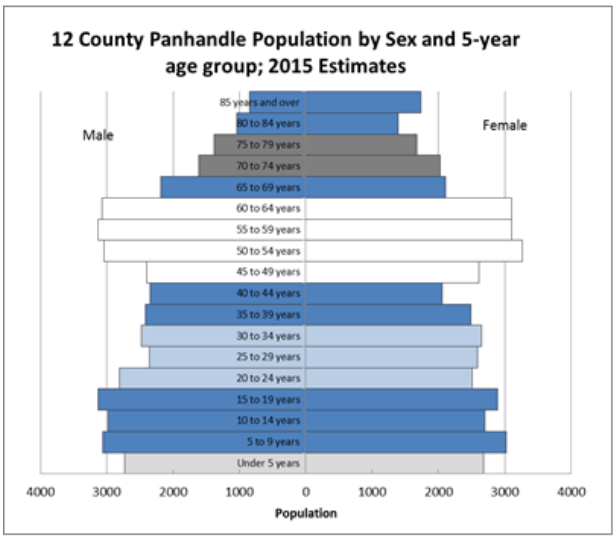
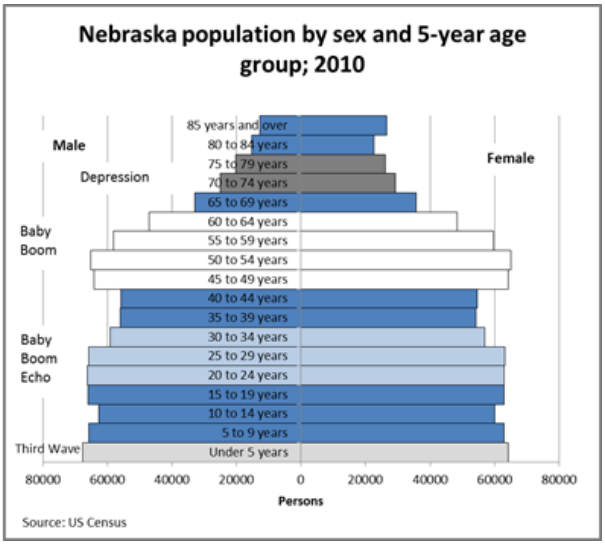


Table 1: Population by sex and 5-year age group

Population by Sex and 5-year Age Group Box Butte and Grant Counties, Nebraska	Both Sexes		Male	Female
	Estimate		Estimate	Estimate
AGE		12,079	6,128	5,951
Under 5 years	6.2%	750	390	360
5 to 9 years	6.9%	836	460	382
10 to 14 years	7.9%	950	584	369
15 to 19 years	7.1%	859	485	376
20 to 24 years	5.2%	626	327	299
25 to 29 years	4.6%	560	260	294
30 to 34 years	5.5%	670	328	336
35 to 39 years	5.2%	633	333	301
40 to 44 years	5.3%	638	357	282
45 to 49 years	6.0%	730	276	456
50 to 54 years	7.5%	904	450	447
55 to 59 years	8.4%	1009	512	496
60 to 64 years	7.9%	957	513	440
65 to 69 years	4.2%	510	255	261
70 to 74 years	4.1%	501	235	271
75 to 79 years	2.6%	320	100	229
80 to 84 years	2.2%	271	110	166
85 years and over	2.8%	332	153	185

Source: 2011-2015 ACS 5-Year Estimates

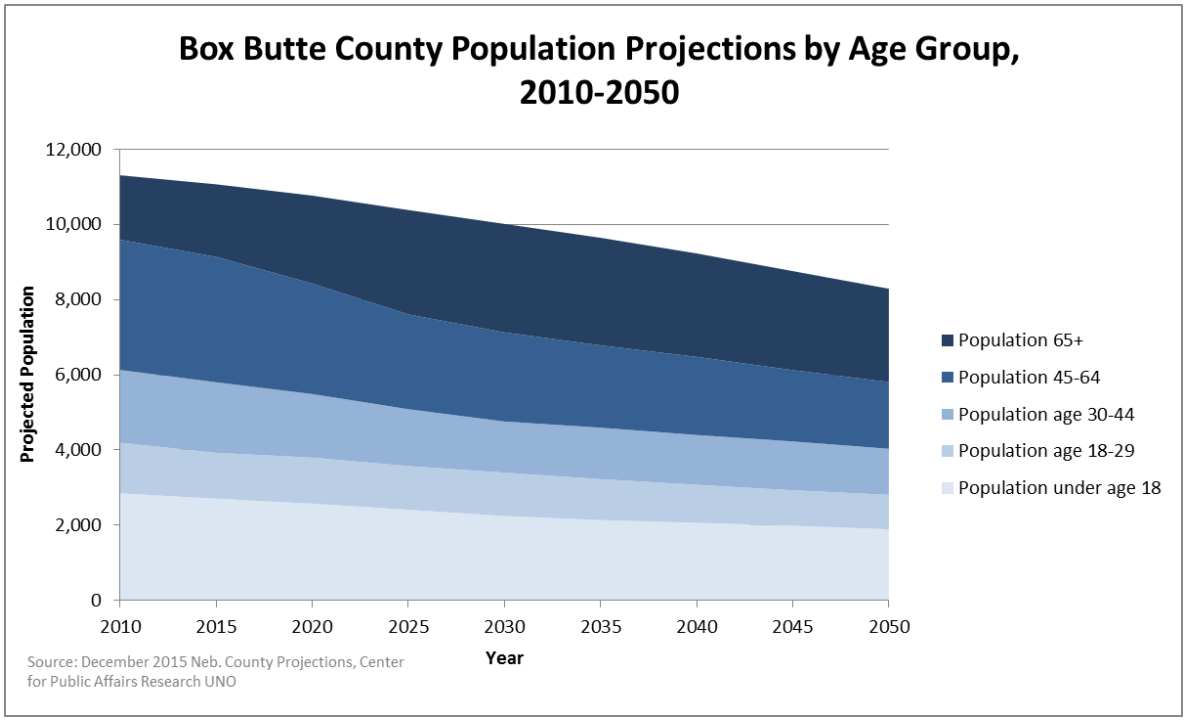




Population Projections

Box Butte County's population is projected to increase slightly until around 2020 before leveling off and then beginning a gradual decline. As the baby boom generation ages, the population 65 and older will increase by over 1000 people and over 60% by 2030. The share of the total population 65 and older is projected to increase from just 16% in 2010 to 27% by 2030. The labor force population is projected to decrease substantially after 2020 as more baby boomers reach the age of 65. The population 18 and under is expected to stay fairly level or decrease slightly.

Figure 11: Box Butte County Population projections; 2010-2050



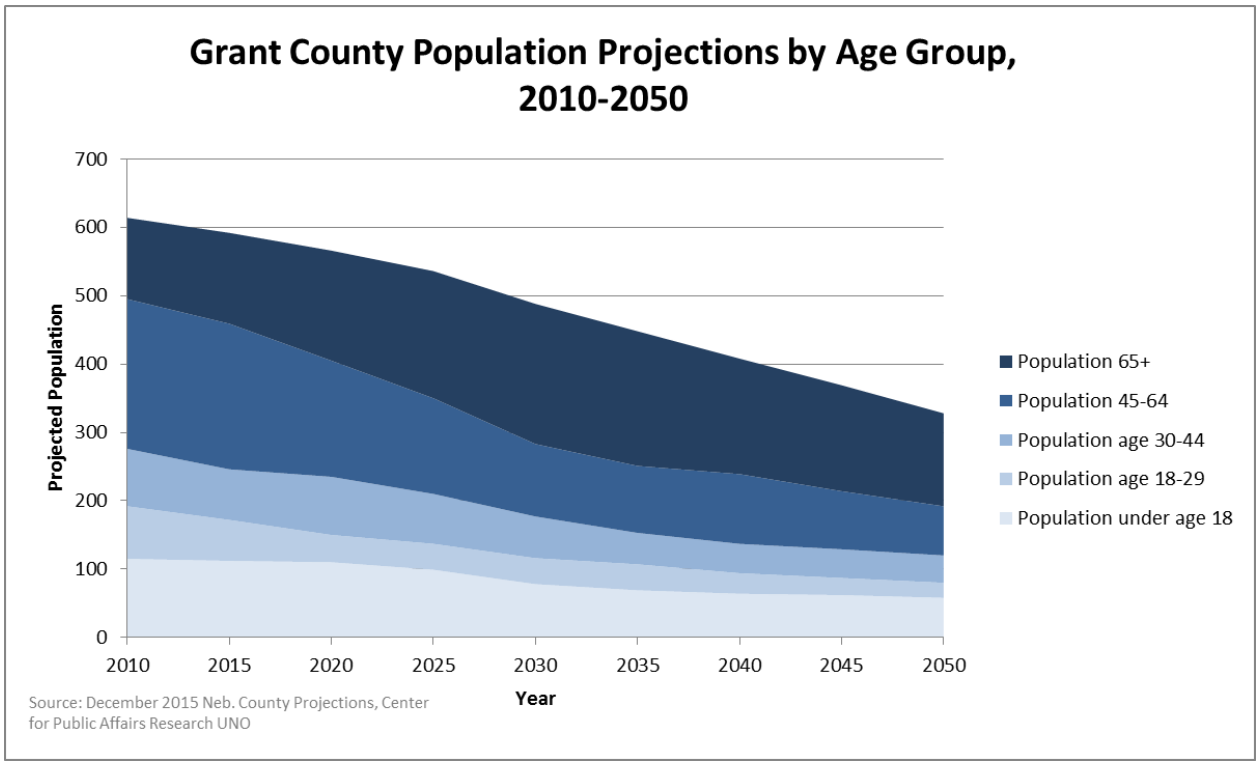
Population projections by age group, Box Butte County, 2010-2030

	Total Population					Change (#)		Change (%)	
Category	2010	2015	2020	2025	2030	2010-20	2020-30	2010-20	2020-30
Total Population	11,308	11,068	10,768	10,384	10,014	-540	-754	-4.8	-7
Population under age 18	2,849	2,709	2,576	2,414	2,247	-273	-329	-9.6	-12.8
Population age 18-29	1,347	1,220	1,226	1,161	1,154	-121	-72	-9	-5.9
Population age 30-44	1,935	1,876	1,688	1,513	1,360	-247	-328	-12.8	-19.4
Population 45-64	3,464	3,333	2,939	2,521	2,369	-525	-570	-15.2	-19.4
Population 65+	1,713	1,930	2,339	2,775	2,884	626	545	36.5	23.3

Source: December 2015 Neb. County Projections, Center for Public Affairs Research UNO

Grant County's population is projected to decline steady in future years, accelerating after 2025. The largest change is the shift of the baby boom generation from the 45-64 age-group to 65 and older, leading to a significant decrease in the population 45-64 and temporary increase in the population 65 and older. The labor force population is projected to decrease substantially after 2020 as more baby boomers reach the age of 65. The population 18 and under is expected to stay fairly level through 2020 and then decline.

Figure 12: Grant County population projection by age group, 2010-2050



Population projections by age group, Grant County, 2010-2030

	Total Population					Change (#)		Change (%)	
Category	2010	2015	2020	2025	2030	2010-20	2020-30	2010-20	2020-30
Total Population	614	593	567	536	488	-47	-79	-7.6	-13.9
Population under age 18	115	112	110	99	78	-5	-32	-4.1	-28.9
Population age 18-29	77	60	40	38	38	-37	-2	-47.7	-4.9
Population age 30-44	84	74	85	73	61	1	-25	1.7	-29.1
Population 45-64	219	213	170	140	106	-49	-64	-22.2	-37.5
Population 65+	119	133	161	186	205	42	44	35.1	27.2

Source: December 2015 Neb. County Projections, Center for Public Affairs Research UNO

Race and Ethnicity

Race patterns in a population are important to assess because they reveal social patterns. Health and economic disparities in America have long existed along racial and ethnic lines. Examining social and economic patterns along racial and ethnic lines can help reveal the extent to which disparities exist and are either improving or worsening to spur thinking and action about equality of opportunity, economic mobility, and improving health for all citizens.

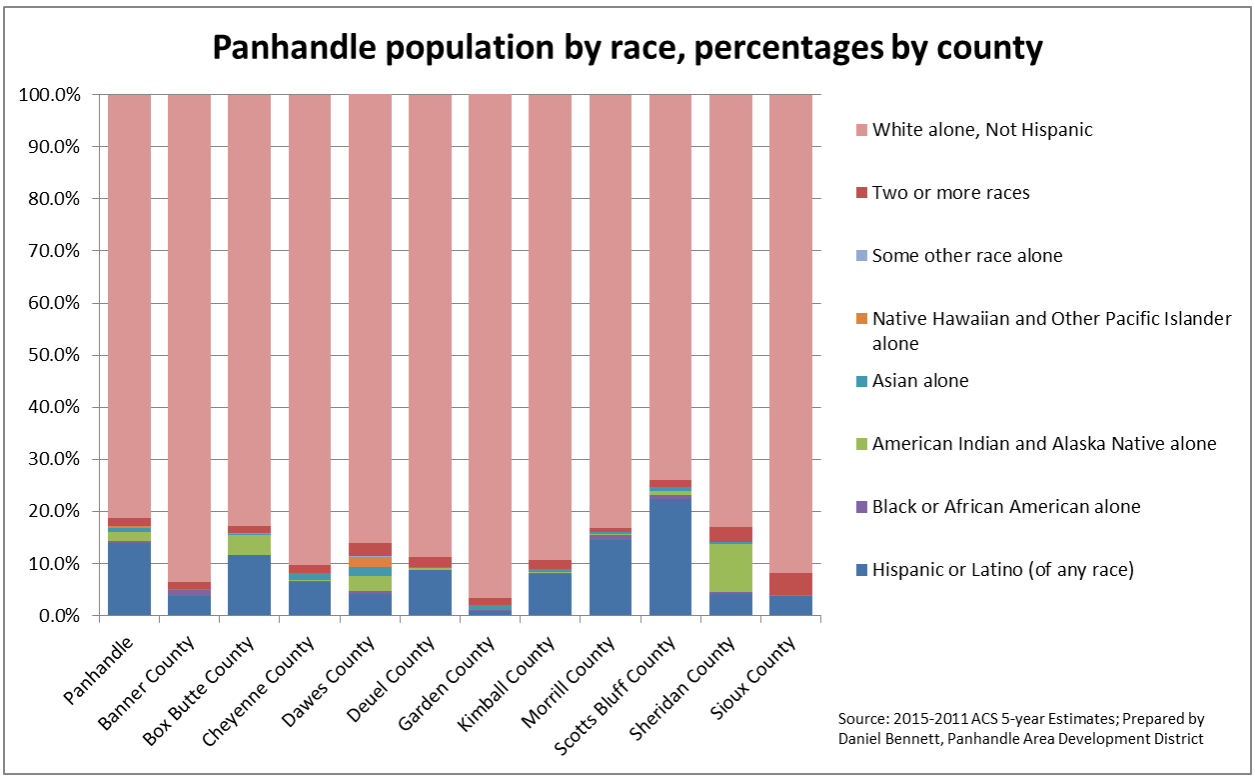
Table 2: Population by Race and Ethnicity

Population by Race and Ethnicity, Box Butte and Grant Counties						
	Nebraska	**Panhandle**	**Box Butte County**		**Grant County**	
	Percent	Percent	Estimate	Percent	Estimate	Percent
Total population	1,869,365	86,933	11,310		769	
Hispanic or Latino (of any race)	10.0%	13.9%	1,314	11.6%	769	100.0%
Not Hispanic or Latino			9,996		0	
White alone, Not Hispanic	80.8%	81.2%	9,370	82.8%	769	100.0%
Black or African American alone	4.6%	0.5%	13	0.1%	0	0.0%
American Indian and Alaska Native alone	0.7%	1.8%	413	3.7%	0	0.0%
Asian alone	2.0%	0.8%	35	0.3%	0	0.0%
Native Hawaiian and Other Pacific Islander alone	0.1%	0.2%	10	0.1%	0	0.0%
Some other race alone	0.1%	0.0%	0	0.0%	0	0.0%
Two or more races	1.8%	1.6%	155	1.4%	0	0.0%

Source: 2011-2015 ACS 5-year Estimates

Box Butte County's largest minority population is Hispanic and Latino at about 11.6% of the county population. The next largest minority group in Box Butte County is American Indian at 3.7% of the population. While the 2015 estimate of no minority population members for Grant County is likely inaccurate, it does emphasize that Grant County's minority population groups have historically been very small.

Figure 13: Minority population ratio in Panhandle Counties



Even with a larger Hispanic population, Box Butte County has a lower rate of those not proficient in English.

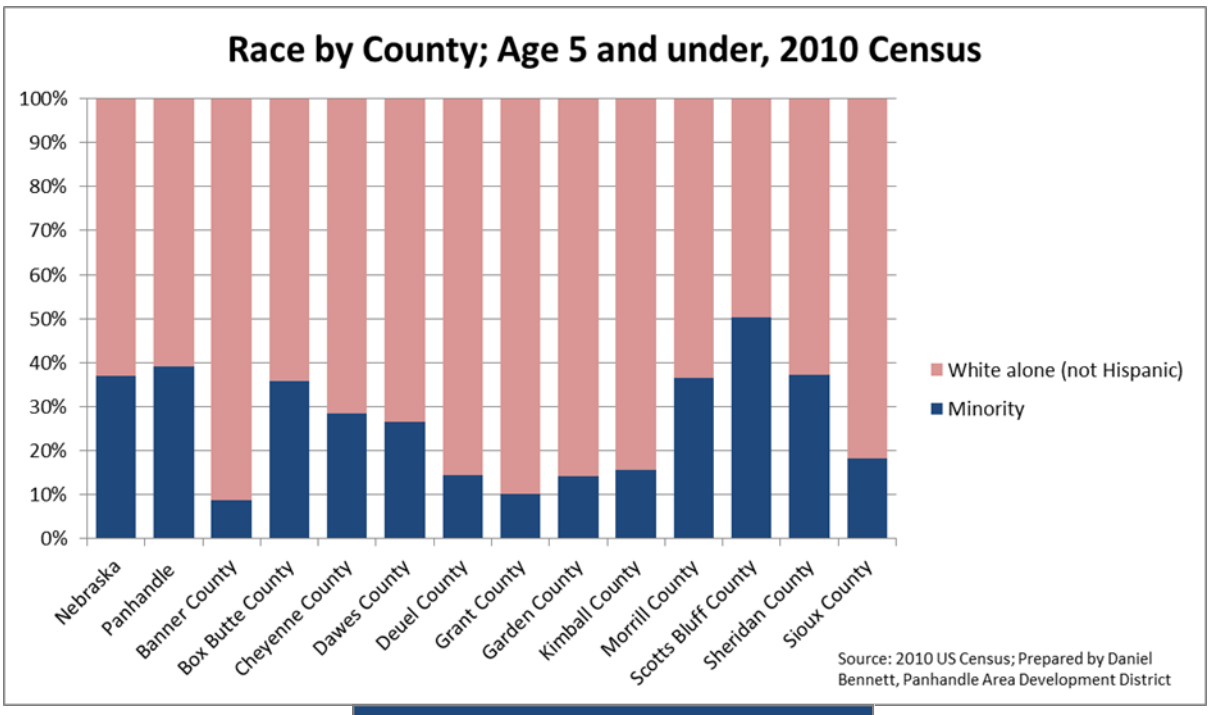
English Language Proficiency; 12 County Region 2015-2011 Estimates

	United States	Nebraska	Banner Co.	Box Butte Co.	Cheyenne Co.	Dawes Co.	Deuel Co.
Speak English less than 'very well'	8.6%	4.9%	1.0%	0.8%	2.0%	3.8%	4.3%
	Garden Co.	Grant Co.	Kimball Co.	Morrill Co.	Scotts Bluff Co.	Sheridan Co.	Sioux Co.
Speak English less than 'very well'	0.0%	0.0%	1.6%	3.2%	3.9%	1.2%	0.3%

Source: 2015-2011 ACS 5-year Estimates

Despite minority populations accounting for only 17% of the total Box Butte County population, minority persons account for 35% of the population age 5 and under. Higher birthrates among minority populations likely contribute to this changing racial and ethnic population composition. A higher proportion of minority populations mean that a higher total proportion of the population may live with the health and economic disparities patterned by race.

Figure 14: Population by minority status, age 5 and under



Race by County; Age 5 and under	White (Non-Hispanic)	Minority
Nebraska	63.0%	37.0%
Panhandle	60.8%	39.2%
Banner County	91.3%	8.7%
Box Butte County	64.2%	35.8%
Cheyenne County	71.6%	28.4%
Dawes County	73.5%	26.5%
Deuel County	85.7%	14.3%
Grant County	90.0%	10.0%
Garden County	86.0%	14.0%
Kimball County	84.3%	15.7%
Morrill County	63.4%	36.6%
Scotts Bluff County	49.7%	50.3%
Sheridan County	62.9%	37.1%
Sioux County	81.8%	18.2%

Source: 2010 Census

Economy

Economic health is the driving force for opportunities and prosperity in a region or community. While it is not the only indicator of well-being, quality economic opportunities contribute heavily to the quality of income and the access to education and health care. Thriving local and regional economies also contribute to the vibrancy of communities and provide a base for shared investments in things like infrastructure, law enforcement, public spaces, and maintaining positive neighborhood environments.

Both Box Butte and Grant County's economies have their roots in a strong agricultural industry. While agricultural production and related industries are still cornerstones of the economy, transportation, health, and education are now the largest employers in the area. Retail trade and manufacturing also have a sizable share of area employment. An analysis of the counties' combined strengths shows relative advantages in Retail Trade, Agriculture, and Transportation and Utilities.

Employment and Workforce

Box Butte County's unemployment rate is slightly above the region and state level and showed only a small increase during the recession, shown in the year 2010, while Grant County has a very low unemployment rate. Both counties' rates are at or just below their pre-recession 2000 and 2008 levels.

Panhandle Unemployment; 2000-2016 12-month Average

County	2000	2008	2010	2016
Banner County	3.0	2.5	4.4	3.8
Box Butte County	3.9	3.7	5.0	3.8
Cheyenne County	2.3	2.8	3.6	3.0
Dawes County	3.0	2.9	4.0	3.1
Deuel County	3.0	2.9	3.9	2.8
Garden County	2.6	3.0	4.1	3.4
Grant County	2.3	2.9	3.8	2.4
Kimball County	2.5	3.4	4.7	4.3
Morrill County	3.5	3.1	4.1	3.4
Scotts Bluff County	4.0	3.7	5.5	3.6
Sheridan County	2.9	2.7	3.5	3.0
Sioux County	1.9	3.4	3.7	2.8
Panhandle	**3.4**	**3.4**	**4.7**	**3.4**
Nebraska	**2.8**	**3.3**	**4.6**	**3.2**
United States	**4.0**	**5.8**	**9.6**	**4.9**

Source: Bureau of Labor Statistics

Table 3 Unemployment rates

Interpreting Unemployment

While unemployment can give us a quick glance as to how the economy of an area is doing, it also does not account for the rate of people who are underemployed or who are working multiple jobs to make ends meet. In an economic downturn, someone who is self-employed or working multiple jobs could lose a significant amount of their work and still not technically be unemployed. Unemployment also does not account for size of the labor force which has decreased significantly in Box Butte County from 2000 to 2016. While the labor force tends to be decreasing faster in more rural counties, Grant County has increased the size of its labor force slightly since 2000 and 2010.

Table 4 Labor Force 2000-2016

Panhandle Labor Force; 2000-2016 12-month Average Change

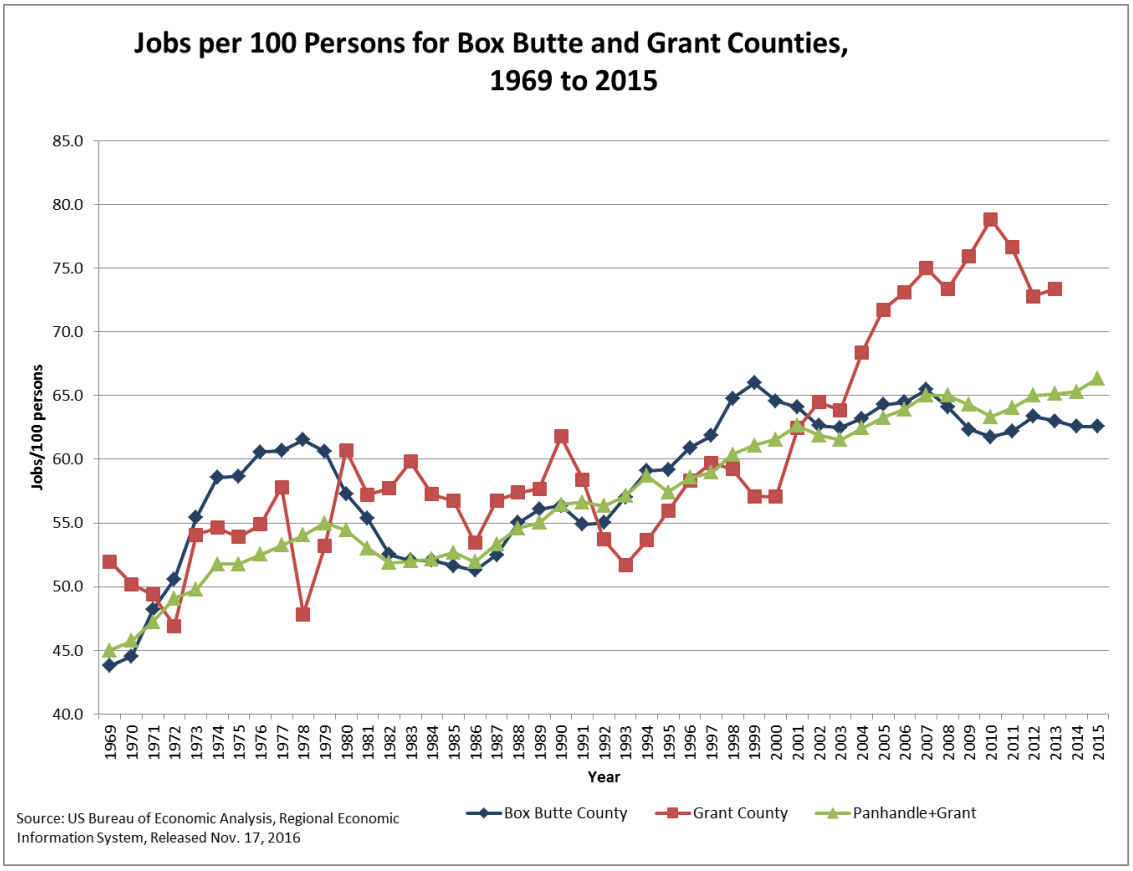
County	Labor Force 2000	Labor Force 2010	Labor Force 2016	Change 2000-2016
Banner County	428	413	418	-2.3%
Box Butte County	6,422	5,852	5,678	-11.6%
Cheyenne County	5,655	5,558	5,434	-3.9%
Dawes County	5,062	5,499	5,240	3.5%
Deuel County	1,175	1,031	1,080	-8.1%
Garden County	1,217	1,266	1,190	-2.2%
Grant County	439	421	452	3.0%
Kimball County	2,198	2,124	1,964	-10.6%
Morrill County	2,798	2,650	2,671	-4.5%
Scotts Bluff County	18,775	19,200	19,035	1.4%
Sheridan County	3,295	2,821	2,748	-16.6%
Sioux County	802	835	791	-1.4%
Panhandle	**48,266**	**47,670**	**46,701**	**-3.2%**
Nebraska	**944,986**	**993,400**	**1,011,051**	**7.0%**
United States	**143,893,664**	**155,539,411**	**159,863,112**	**11.1%**

Source: Bureau of Labor Statistics

In the region and in Box Butte County, there has been a decrease in total labor force which continued through the recession and has continued even while the national economy has recovered. People leave the county labor force by not continuing to look for work, moving away, or retiring. It is unclear as to which of these three factors are most influential in the area's declining labor force, but it is possible that as older generations have retired there has not been the younger generations entering the labor force to take their place.

Box Butte County's position in the region as an employment hub has not equated to a higher prevalence of jobs per 100 persons that we have seen in other 'trade counties' of Cheyenne and Scotts Bluff Counties. Grant County has shown a sharp increase in jobs per capita since 2000. The steady jobs per capita in Box Butte County could reflect that its population is closely tied to the jobs present in the county, and that as jobs decrease or rise, so does the population. Regionally, while jobs per 100 persons have increased significantly, wages have not had the same inflation adjusted increase, emphasizing the importance in the type of jobs and wages paid when jobs are created.

Figure 15: Jobs per 100 persons 1969-2015



Jobs per 100 Persons, Box Butte and Grant Counties and Panhandle Region, 2006-2015										
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Box Butte County	64.5	65.5	64.1	62.3	61.8	62.2	63.4	63.0	62.6	62.6
Grant County	73.1	75.0	73.4	75.9	78.8	76.6	72.8	73.4	82.3	81.7
Panhandle + Grant County	63.9	65.0	65.0	64.3	63.3	64.0	65.0	65.1	65.3	66.4

Source: US BEA, Regional Economic Information System, Released Nov.17, 2016

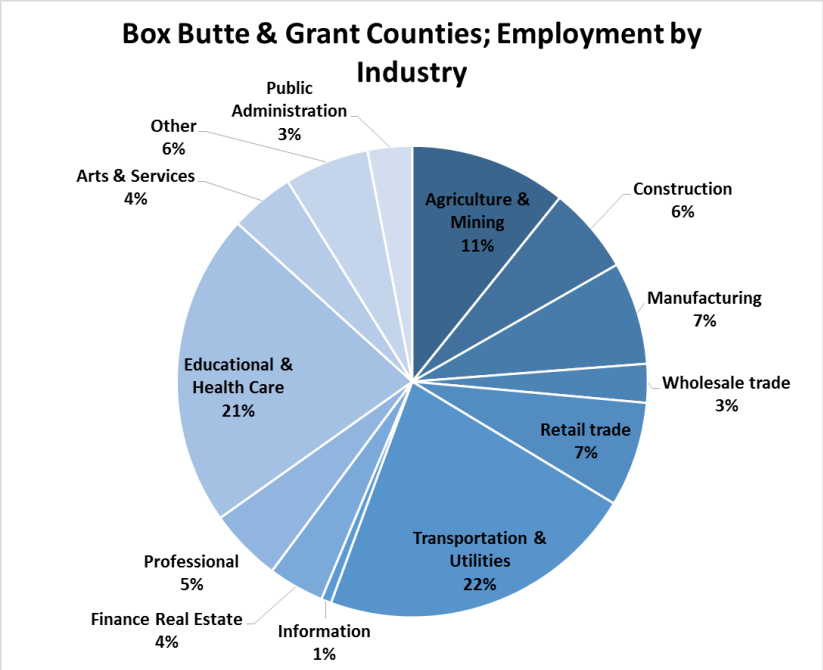
Employment in the Transportation and Utilities industry is very high (22.0%) compared to the state. Employment with Burlington Northern-Sante Fe Railroad in Alliance contributes to this high rate. The Health care and Education services (21.5%) as well as Agriculture and Mining (10.8%) industries are the next largest sources of employment in the county.

Table 5: Employment by Industry

Employment by Industry		
	Nebraska	Box Butte & Grant County
Agriculture & Mining	4.6%	10.8%
Construction	6.7%	6.0%
Manufacturing	10.9%	7.0%
Wholesale trade	2.8%	2.7%
Retail trade	11.6%	7.2%
Transportation & Utilities	5.6%	22.0%
Information	1.9%	0.7%
Finance Real Estate	7.4%	3.9%
Professional	8.2%	5.0%
Educational & Health Care	23.8%	21.5%
Arts & Services	7.9%	4.4%
Other	4.5%	5.8%
Public Administration	4.2%	3.1%

Source: 2011-2015 ACS 5-year Estimates

Figure 17: Box Butte County and Grant County Employment by Industry



Educational Attainment

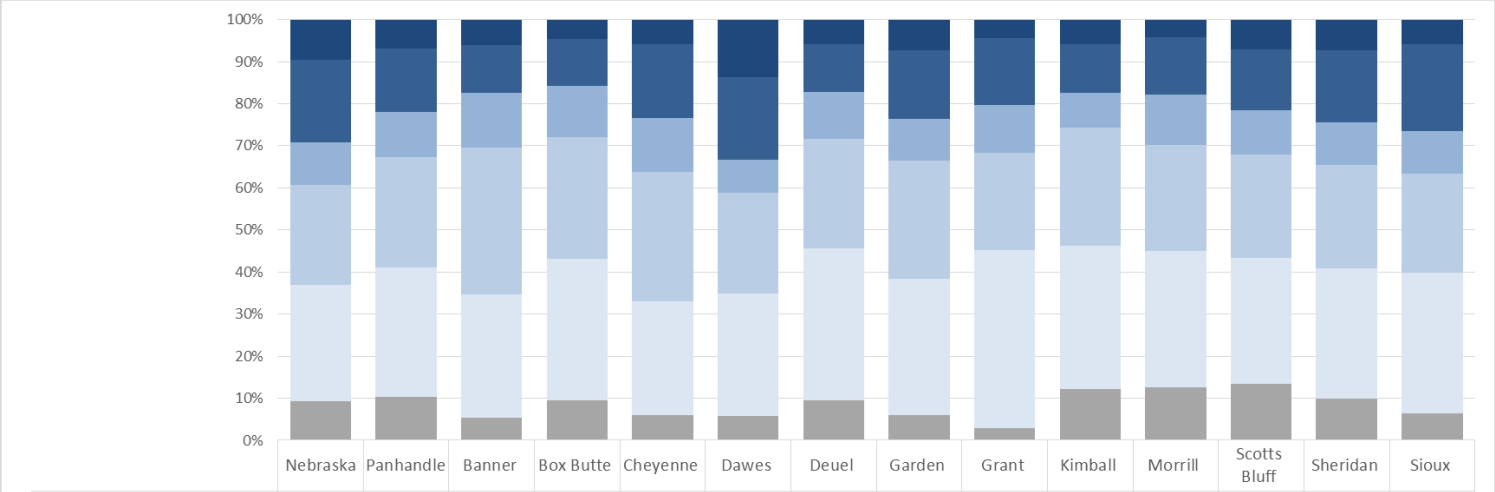
Box Butte County has experienced a slight increase in the proportion of residents with a Bachelor's degree or higher on par with the increase seen at the state level. Grant County has a had a high level of educational attainment for such a rural county with 20.4% bachelor's degree or higher, which is a decrease from 2000. Grant County had a very low rate of the population having less than a high school degree at less than 5% for while Box Butte County has had a higher rate of just under 10% which is similar to the state.

Table 6: Change in Educational Attainment, 2000-2015

	% Population 2000	% Population 2015	Change % Bachelor's+ (2000-15)
Nebraska	**23.7**	**29.3**	**5.5**
Panhandle	18.3	21.6	3.2
Banner	19.6	17.4	-2.2
Box Butte	15.3	15.9	0.6
Cheyenne	16.8	23.4	6.6
Dawes	28.4	33.2	4.8
Deuel	17.4	17.3	-0.2
Garden	14.2	23.5	9.3
Grant	24.7	20.4	-4.4
Kimball	13.5	17.4	3.9
Morrill	14.3	17.8	3.5
Perkins	**17.6**	**21.8**	**4.2**
Scotts Bluff	17.3	21.5	4.2
Sheridan	17.2	24.5	7.4
Sioux	21.5	26.6	5.1

Figure 18: Educational Attainment

Educational Attainment in Panhandle Counties



	Nebraska	Panhandle	Banner	Box Butte	Cheyenne	Dawes	Deuel	Garden	Grant	Kimball	Morrill	Scotts Bluff	Sheridan	Sioux
Graduate degree	117,678	4102	38	346	404	757	80	105	23	153	142	1,722	280	52
Bachelor's degree	238,158	8846	71	847	1231	1,078	159	237	84	303	455	3,544	650	187
Associate's degree	120,763	6386	82	916	888	433	153	146	59	217	407	2,615	379	91
Some college	290,878	15472	218	2,164	2150	1,330	360	408	122	733	843	6,001	932	211
High school or equivalent	334,449	18206	184	2,540	1889	1,609	502	472	222	890	1,084	7,337	1,177	300
Less than High School degree	113,474	6151	34	709	416	315	130	86	15	318	425	3,273	372	58

Source: 2011-2015 ACS Estimates

Source: 2011-2015 ACS Estimates and 2000 Census

Income

Box Butte County's numbers were towards the top of the median household and family incomes in the region, while Grant County was in the middle of median incomes in the region. Income distribution for the two counties shows a lot of people earning the middle income brackets with a higher percentage of its households having income in the $75,000 to $150,000 range than the region as a whole and about 4% higher than Scotts Bluff County.

Figure 19: Box Butte and Grant Counties Income Range

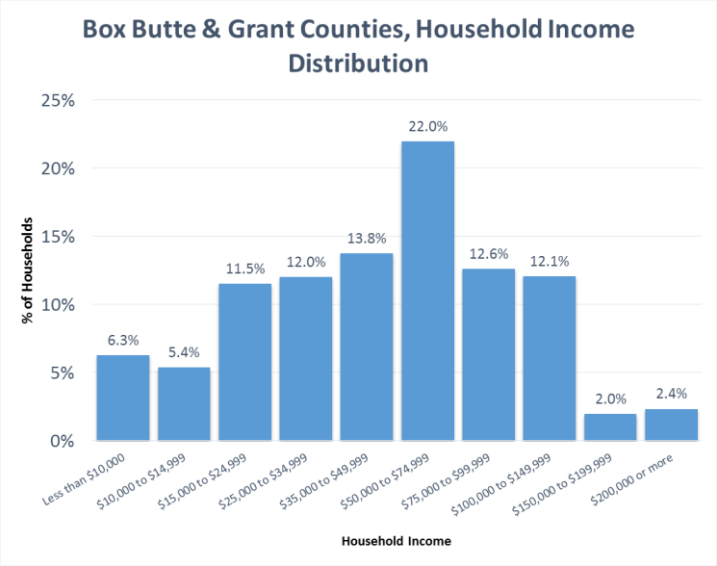


Table 7 Change in Adjusted Median Household Income

Panhandle Median Household Income			
County	**2010**	**2015**	**Change**
United States	$ 56,829	$ 53,889	-5.17%
Nebraska	$ 54,014	$ 52,997	-1.88%
Banner	$ 37,288	$ 48,897	31.13%
Box Butte	$ 48,608	$ 51,691	6.34%
Cheyenne	$ 54,179	$ 53,814	-0.67%
Dawes	$ 38,245	$ 41,038	7.30%
Deuel	$ 40,665	$ 50,962	25.32%
Garden	$ 36,083	$ 45,845	27.05%
Grant	$ 42,978	$ 44,750	4.12%
Kimball	$ 45,988	$ 40,242	-12.49%
Morril	$ 41,288	$ 45,910	11.19%
Scotts Bluff	$ 42,697	$ 45,992	7.72%
Sheridan	$ 36,790	$ 41,985	14.12%
Sioux	$ 46,399	$ 41,215	-11.17%

Source: 2011-2015 ACS 5-year Estimate, Bureau of Labor Statistics CPI Inflaction Calculator

Change in median household income varied from 2010 to 2015 estimates but figures for both counties increased since 2010. The data for 2015 includes data which would have been collected during the recession which likely accounts for the decrease in median household income at the state and national levels.

Table 9 shows per capita personal income of counties by taking all the income in a county in a year and dividing it by the number of people in the county. This gives an idea of the general wealth circulating in the area and the strength of the economy. The table shows the close connection of the region's economy to the agricultural economy, particularly in the rural counties (no highlight) where income dropped with commodity prices in 2015. The larger 'trade' counties (grey highlight) showed this connection as well but to a lesser extent.

	Per capita personal income[1]				Percent change from preceding period[2]		
	Dollars			Rank in State	Percent change		Rank in State
	2013	2014	2015	2015	2014	2015	2015
Banner	55,072	79,235	68,652	5	43.9	-13.4	86
Box Butte	41,889	44,801	41,045	83	7.0	-8.4	72
Cheyenne	54,521	55,954	52,537	21	2.6	-6.1	64
Dawes	30,790	35,704	33,366	93	16.0	-6.5	66
Deuel	38,512	47,093	41,360	82	22.3	-12.2	83
Garden	42,227	54,689	46,254	54	29.5	-15.4	89
Grant	40,829	58,684	51,003	26	43.7	-13.1	85
Kimball	46,557	49,557	42,922	76	6.4	-13.4	87
Morrill	49,072	55,486	49,947	31	13.1	-10.0	79
Scotts Bluff	37,943	40,747	40,984	84	7.4	0.6	28
Sheridan	45,077	52,720	46,339	51	17.0	-12.1	82
Sioux	52,608	69,696	62,599	12	32.5	-10.2	80
Nebraska	**45,858**	**48,321**	**48,544**	**--**	**5.4**	**0.5**	
United States	**44,462**	**46,414**	**48,112**	**--**	**4.4**	**3.7**	**--**

Table 8 Income Trends for the Panhandle Region

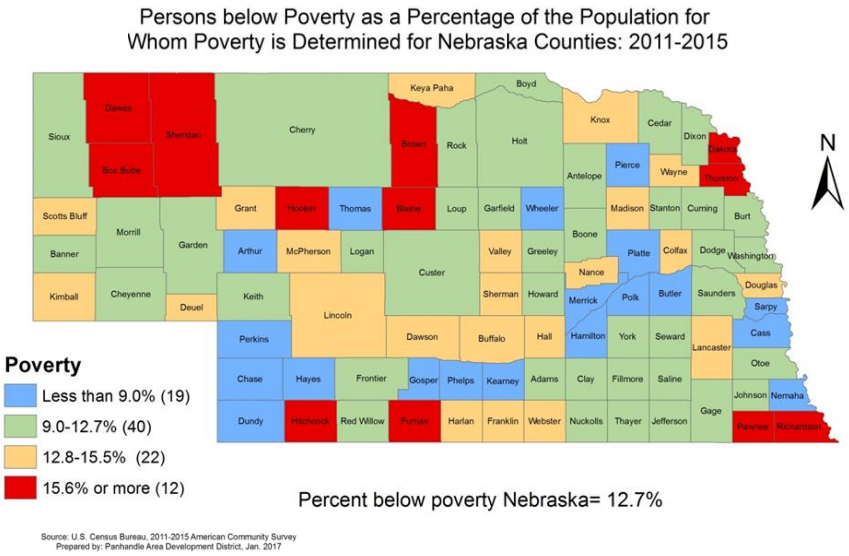
Poverty

Poverty in the Panhandle is generally higher than in the rest of the state and nearby metro areas, with Box Butte County having one of the highest poverty rates in the state and region. Grant County shows a poverty rate slightly higher than the state.

Table 9: Percent of total population with income in past 12-months below the poverty level

Percent of Population with income in past 12-months below the poverty level	
County	Percent
Dawes County	17.8%
Box Butte County	17.0%
Sheridan County	16.5%
Scotts Bluff County	13.7%
Kimball County	13.6%
Grant County	13.3%
Deuel County	12.9%
Sioux County	12.5%
Banner County	11.7%
Morrill County	11.7%
Cheyenne County	11.6%
Garden County	10.2%
Panhandle	**14.7%**
Nebraska	**12.7%**
United States	**15.5%**

Figure 20: Box Butte and Grant Counties Income Range



Race and Poverty

Box Butte County's largest minority group, Hispanic or Latino, shows an estimated 33.3% poverty rate, compared to just 11% for white alone (non-Hispanic). This data shows that disparities between ethnicities, even in counties where incomes in general are relatively high, are still present.

Table 10 Poverty by Race and Ethnicity

Percent with Income in last 12 months Below Poverty level,					
County	**White alone**	**American Indian alone**	**Two or more races**	**Hispanic or Latino origin (of any race)**	**White alone, not Hispanic or Latino**
Banner County	11.5%	-	36.4%	51.6%	9.9%
Box Butte County	14.0%	68.9%	46.0%	33.3%	11.2%
Cheyenne County	11.4%	37.8%	2.7%	45.4%	9.0%
Dawes County	16.1%	73.7%	7.6%	16.3%	16.1%
Deuel County	12.5%	22.2%	0.0%	47.4%	10.1%
Garden County	10.0%	-	25.0%	0.0%	10.0%
Grant County	13.3%	-	-	29.3%	12.4%
Kimball County	14.1%	0.0%	0.0%	44.4%	11.3%
Morrill County	11.7%	0.0%	29.6%	11.9%	11.4%
Scotts Bluff County	12.7%	45.4%	23.5%	23.8%	9.7%
Sheridan County	12.2%	56.3%	17.0%	32.7%	10.9%
Sioux County	13.1%	-	3.4%	21.3%	12.7%
Panhandle	12.9%	59.3%	18.9%	26.1%	10.8%
Nebraska	10.90%	40.50%	21.70%	25.70%	9.50%

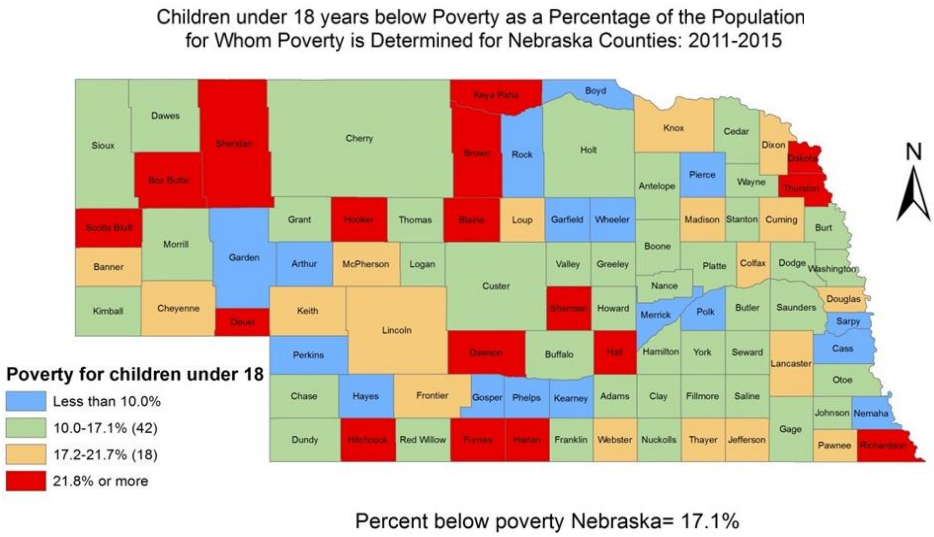
Source: 2011-2015 ACS 5-year Estimates

Box Butte County has one of the highest rates of children under 18 in poverty at an estimated 28.8%. A higher ratio of minorities, particularly of Hispanic or Latino, for younger age groups and the higher poverty rate for this ethnic group in the county may lead to these high numbers. More children in poverty means more children growing up with potential obstacles to career, educational, and health care opportunities and threatens the overall prosperity of a community.

Figure 21: Children under 18 years below poverty by county

Percent of Children Under 18 with income in past 12-months below the poverty level	
County	Percent
Sheridan County	29.5%
Box Butte County	28.8%
Deuel County	27.2%
Scotts Bluff County	22.4%
Cheyenne County	19.0%
Banner County	17.3%
Dawes County	15.6%
Sioux County	15.5%
Kimball County	15.1%
Grant County	14.6%
Morrill County	14.5%
Garden County	8.9%
Panhandle	**21.8%**
Nebraska	**17.1%**
United States	**21.7%**

Source: 2015-2011 ACS 5-year Estimates



The county has a generally higher rates of poverty than the region or state for the population with a high school degree or lower level of educational attainment. It is important to note that the region's 34% poverty rate for those with a high school degree or less is substantially lower than big cities such as Denver (50%), Rapid City (43%), or Omaha (45%).

Table 11: Percent below poverty by educational attainment

Percent Below Poverty level by Educational Attainment, 2011-2015 Estimates			
Educational Attainment	**Below Poverty**		
	Box Butte & Grant	Panhandle	Nebraska
Population 25 years and over	11.0%	10.3%	9.3%
Less than high school	29.2%	23.8%	24.9%
High school graduate	13.5%	11.7%	10.9%
Some college, Associate's	9.0%	9.9%	8.8%
Bachelor's degree or higher	1.1%	3.0%	3.5%
Source: 2011-2015 ACS 5-year Estimates			

Family Type

Box Butte County and Grant Counties both have a majority of households as households without children. Single parent families with children make up about 11% of all Box Butte County families and about 7% of Grant County families.

Figure 22: Family type by county

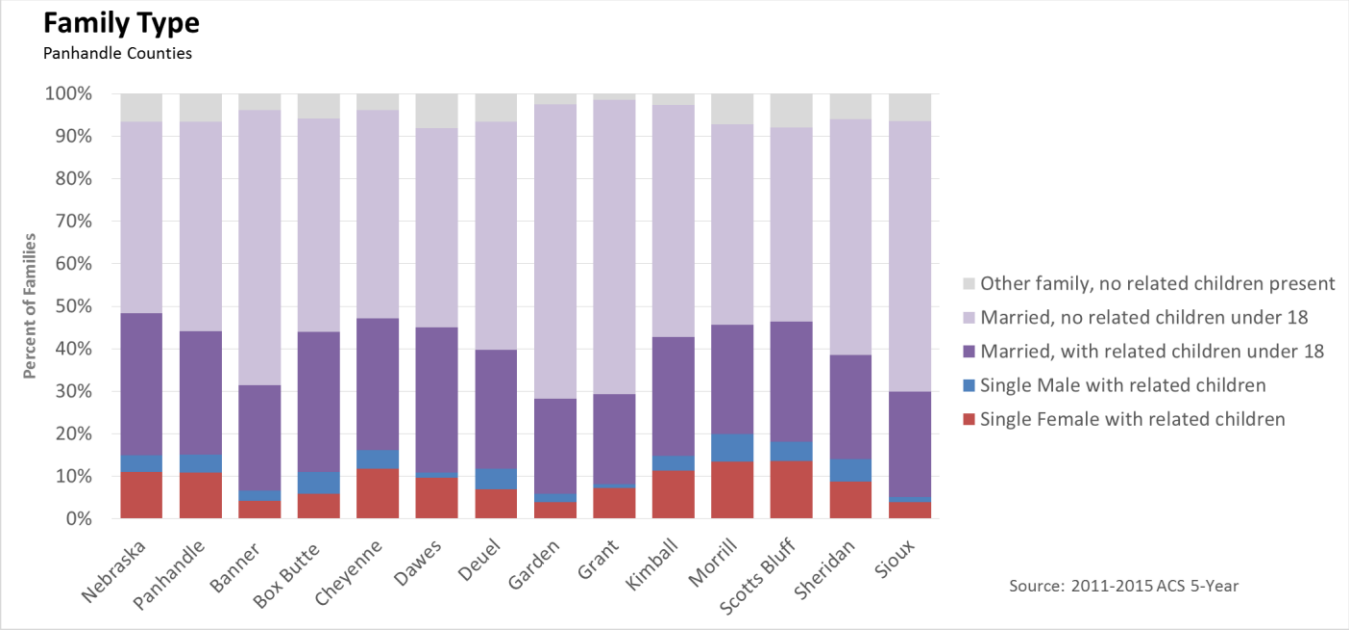


Table 12 Single Parent Households by County and Region

	Nebraska	Panhandle	Banner	Box Butte	Cheyenne	Dawes	Deuel	Garden	Grant	Kimball	Morrill	Scotts Bluff	Sheridan	Sioux
Single Parent	71229	3543	17	351	432	242	60	32	13	149	269	1750	208	20
	14.94%	**15.10%**	**6.59%**	**11.00%**	**16.09%**	**10.81%**	**11.81%**	**5.89%**	**6.77%**	**14.83%**	**19.93%**	**18.19%**	**14.04%**	**5.17%**
Single Mother	52226	2542	11	188	316	215	35	21	11	114	182	1304	130	15
	10.96%	**10.84%**	**4.26%**	**5.89%**	**11.77%**	**9.61%**	**6.89%**	**3.87%**	**5.73%**	**11.34%**	**13.48%**	**13.55%**	**8.77%**	**3.88%**
Single Father	19003	1001	6	163	116	27	25	11	2	35	87	446	78	5
	3.99%	**4.27%**	**2.33%**	**5.11%**	**4.32%**	**1.21%**	**4.92%**	**2.03%**	**1.04%**	**3.48%**	**6.44%**	**4.64%**	**5.26%**	**1.29%**

Source: 2015 ACS 5-year Estimates

Poverty by Family Type

Over 80% of all families in poverty in Box Butte County, and over 70% of families in poverty in Grant County have children under 18. This helps explain the significantly higher rate of childhood poverty, compared to overall poverty within the county as well as regional childhood poverty rates. Single female headed households with children account for just 11% of total families but account for nearly 30% of all the families in poverty in Box Butte County.

Figure 23: Families below poverty level by family type

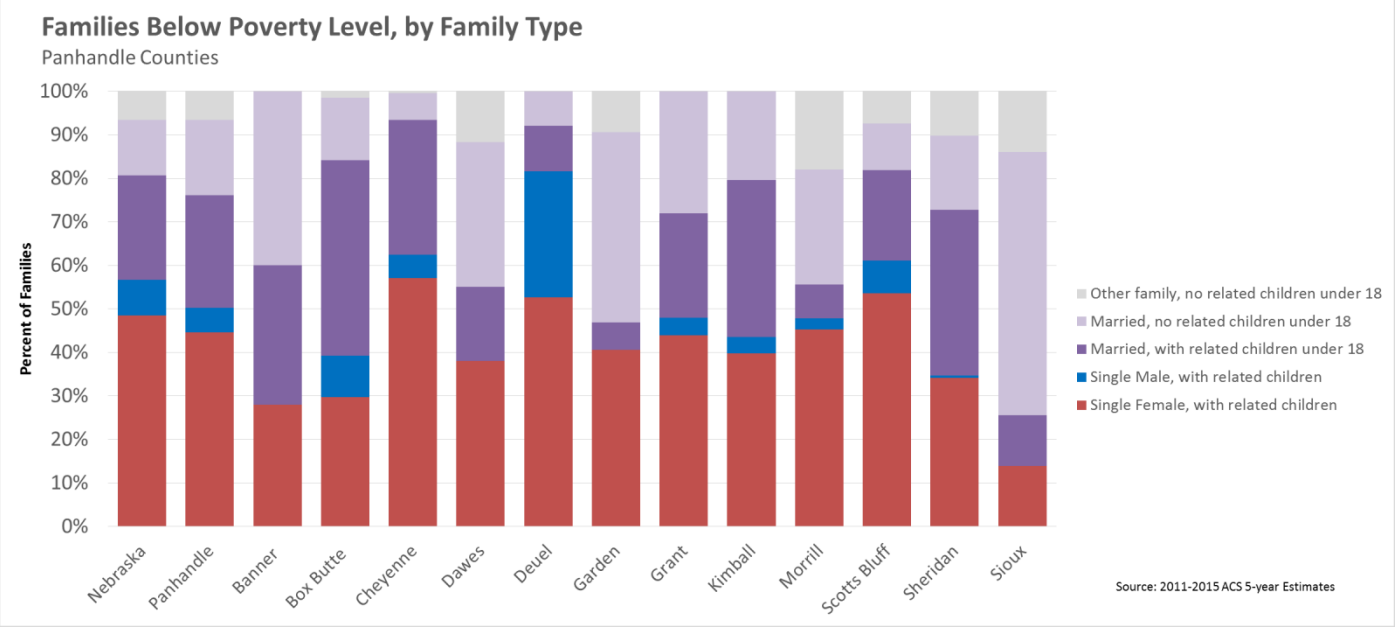


Table 6 Percentage of Households Living Below Poverty by Family Type

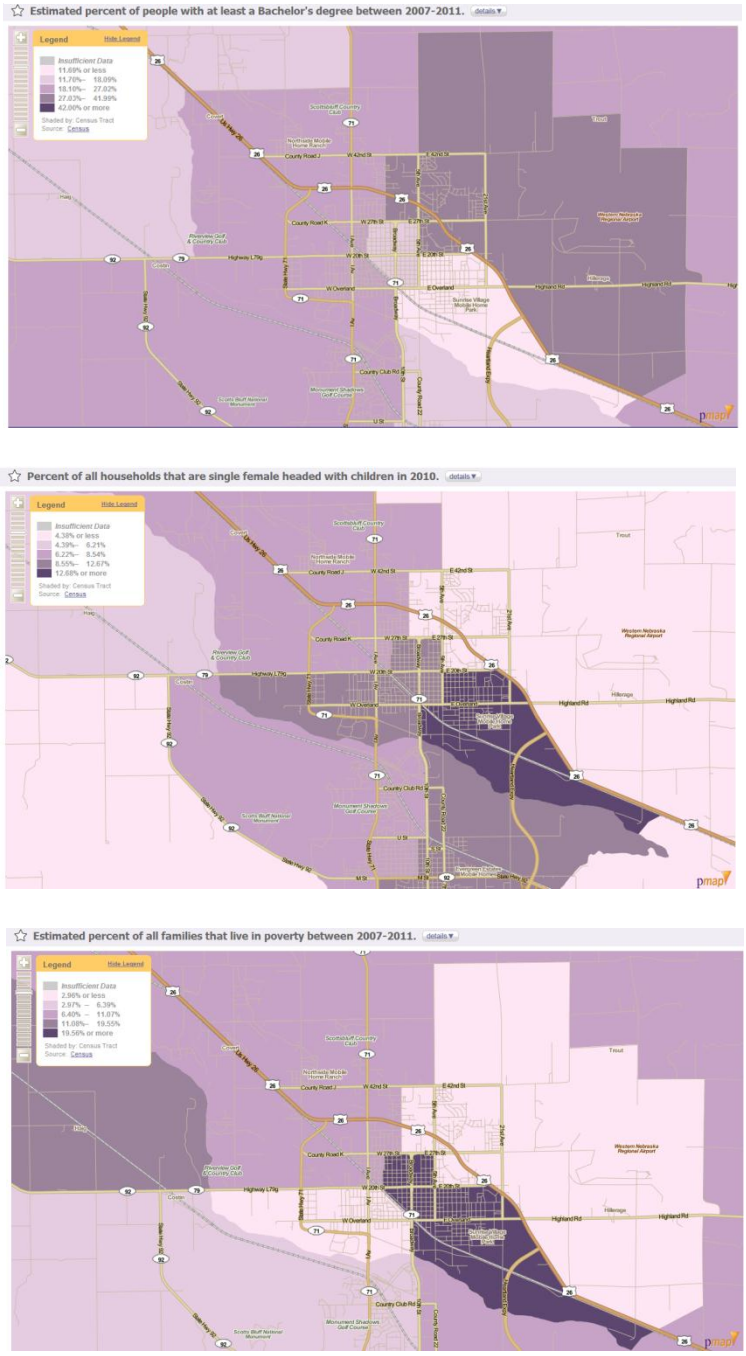
	Nebraska	Panhandle	Banner	Box Butte	Cheyenne	Dawes	Deuel	Garden	Grant	Kimball	Morrill	Scotts Bluff	Sheridan	Sioux
Total Households	476,627	23,461	258	3,191	2,685	2,238	508	543	192	1,005	1,350	9,622	1,482	387
Below Poverty	41,690 8.75%	2,366 10.08%	25 9.69%	347 10.87%	245 9.12%	318 14.21%	38 7.48%	32 5.89%	14 7.29%	108 10.75%	117 8.67%	903 9.38%	176 11.88%	43 11.11%
Married, with Children	24.05%	25.91%	32.00%	44.96%	31.02%	16.98%	10.53%	6.25%	42.86%	36.11%	7.69%	20.71%	38.07%	11.63%
Married, no children	12.66%	17.37%	40.00%	14.41%	6.12%	33.33%	7.89%	43.75%	50.00%	20.37%	26.50%	10.74%	17.05%	60.47%
Single Father	8.17%	5.66%	0.00%	9.51%	5.31%	0.00%	28.95%	0.00%	7.14%	3.70%	2.56%	7.53%	0.57%	0.00%
Single Mother	48.48%	44.84%	28.00%	29.68%	57.14%	38.05%	52.63%	40.63%	78.57%	39.81%	45.30%	53.60%	34.09%	13.95%
Other, no children	6.64%	6.68%	0.00%	1.44%	0.41%	11.64%		9.38%	21.43%	0.00%	17.95%	7.42%	10.23%	13.95%

Correlation of social and economic factors and environments

Economic and social factors that affect health do not exist independent of one another but are interrelated. For example, families headed by single parents not only run a higher risk of inadequate social support for children but also potentially bear a greater financial burden. The correlation of these factors points to solutions which touch multiple aspects of a person's life.

The correlation of social and economic factors also manifests itself geographically with those having lower incomes often locating in neighborhoods with lower cost housing. The images on this page show the southeastern census tract of Scottsbluff having the highest rates of poverty and single female headed households and also the lowest rate of educational attainment. These maps not only affirm the interrelation of social and economic health factors but also show the environmental implications of this correlation. Having a positive neighborhood and school environment is also important for personal health in developing positive developmental assets as well as physical health.[1]

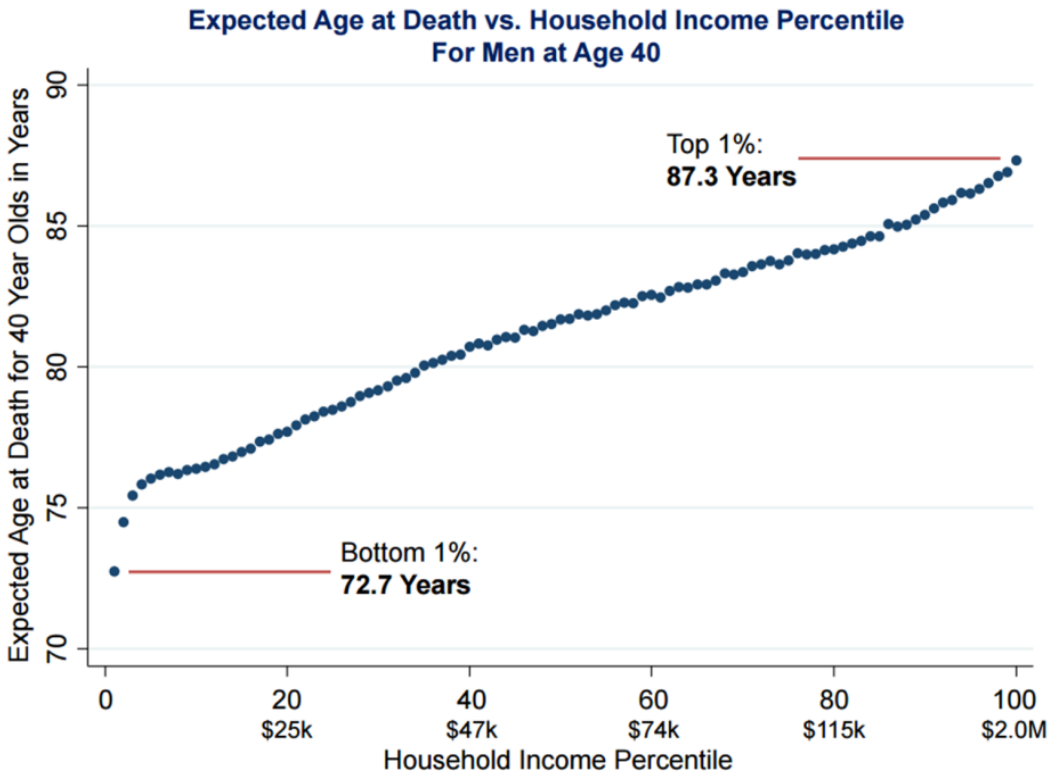
Figure 24: Correlation of factors and social environments



Source: U.S. Census Bureau

This correlation is also shown by the difference in life expectancy by income. New research has shown that life expectancy correlates strongly with income, with higher income percentile positively correlating with longer life expectancies.[2]

Figure 25: Life expectancy by household income percentile, Men in the United States



In Scotts Bluff County, the only Panhandle county with available data, the life expectancy for a woman in the bottom 25% of income earners is six years less than a woman in the top 25% of income earners. For men, a nine year difference exists between the bottom 25% of income earners and top 25%.

The research of this project showed the strongest correlation to predicting where poorer Americans had the highest life expectancies were places with patterns of better health behaviors such as not smoking and regularly exercising, rather than differences in access to health care or levels of income inequality.

Moving Forward

An individual's economic and social well-being directly affects his or her health. While the Panhandle has many social and economic indicators that are worse than the state and surrounding regions, the positive is that many of the issues, while complex, are patterned and can be strategically addressed to provide economic opportunities or improve health behaviors. Strong partnerships among educational, governmental, non-profit, and business communities and policies that promote financial and social stability for all citizens of the Nebraska Panhandle will drive sustainable, regional wellness.

General Health Status

Health Outcomes

Deaths

Leading Causes of Death

Heart disease was the leading cause of death in the Panhandle during 2010-2014, accounting for 23.3% of deaths. Cancer was the second leading cause of death in the Panhandle, accounting for 19.3% of deaths. This is opposite of the state of Nebraska, in which cancer was the leading cause of death and heart disease was the second leading cause of death (accounting for 22.1% and 21.3% of deaths, respectively). Chronic lung disease, stroke, and unintentional injury ranked third through fifth in number of deaths in the Panhandle, respectively.

Table 14. Leading causes of death in the Panhandle and Nebraska, 2010-2014 combined

Leading Causes of Death in Panhandle PHD and Nebraska, 2010-2014 Combined						
	Panhandle PHD*			State of Nebraska		
Rank	Cause of Death	Number Deaths	% of Total	Cause of Death	Number Deaths	% of Total
1	Heart Disease	1,119	23.3%	Cancer	17,238	22.1%
2	Cancer	926	19.3%	Heart Disease	16,584	21.3%
3	Chronic Lung	291	6.1%	Chronic Lung	4,947	6.3%
4	Stroke	246	5.1%	Stroke	4,083	5.2%
5	Unintentional Injury	241	5.0%	Unintentional Injury	3,638	4.7%
6	Diabetes	166	3.5%	Alzheimer's	2,803	3.6%
7	Alzheimer's	135	2.8%	Diabetes	2,295	2.9%
8	Hypertension	106	2.2%	Pneumonia	1,458	1.9%
9	Liver Chirrhosis	77	1.6%	Kidney Disease	1,210	1.6%
10	Pneumonia	70	1.5%	Hypertension	1,084	1.4%
	Total	4,800		Total	78,008	

*Includes the 12 counties served by Panhandle Public Health District

Source: Nebraska Vital Records

Years of Potential Life Lost (YPLL)

Years of Potential Life Lost (YPLL) is a measure of premature mortality, that is calculated by taking the age at death (for a person who died prior to a predetermined age of death) from the predetermined age of death—in this case 75 years of age.[3] YPLL is a calculation used often in public health, because prevention of early death is a major goal of public health.

Table 15. Leading Cause of Death and Years of Potential Life Lost (YPLL), 2010-2014

Leading Causes of Death and Years of Potential Life Lost (YPLL) in Panhandle Public Health District, 2010-2014 Combined							
Leading Causes of Death in Panhandle PHD, 2010-2014				Leading Causes of YPLL in Panhandle PHD, 2010-2014			
Rank	Cause of Death	Number Deaths	% of Total	Cause of Death	Total Deaths	Total YPLL	Average YPLL Per Death
1	Heart Disease	1,119	23.3%	Cancer	926	5,975	6.5
2	Cancer	926	19.3%	Unintentional Injury	241	4,760	19.8
3	Chronic Lung	291	6.1%	Heart Disease	1,119	3,326	3.0
4	Stroke	246	5.1%	Suicide	69	1,759	25.5
5	Unintentional Injury	241	5.0%	Diabetes	166	1,174	7.1
6	Diabetes	166	3.5%	Birth Defects	25	1,100	44.0
7	Alzheimer's	135	2.8%	Chronic Lung	291	985	3.4
8	Hypertension	106	2.2%	Stroke	246	595	2.4
9	Liver Chirrhosis	77	1.6%	Homicide	13	532	40.9
10	Pneumonia	70	1.5%	Hypertension	106	279	2.6

*Includes the 12 counties served by Panhandle Public Health District

Source: Nebraska Vital Records

Although heart disease was the leading cause of death in the Panhandle during 2010-2014, cancer was the leading cause of total YPLL, with 5,975 YPLL. Unintentional injury was ranked second, with 4,760 YPLL.

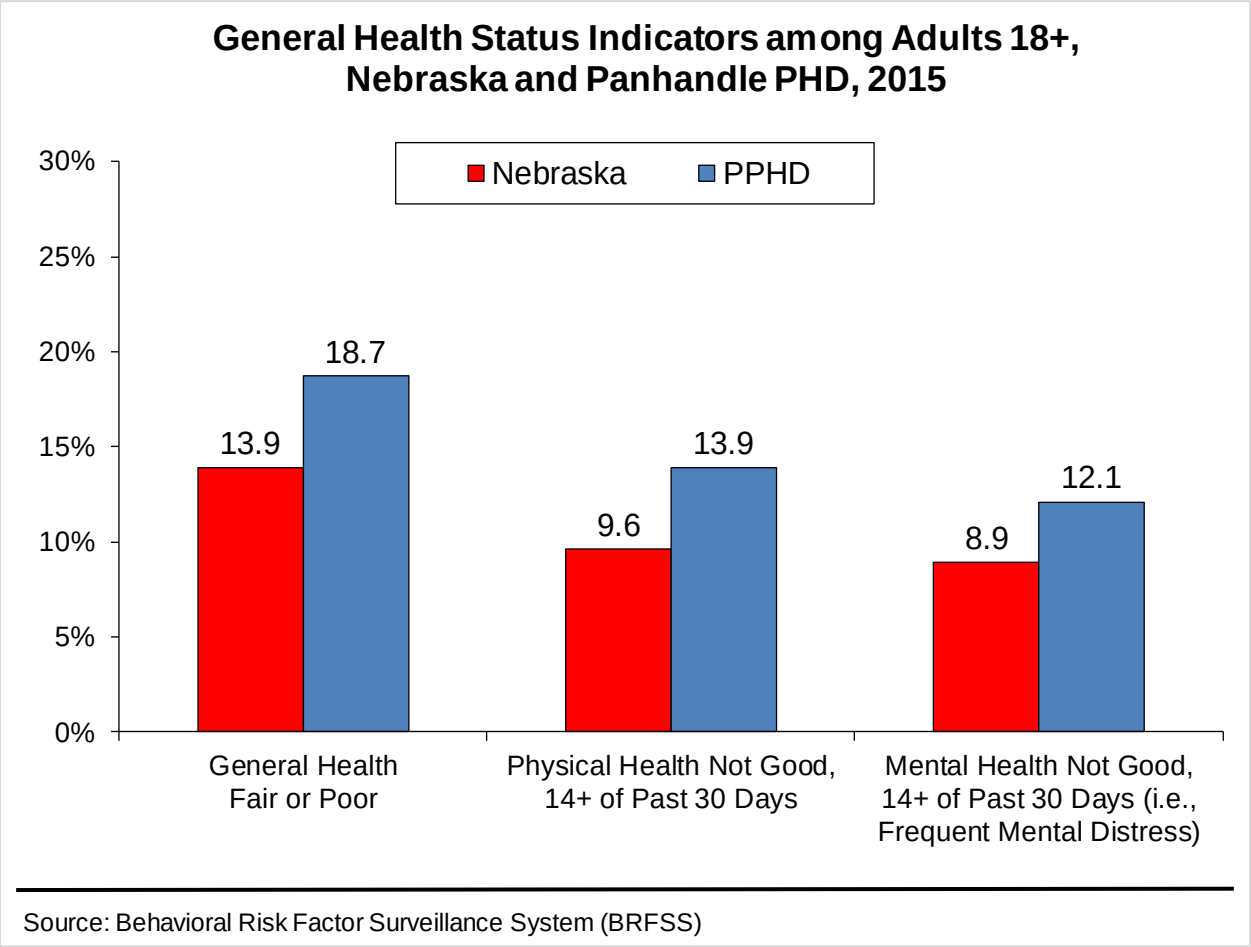
While looking at total YPLL, it is also handy to look at the average YPLL per death. In doing so, we find that birth defects ranked first, with 44.0 YPLL per death, and homicide second with 40.9 YPLL per death, during 2010-2014. In contrast, stroke resulted in 2.4 YPLL per death, hypertension in 2.6, and heart disease in 3.0.

Health-Related Quality of Life

Quality of Life

General Health Status Indicators

Figure 26. General health status indicators among adults 18+, Nebraska and Panhandle, 2015

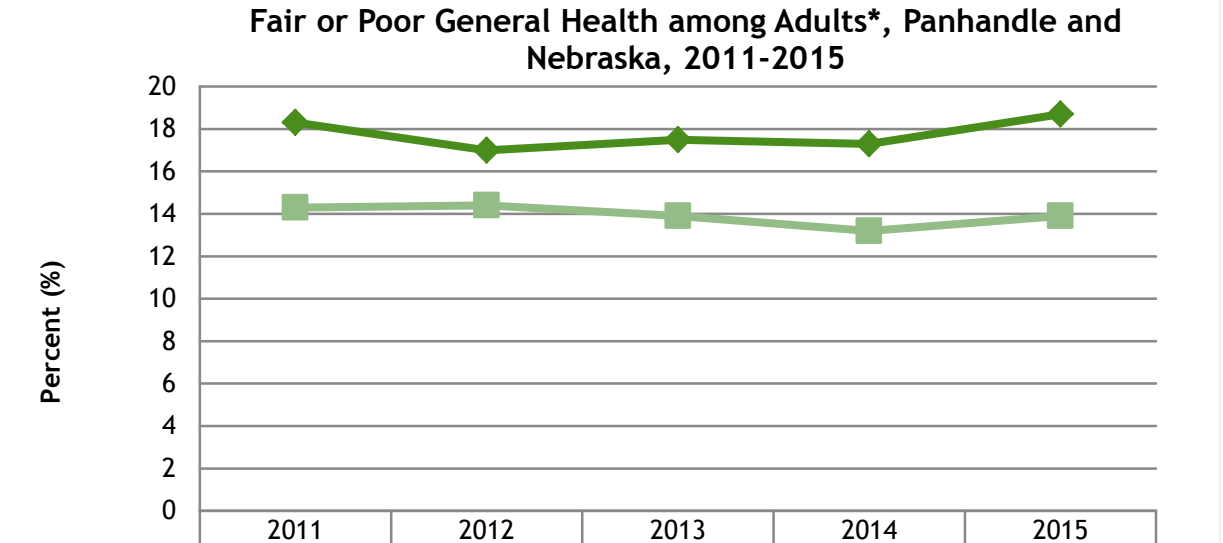


Source: Behavioral Risk Factor Surveillance System (BRFSS)

In 2015, 18.7% of Panhandle adults ranked their general health as fair or poor, versus 13.9% for the state. 13.9% of Panhandle adults reported their physical health was not good for 14 or more of the past 30 days, much higher than the 9.6% that report the same across the state. Additionally, 12.1% of Panhandle adults reported their mental health was not good for 14 or more of the past 30 days in 2015, as opposed to 8.9% at the state level. These measures collectively give a picture of the health-related quality of life in the Panhandle. More detail is contained in the sections below.

General Health Rating

Figure 27. General health fair or poor, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	18.3	17	17.5	17.3	18.7
Nebraska	14.3	14.4	13.9	13.2	13.9

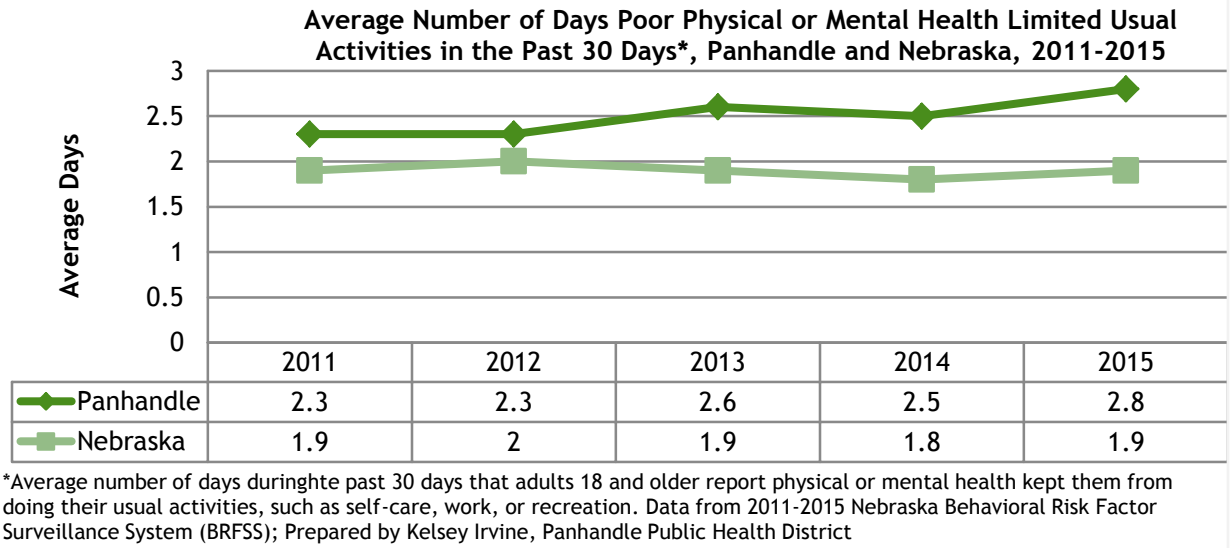
*Percentage of adults 18 and older who reported their general health is fair or poor. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

From 2011-2015, Panhandle adults consistently reported their health status as general or poor at a higher rate than the state. This difference was significant in 2011, 2013, 2014, and 2015.

Poor Physical/Mental Health Days

From 2011-2015, the average number of days that poor physical or mental health limited usual activity in the past 30 days was consistently higher in the Panhandle versus the state of Nebraska. This difference was significant in 2013, 2014, and 2015.

Figure 28. Average number of days poor physical or mental health limited usual activities in the past 30 days, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	2.3	2.3	2.6	2.5	2.8
Nebraska	1.9	2	1.9	1.8	1.9

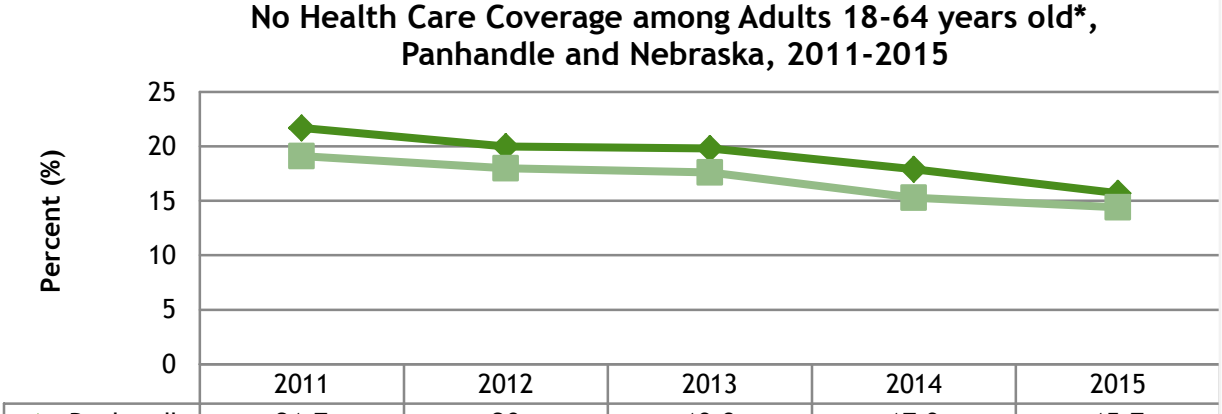
*Average number of days duringhte past 30 days that adults 18 and older report physical or mental health kept them from doing their usual activities, such as self-care, work, or recreation. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Healthcare Access and Utilization

Healthcare Coverage

From 2011 to 2015, the Panhandle has consistently had a slightly higher percentage of individuals that report they do not have health insurance. This difference was not significant for any year. However, this number has dropped from year to year, with only 15.7% of Panhandle adults reporting that they do not have health insurance in 2015. This drop is likely due to the initiation of health insurance exchanges, a part of the Affordable Care Act that came into effect in October of 2013.

Figure 29. No health care coverage among adults 18-64 years old, Panhandle and Nebraska, 2011-2015



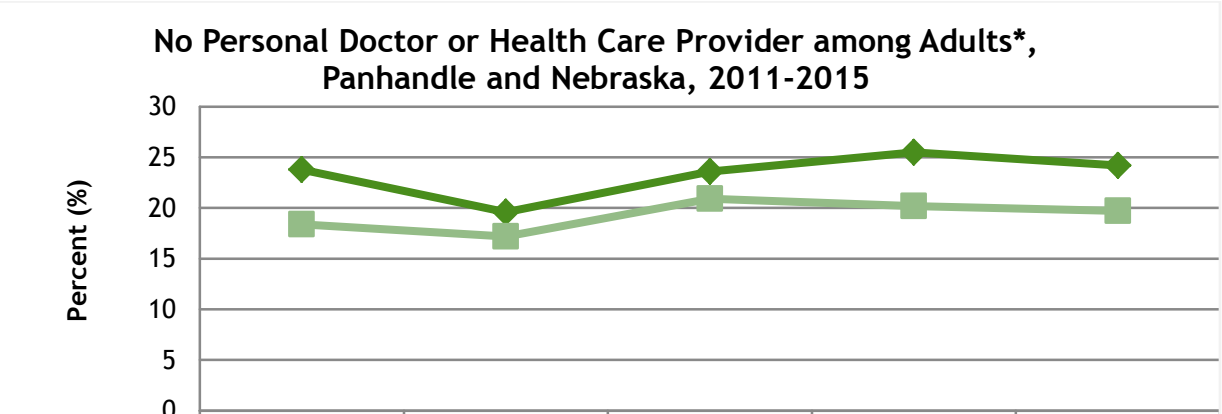
	2011	2012	2013	2014	2015
Panhandle	21.7	20	19.8	17.9	15.7
Nebraska	19.1	18	17.6	15.3	14.4

*Percentage of adults 18-64 years old who reoprt that they do not have any kind of health care coverage. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Barriers to Healthcare

Lacking a Personal Healthcare Provider

Figure 30. No personal doctor or health care provider among adults, Panhandle and Nebraska, 2011-2015



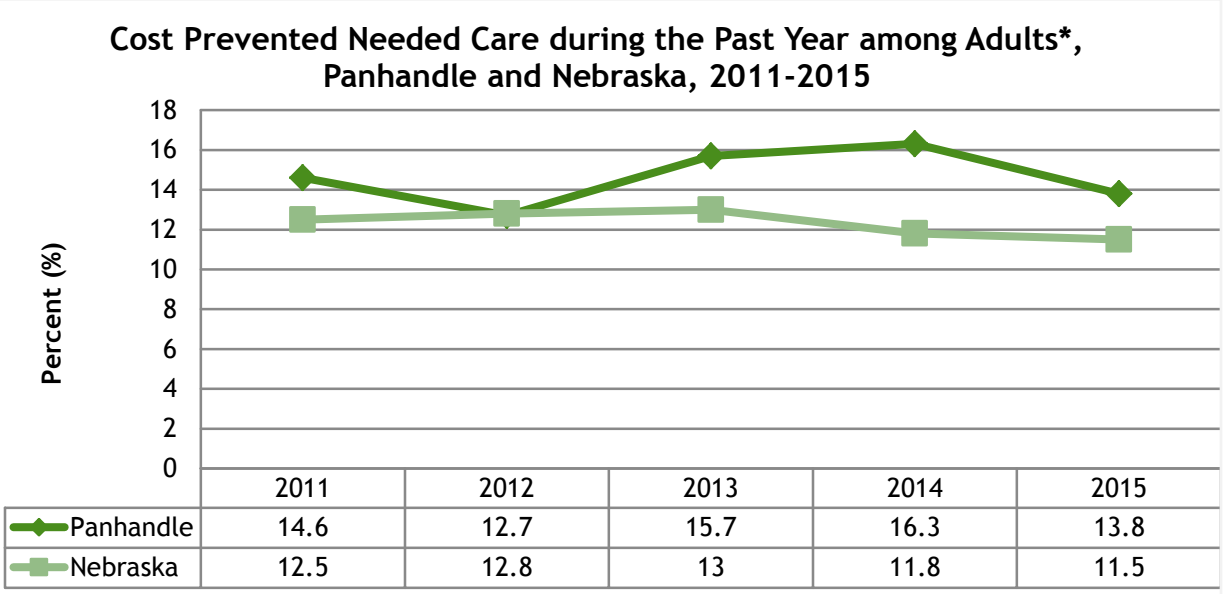
	2011	2012	2013	2014	2015
Panhandle	23.8	19.6	23.6	25.5	24.2
Nebraska	18.4	17.2	20.9	20.2	19.7

*Percentage of adults 18 and older who report that they do not have a personal doctor or health care provider. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Adults in the Panhandle consistently report they do not have a doctor or health care provider at a higher rate than the rest of the state, with significant differences in 2011, 2014, and 2015 (see Figure 30). This percentage appears to have an upward trend in recent years.

Cost as a Barrier to Care

Figure 31. Cost prevented needed care during the past year among adults, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	14.6	12.7	15.7	16.3	13.8
Nebraska	12.5	12.8	13	11.8	11.5

*Percentage of adults 18 and older who report that they needed to see a doctor but could not because of cost in the past 12 months. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

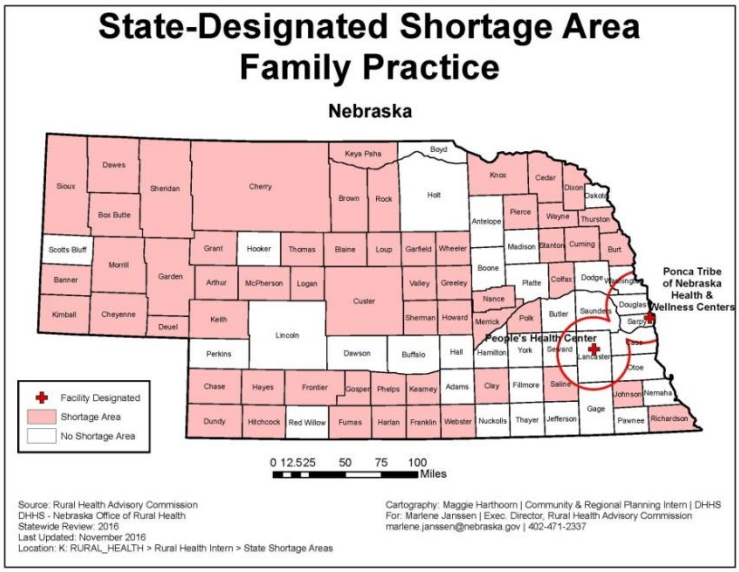
In 2015, 13.8% of Panhandle adults reported that they needed to see a doctor but could not because of cost in the past 12 months (see Figure 31). This number has historically been higher than the state, however trended down between 2014 and 2015. The difference between the Panhandle and the State was significant only in 2014.

Shortage Area Designations

Access to health care services (physical, mental, and dental) varies across the state, with rural areas generally having fewer resources than metropolitan areas. Specialists are especially scarce in rural areas.

Not only is the Panhandle rural, but it has an aging population. People tend to utilize health care services more as they age, which can be an issue in a rural area.

Figure 32. State-Designated Shortage Area, Family Practice



Shortage area maps exist for Nebraska for three health care areas: Family Practice, General Dentistry, and Psychiatry and Mental Health.

Family Practice

Outside of Scotts Bluff County, all other Panhandle counties are designated shortage areas for family practice (see Figure 32).

General Dentistry

Scotts Bluff, Box Butte, Garden, and Deuel Counties are not shortage areas for general dentistry. Every other Panhandle county is designated as a shortage area (see Figure 33).

Psychiatry and Mental Health

The entire Panhandle area is designated as a shortage area for psychiatry and mental health. Only the metropolitan areas of Douglas/Sarpy Counties and Lancaster County are not shortage areas for psychiatry and mental health (see Figure 34).

Licensed Hospital Beds

The Panhandle region has 135 licensed long-term beds in its hospitals, and 275 acute beds (see Table 16).

Figure 33. State-Designated Shortage Area, General Dentistry

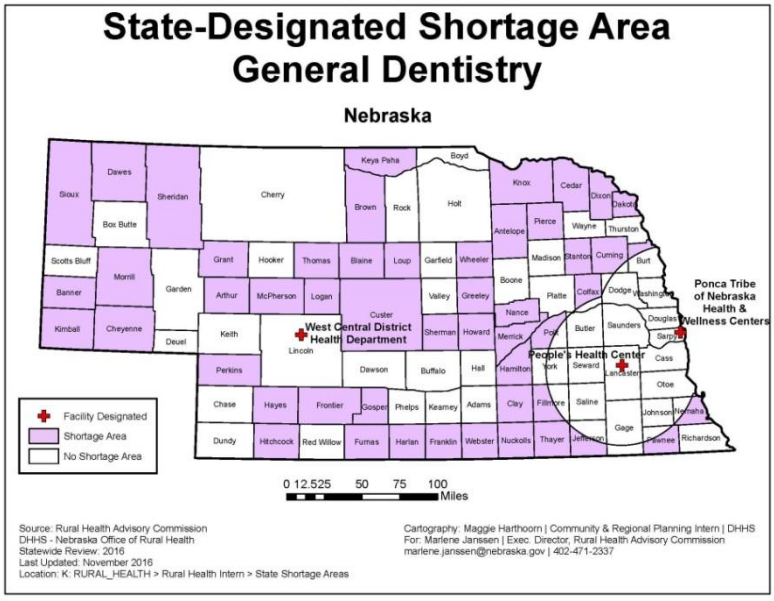


Figure 34. State-Designated Shortage Area, Psychiatry and Mental Health

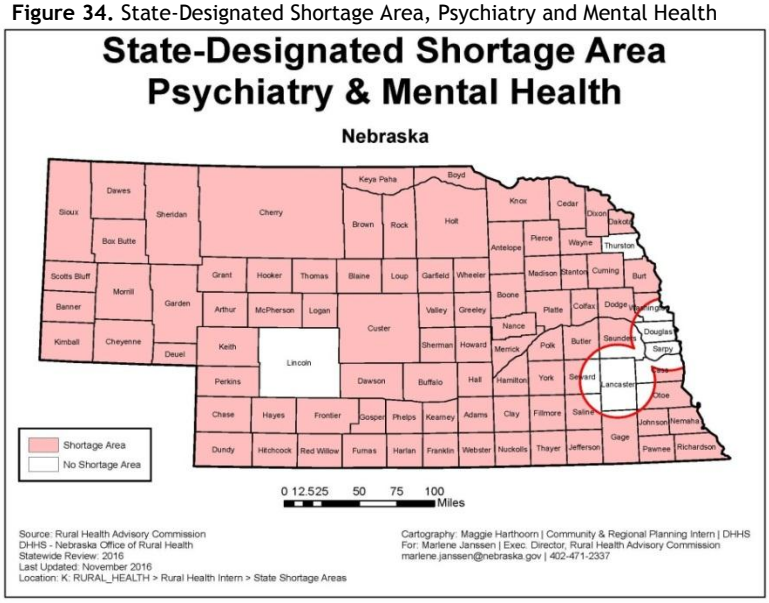


Table 16. Number of licensed beds in Panhandle hospitals

Hospitals	Licensed Beds	
	Acute	Long term
Regional West Medical Center	130	0
Box Butte General Hospital	25	0
Sidney Regional Medical Center	25	63
Garden County Health Services	10	40
Kimball Health Services	15	0
Morrill County Community Hospital	20	0
Gordon Community Hospital	25	32
Chadron Community Hospital	25	0
TOTAL	**275**	**135**

Chronic Disease

Cardiovascular Disease

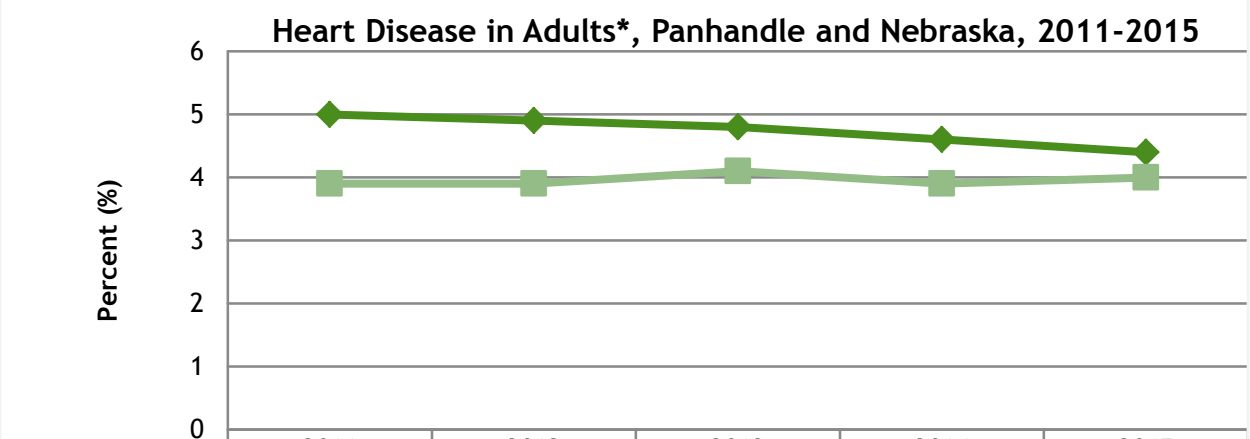
Cardiovascular diseases (CVD) are the number one cause of death across the world.[4] Cardiovascular diseases "are a group of disorders of the heart and blood vessels", they include: coronary heart disease, cerebrovascular disease, peripheral arterial disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis and pulmonary embolism.[4] Risk factors for cardiovascular diseases include: unhealthy diet, physical inactivity, tobacco use, and harmful use of alcohol.

Heart Disease

Coronary heart disease is a "disease of the blood vessels supplying the heart muscle".[4] It is the most common type of heart disease in the US, and is caused by narrowing of the vessels that supply blood and oxygen to the heart due to a buildup of plaque.[5]

Prevalence

Figure 35. Heart disease in adults, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report they have ever had angina or coronary heart disease. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

A larger percentage of adults in the Panhandle historically report having heart disease compared to the state of Nebraska, however the difference between the two has never been significant (see Figure 35). The prevalence in the Panhandle appears to be trending down from 2011 to 2015.

Mortality

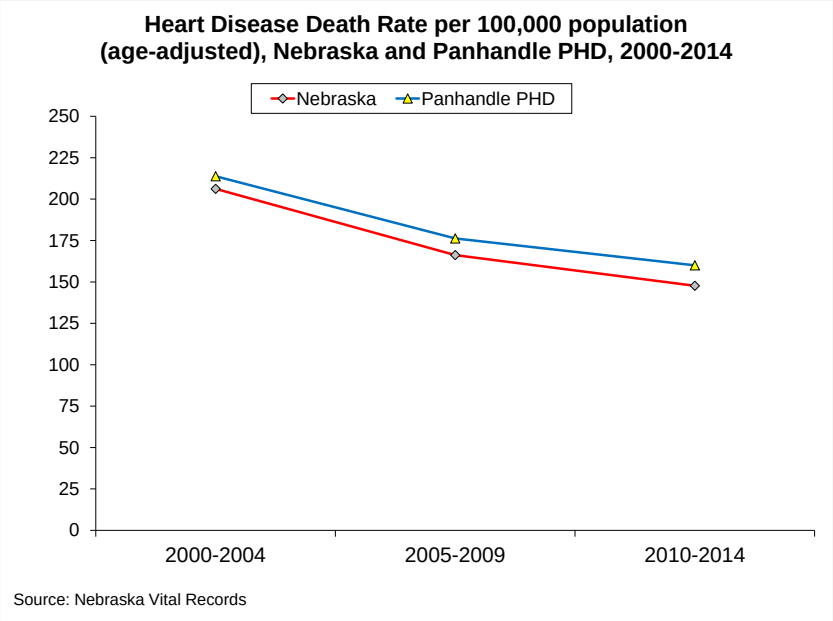
Table 17. Heart Disease Death Rate per 100,000 population (age-adjusted) Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	171.7	166.5	162.1	157.1	151.2	149.6	147.4	146.2	148.6
Panhandle	181.1	178.2	171.8	169.7	159.5	168.5	159.8	158.7	152.9

Source: Nebraska Vital Records

Similar to the prevalence of heart disease, the heart disease death rate per 100,000 population is also slightly higher when compared to the state (see Table 17 and Figure 36).

Figure 36. Heart disease death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



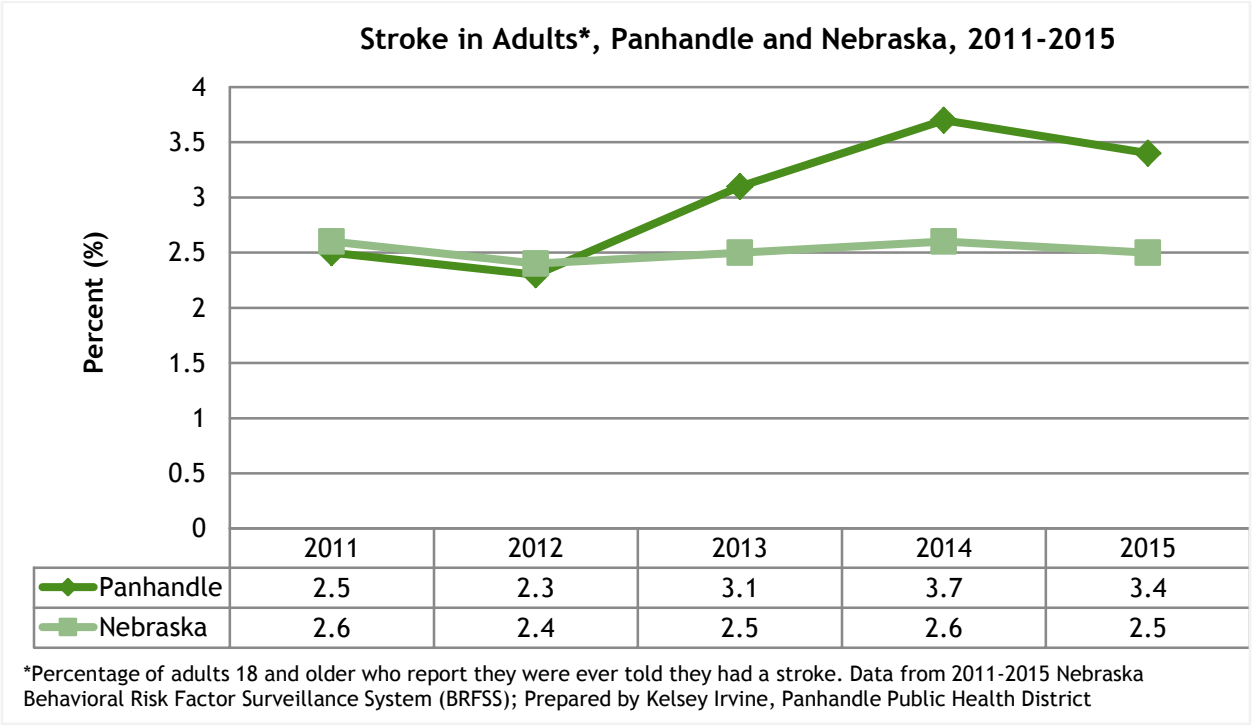
Source: Nebraska Vital Records

Stroke

Stroke, also known as cerebrovascular disease, is another type of CVD that occurs when blood supply to a part of the brain is blocked, or when a blood vessel in the brain bursts. This leads to brain damage or death. A stroke can cause severe disability, brain damage, and death.[6]

Prevalence

Figure 37. Stroke in adults, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	2.5	2.3	3.1	3.7	3.4
Nebraska	2.6	2.4	2.5	2.6	2.5

*Percentage of adults 18 and older who report they were ever told they had a stroke. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

In recent years, the prevalence of stroke in adults has been slightly higher in the Panhandle versus the state of Nebraska, however there is no significant difference in any year (see Figure 37).

Mortality

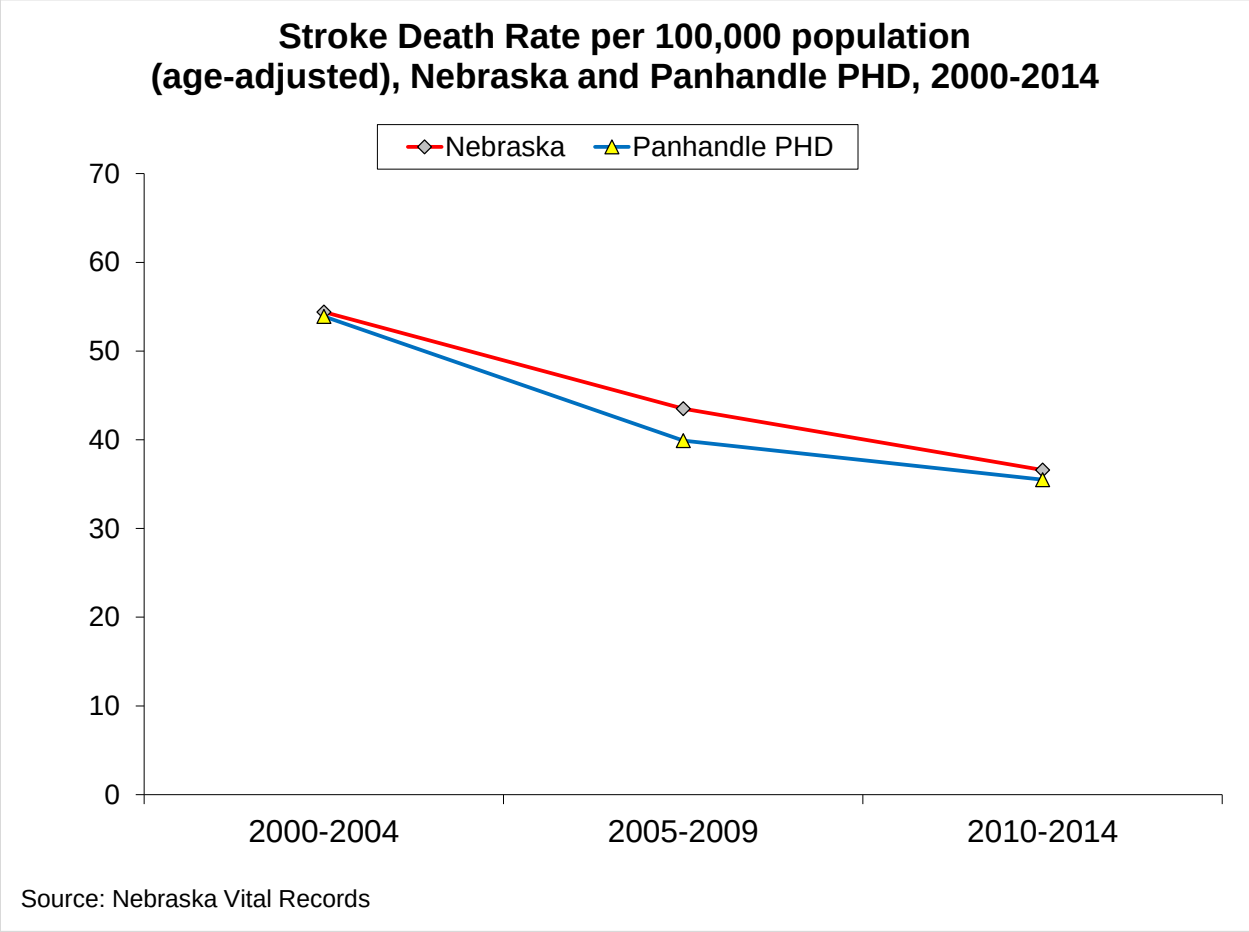
Table 18. Stroke Death Rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	45.6	42.4	41.1	39.9	39.2	37.6	36.1	35.3	34.8
Panhandle	42.3	40.8	37.7	35.5	35.2	35.5	37.9	36.0	38.3

Source: Nebraska Vital Records

The stroke death rate per 100,000 population is similar between the Panhandle and the state of Nebraska (see Table 18 and Figure 38).

Figure 38. Stroke Death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



Source: Nebraska Vital Records

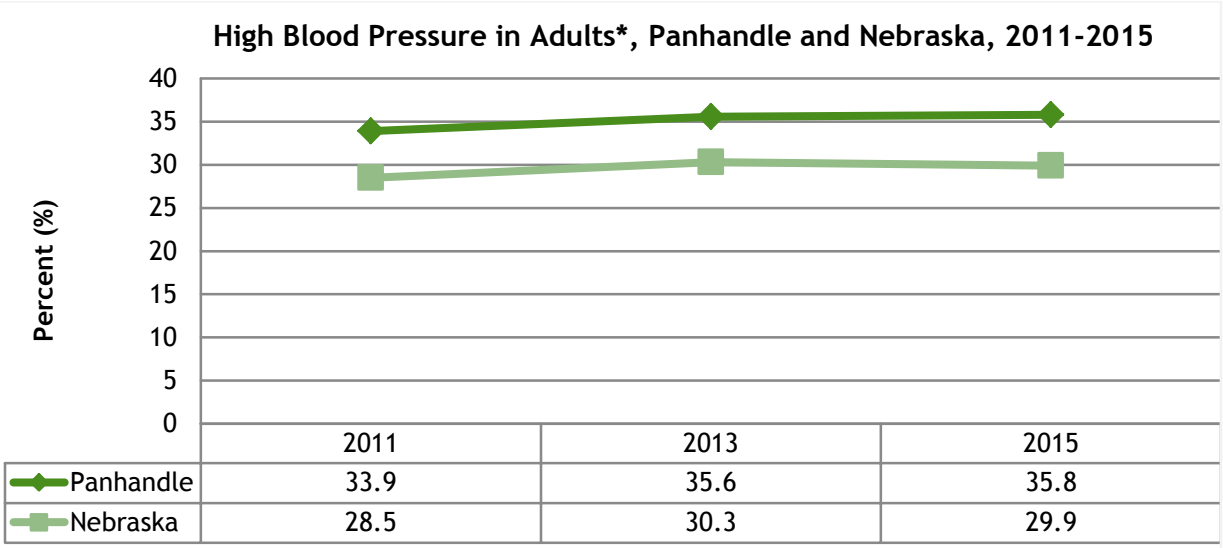
Clinical Risk Factors for Cardiovascular Disease

High Blood Pressure

As mentioned above, high blood pressure (also known as hypertension) is a risk factor for cardiovascular disease. High blood pressure is a common condition—about 1 in 3 US adults (75 million people) have it. However, only half of those with hypertension have their blood pressure in control.[7]

Prevalence

Figure 39. High blood pressure in adults, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report they were ever told by a doctor, nurse, or other health professional that they have high blood pressure. NOTE: This indicator is measured on only odd years. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

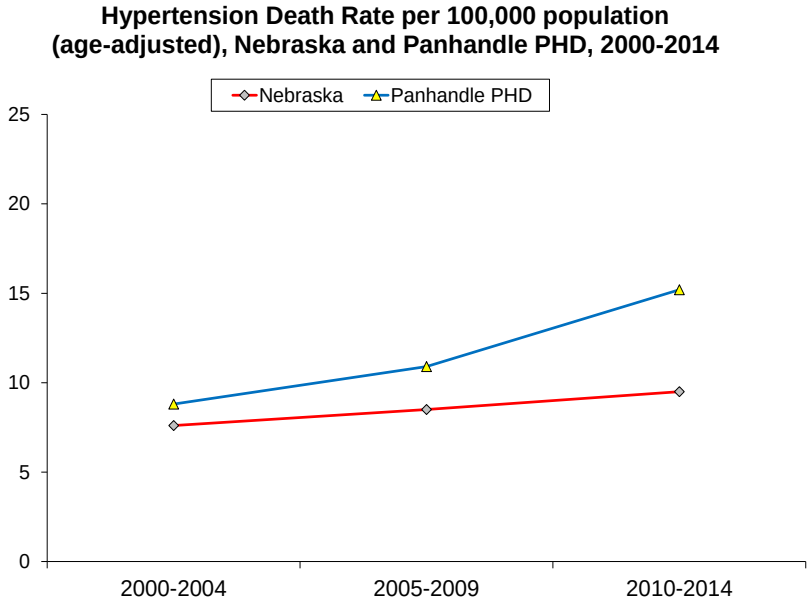
The Panhandle historically has a higher percentage of adults that report they have high blood pressure compared with the state of Nebraska (see Figure 39). The difference between the two is significant in each year measured.

84.7% of Panhandle adults reported having their blood pressure checked in 2015, as opposed to 88.0% at the state level.[8] Of adults in the Panhandle who reported they had high blood pressure in 2015, 76.0% were currently taking medication, versus 77.8% at the state level.[9]

Mortality

The hypertension death rate per 100,000 population has a similar trend as heart disease and stroke, with the Panhandle having a historically higher death rate than the state of Nebraska (see Figure 40). While the state death rate has had a relatively slow increase from 2000-2014, the Panhandle death rate has increased more drastically.

Figure 40. Hypertension Death Rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014

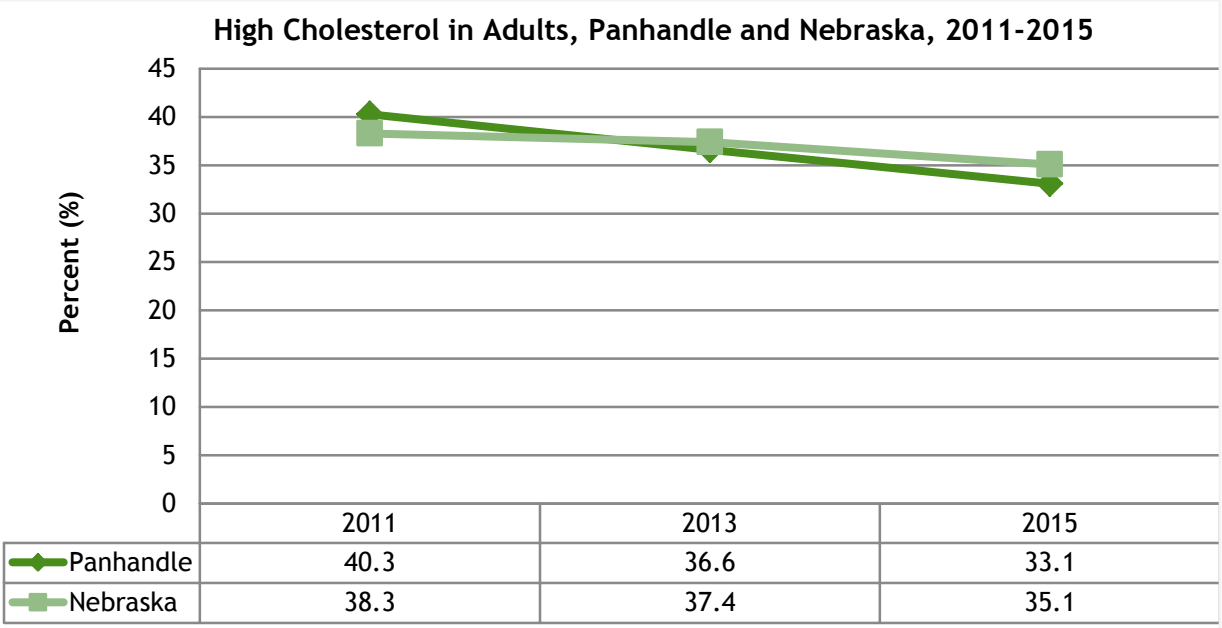


High Blood Cholesterol

While cholesterol plays an important part in bodily functions, too much cholesterol can cause buildup in the walls of blood vessels, called plaque. The buildup of plaque causes blood vessels to narrow, thus less blood flows through the body and to organs.[10]

Prevalence

Figure 41. High cholesterol in adults, Panhandle and Nebraska, 2011-2015



	2011	2013	2015
Panhandle	40.3	36.6	33.1
Nebraska	38.3	37.4	35.1

*Percentage of adults 18 and older who report they were ever told they have high cholesterol. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

The prevalence of high cholesterol in adults was higher in the Panhandle versus the state in 2011, but from 2013 to 2015 the percentage of adults that reported having high cholesterol was lower in the Panhandle than the state (see Figure 41). There was no significant difference between any of the years.

Diabetes

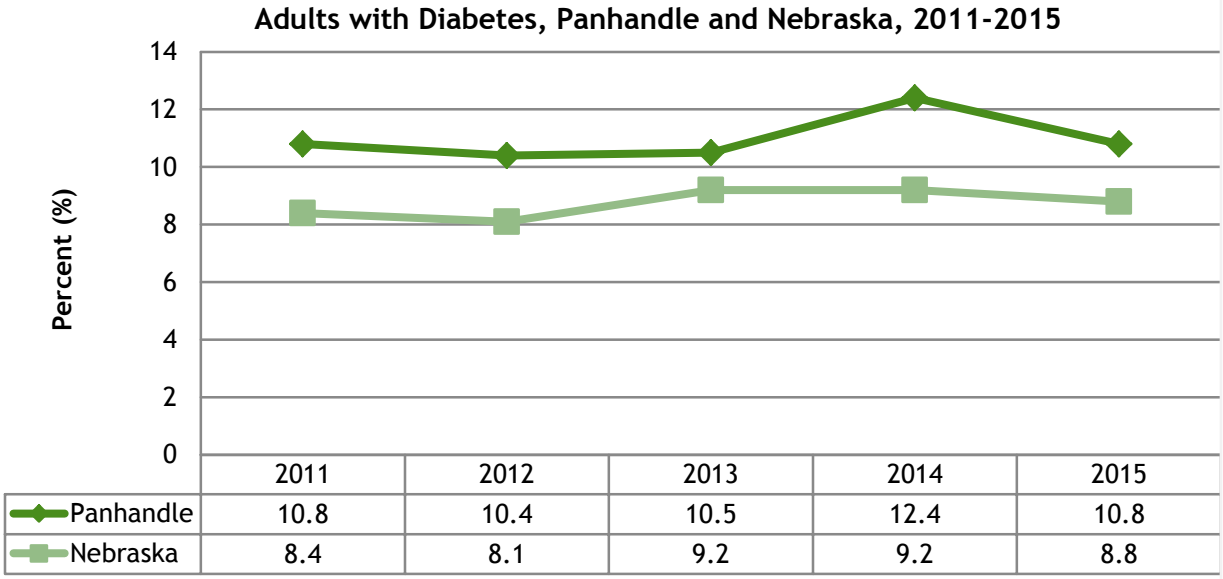
Diabetes is a chronic illness in which blood glucose levels are above normal. There are two types of diabetes: type 1 and type 2. Type 1 diabetes, often referred to as juvenile-onset diabetes, occurs when the body cannot produce its own insulin and may make up approximately 5% of diagnosed diabetes cases. Type 2 diabetes, also known as adult-onset diabetes, may make up 90-95% of diagnosed diabetes cases. Gestational diabetes is a form of diabetes that occurs in pregnant women (in 2-10% of pregnancies), but generally disappears when pregnancy ends.[10]

Risk factors for type 1 diabetes are largely unknown. Risk factors for type 2 diabetes include old age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity.[10]

Diabetes Prevalence

The prevalence of diabetes is much higher in the Panhandle compared to the state, with significant differences in years 2011 and 2015 (see Figure 42). There was a slight uptick in the percentage of adults who reported having diabetes in 2014, which then decreased in 2015.

Figure 42. Adults with diabetes, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report they were ever told they have diabetes (excluding pregnancy). Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Diabetes Mortality

Table 19. Number of deaths from diabetes, Nebraska and Panhandle, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	1358	1379	1386	1364	1353	1351	1373	1386	1496
Panhandle	84	68	75	82	105	105	98	90	100

Source: Nebraska Vital Records

While the rate of death by diabetes in the Panhandle was lower or approximately equal to the state from approximately 2005-2010, an uptick in the diabetes death rate per 100,000 population occurred in 2009 and continues through 2015 (see Table 20). A similar pattern is seen in the number of deaths by diabetes in the Panhandle versus the state (see Table 19).

Table 20. Diabetes death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	23.0	22.9	22.8	22.2	21.7	21.4	21.4	21.4	22.7
Panhandle	23.1	17.8	19.7	22.1	27.8	27.8	25.7	24.6	28.1

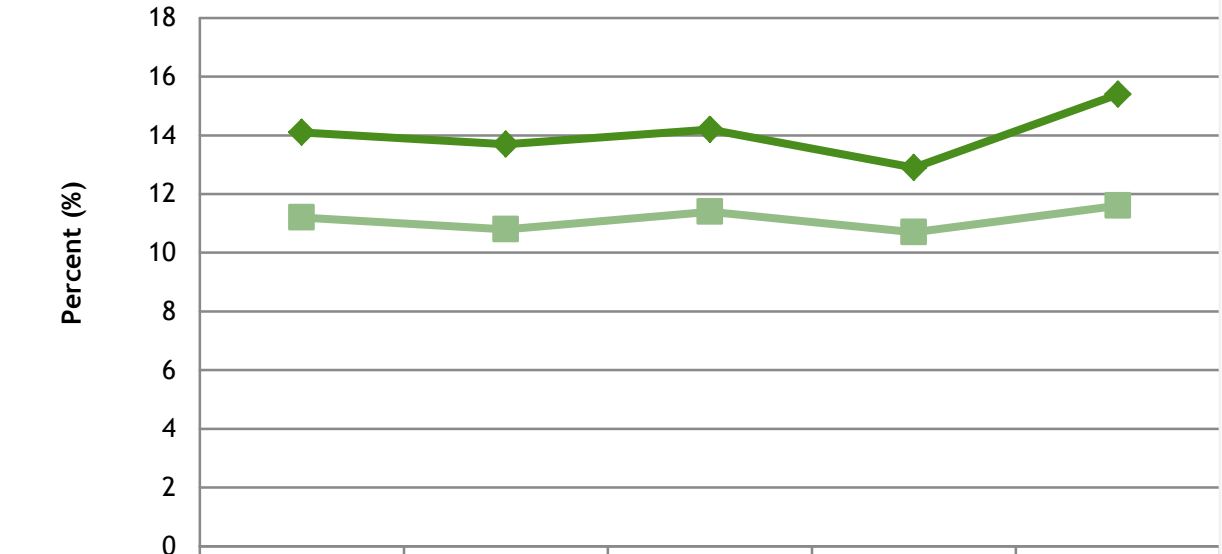
Source: Nebraska Vital Records

Cancer

"Cancer is a term used for diseases in which abnormal cells divide without control and can invade other tissues".[11] Cancer spreads throughout the body through the blood and lymph system. Cancer is not only one disease—there are more than 100 types of cancers.[11]

Cancer Prevalence

Figure 43. Adults with any kind of cancer, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	14.1	13.7	14.2	12.9	15.4
Nebraska	11.2	10.8	11.4	10.7	11.6

*Percentage of adults 18 and older who report they were ever told they have any kind of cancer. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

The percentage of adults reporting they have any kind of cancer has been significantly higher in the Panhandle when compared to the state, from 2011 forward (see Figure 43).

Cancer Mortality

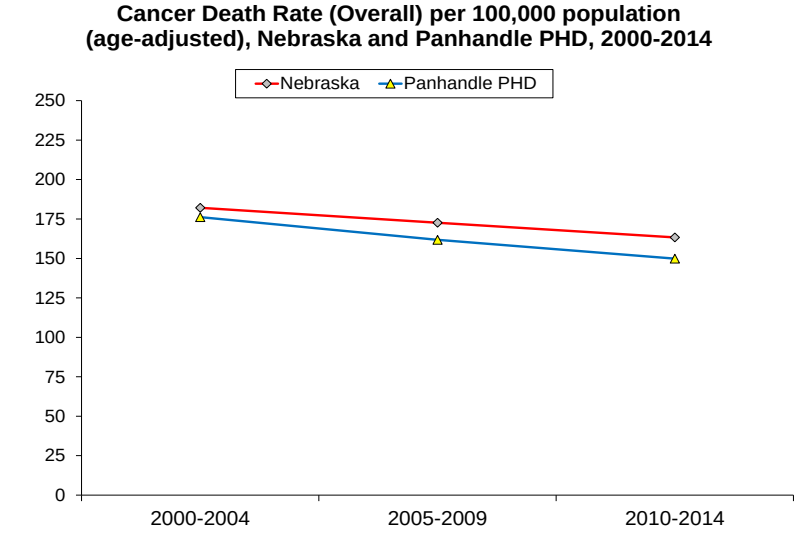
Although the prevalence of cancer in the Panhandle is significantly higher than in the state, the rate of death caused by cancer is higher at the state level (see Figure 44). This is interesting because the percentage of adults that report being up to date on cancer screenings in the Panhandle is lower than that at the state level (see cancer screening section below). Table 21 shows the number of death and cancer death rate per 100,000 population from 2010-2014. Lung and bronchus cancer had the highest rate of death in the Panhandle, but it was a lower rate than that of the state. Colorectal cancer ranked second, with a mortality rate of 18.8 per 100,000 population, much higher than the 16.2 per 100,000 population of the state. The remaining types of cancer have notably lower mortality rates when compared to the state.

Table 21. Cancer Mortality, Number of Deaths and Mortality Rates, All Sites and Selected Primary Sites, US, NE, Panhandle, 2010-2014

	US		Nebraska		Panhandle	
Primary Site	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
All sites	2,910,637	166.4	17,245	163.3	926	149.7
Lung & bronchus	784,338	44.7	4,499	43.0	228	36.6
Colorectal	258,814	14.8	1,721	16.2	114	18.8
Female breast	205,153	21.3	1,172	20.3	63	18.0
Prostate	139,802	20.0	916	20.8	47	17.0
Melanoma	46,252	2.7	302	2.9	11	1.9
Cervix	20,437	2.3	112	2.2	4	1.4
Oral cavity & pharynx	44,310	2.8	247	2.7	11	1.9

NOTE: All rates are age-adjusted to the 2000 US standard population; rates are the average annual number of cases/deaths per 100,000 population (gender-specific cancers are per 100,000 male or female population)
Source: Nebraska Vital Records

Figure 44. Cancer death rate (overall) per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



Source: Nebraska Vital Records

Incidence of Cancer

The incidence rate (new cases) per 100,000 population of cancers in the Panhandle during 2009-2013 were highest among prostate and female breast cancer, with lung and bronchus cancer ranking third. The incidence rate of cervix cancer is slightly higher in the Panhandle when compared to the state. All other cancers had an incidence rate relatively similar to or less than the state.

Table 22. Cancer Incidence, Number of Cases and Incidence Rates, All Sites and Selected Primary Sites, US, Nebraska, Panhandle, 2009-2013

	US		Nebraska		Panhandle	
Primary Site	**Number**	**Rate**	**Number**	**Rate**	**Number**	**Rate**
All sites	7,800,258	456.6	46,260	454.3	2,369	412.1
Lung & bronchus	1,067,959	62.5	6,113	59.6	293	47.7
Colorectal	692,122	40.6	4,559	44.4	233	40.4
Female breast	1,117,483	123.4	6,388	120.8	332	115.4
Prostate	1,009,595	123.2	6,026	123.6	336	117.8
Melanoma	340,070	20.3	1,925	19.7	98	18.2
Cervix	61,711	7.6	320	7.2	20	9.4
Oral cavity & pharynx	198,493	11.4	1,162	11.2	60	10.2

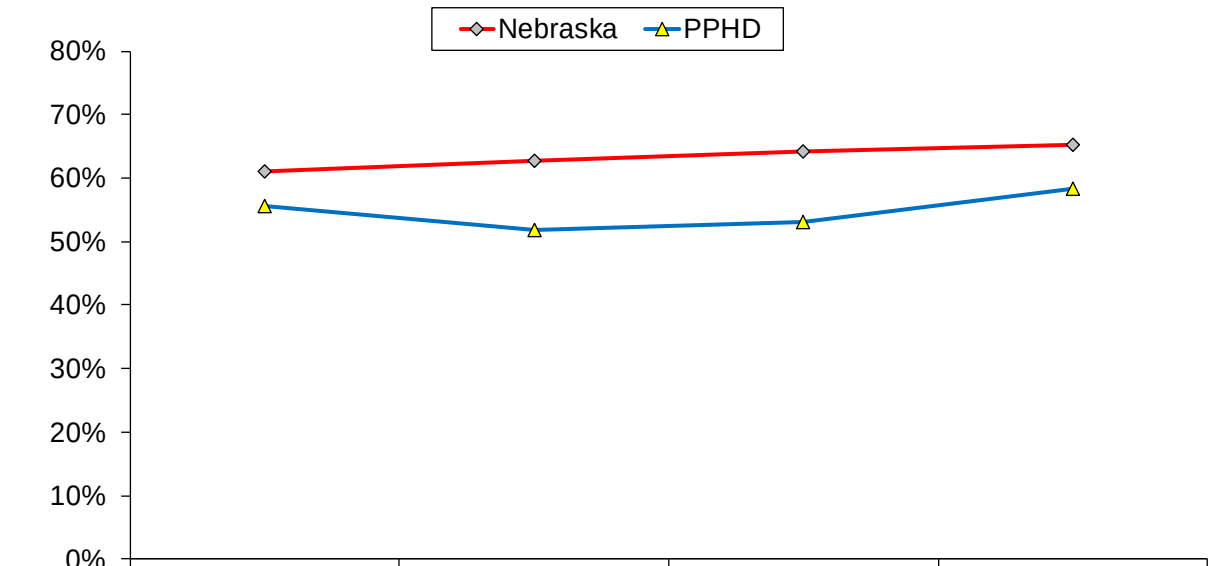
NOTE: All rates are age-adjusted to the 2000 US standard population; rates are the average annual number of cases/deaths per 100,000 population (gender-specific cancers are per 100,000 male or female population)
Source: Nebraska Vital Records

Cancer Screening

Colon Cancer Screening

The percentage of adults 50-75 years old who report being up-to-date on colon cancer screening is much lower in the Panhandle than the state of Nebraska.

Figure 45. Up-to-date on colon cancer screening among adults 50-75, Nebraska and Panhandle, 2011-2015



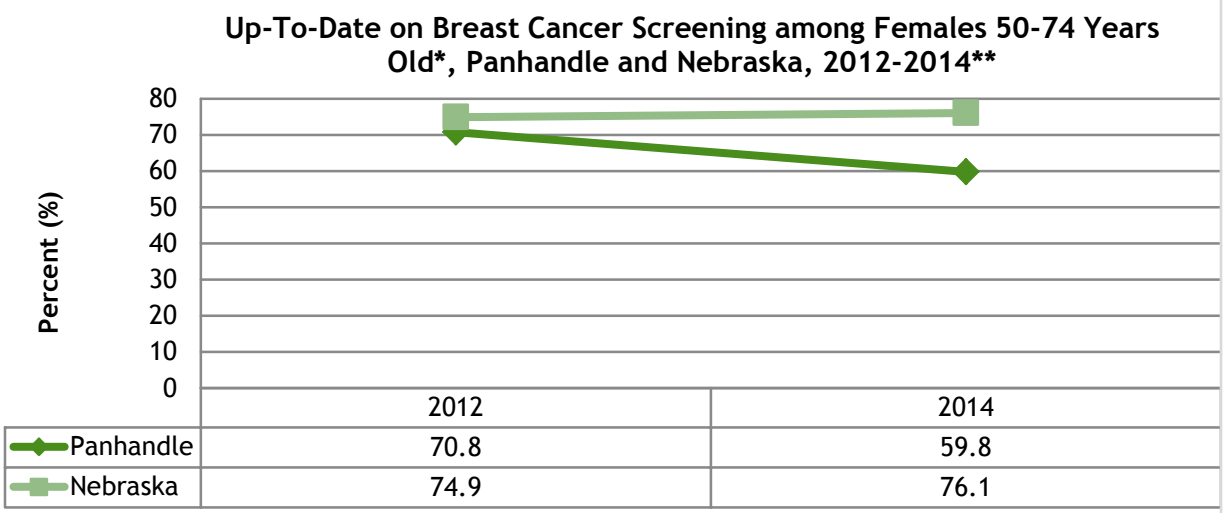
	2012	2013	2014	2015
Nebraska	61.1	62.8	64.1	65.2
PPHD	55.6	51.8	53.0	58.3

*Percentage of adults 50–75 years old who report having had a fecal occult blood test (FOBT) during the past year, or a sigmoidoscopy during the past 5 years and an FOBT during the past 3 years, or a colonoscopy during the past 10 years (U.S. data only collected during even calendar years)
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Breast Cancer Screening

The percentage of females aged 50-74 who report being up-to-date on breast cancer screening in the Panhandle has decreased from 2012 to 2014, always remaining lower than the state percentage (see Figure 46). Although the percentage reporting being up-to-date on breast cancer screening in the Panhandle in 2012 was relatively close to that of the state (70.8% vs. 74.9%), this gap widened in 2014 to an almost 20% difference (59.8% for the Panhandle vs. 76.1% for the state). Notably, the state percentage has increased while the Panhandle has decreased. Despite the lower screening rates in the Panhandle, the stage at which breast cancer is diagnosed is approximately the same as the state (see Table 23), with a slightly higher percentage of cases in the Panhandle identified at the "unstaged" level. Unstaged means there is not enough information to indicate the stage of cancer.[12]

Figure 46. Up-to-date on breast cancer screening among females 50-74 years old, Panhandle and Nebraska, 2012-2014



*Percentage of females 50-74 years old who report they are up-to-date on breast cancer screening. **Data only collected on even years. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Table 23. Stage of Disease at Diagnosis, Number and Percentage of Cases by Stage, Invasive Female Breast Cancer, Nebraska and Panhandle, 2009-2013

	Nebraska		Panhandle	
Stage at Diagnosis	**Number**	**%**	**Number**	**%**
Localized	4,077	63.8	201	60.5
Regional	1,854	29.0	99	29.8
Distant	294	4.6	17	5.1
Unstaged	163	2.6	15	4.5
Total	**6,388**	**100.0**	**332**	**100.0**

NOTE: Cases are staged according to the Derived SEER Summary Stage 2000 coding system

Cervical Cancer Screening

As with other forms of cancer, the percentage of adults who report being up-to-date on screening for cervical cancer is also lower than the state of Nebraska (see Figure 48). The percentage of cervical cancer diagnosed at the localized stage is similar between the Panhandle and state and the percentage diagnosed at the regional stage lower in the Panhandle. A slightly higher percentage of cervical cancer is diagnosed at the distant or unstaged level in the Panhandle (see Table 24).

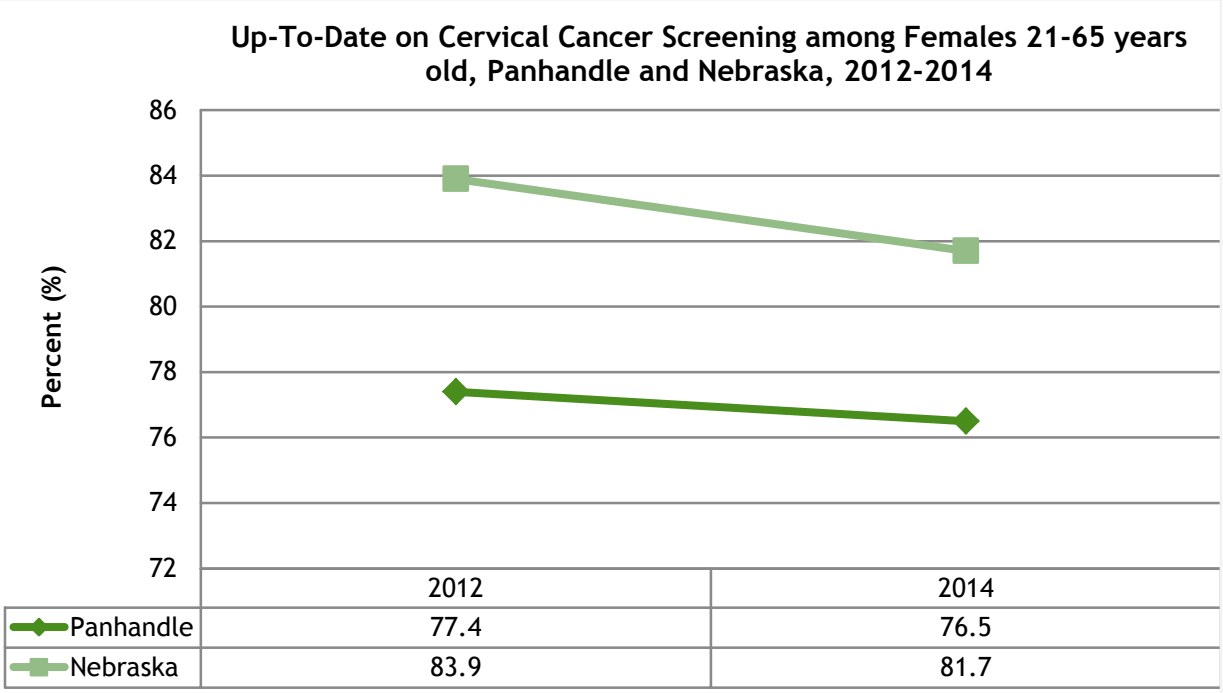
Table 24. Stage of Disease at Diagnosis, Number and Percentage of Cases by Stage, Invasive Cervical Cancer, Nebraska and Panhandle, 2009-2013

	Nebraska		Panhandle	
Stage at Diagnosis	**Number**	**%**	**Number**	**%**
Localized	142	44.4	9	45.0
Regional	118	36.9	6	30.0
Distant	44	13.8	3	15.0
Unstaged	16	5.0	2	10.0
Total	**320**	**100.0**	**20**	**100.0**

NOTE: Cases are staged according to the Derived SEER Summary Stage 2000 coding system

Source: Nebraska Vital Records

Figure 47. Up-to-date on cervical cancer screening among females 21-65 years old, Panhandle and Nebraska, 2012-2014



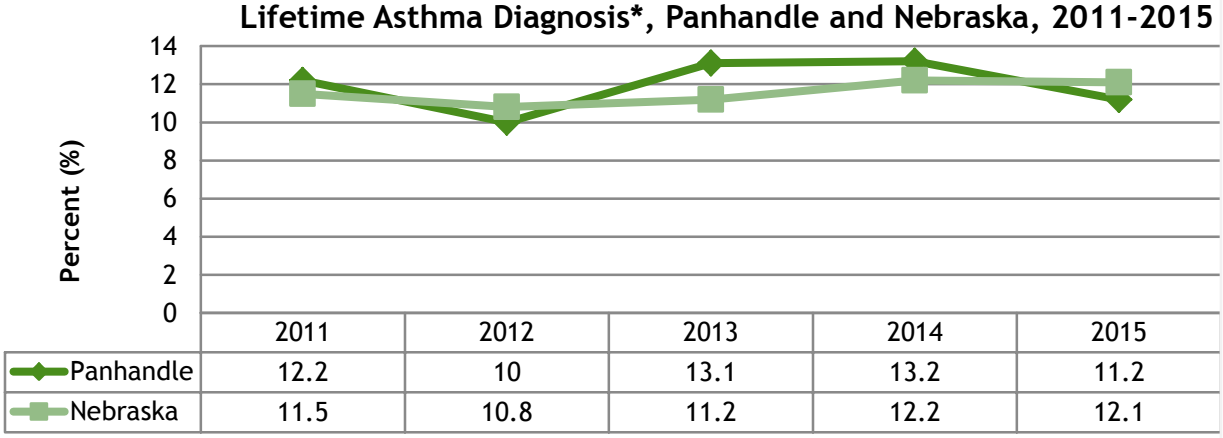
*Percentage of females 21-65 years old who report they are up-to-date on cervical cancer screening. **Data collected on even years only. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Asthma

Asthma is a disease that impact the lungs, causing repeated episodes of breathlessness, wheezing, nighttime or early morning coughing, and chest tightness. It can be controlled through medication and avoiding triggers of asthma attacks.[13]

Asthma Prevalence

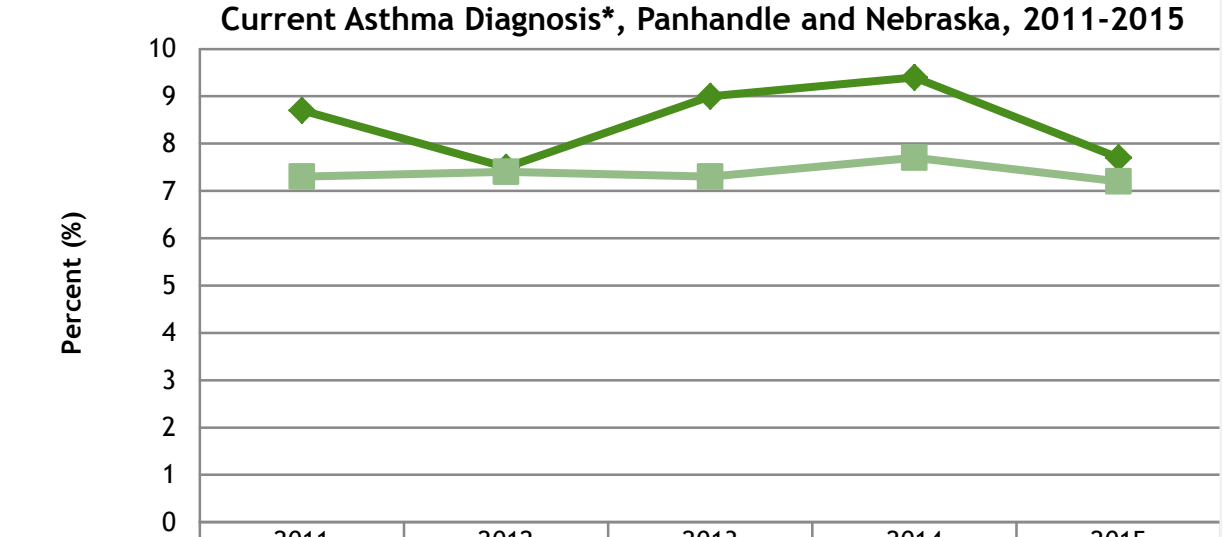
Figure 48. Lifetime asthma diagnosis, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report they were ever been told by a doctor, nurse, or other health professional that they have asthma (lifetime). Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Lifetime diagnosis of asthma has been relatively similar when comparing the Panhandle to the state (see Figure 48). Current diagnosis of asthma is historically slightly higher in the Panhandle than the state level, however the difference was not significant in any year (see Figure 49).

Figure 49. Current asthma diagnosis, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	8.7	7.5	9	9.4	7.7
Nebraska	7.3	7.4	7.3	7.7	7.2

*Percentage of adults 18 and older who report they currently have asthma. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Asthma Mortality

Table 25. Number of deaths from asthma, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	93	80	88	87	90	84	83	81	91
Panhandle	6	5	2	2	3	4	4	4	6

Source: Nebraska Vital Records

The number of deaths from asthma in the Panhandle has been between two and six per year, from 2005-2015 (see Table 25). The rate of death per 100,000 population has been approximately the same or lower than the state of Nebraska (see Table 26).

Table 26. Asthma death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	1.5	1.3	1.4	1.4	1.4	1.3	1.3	1.2	1.4
Panhandle	1.4	1.1	0.4	0.4	0.7	0.9	0.9	1.1	1.6

Source: Nebraska Vital Records

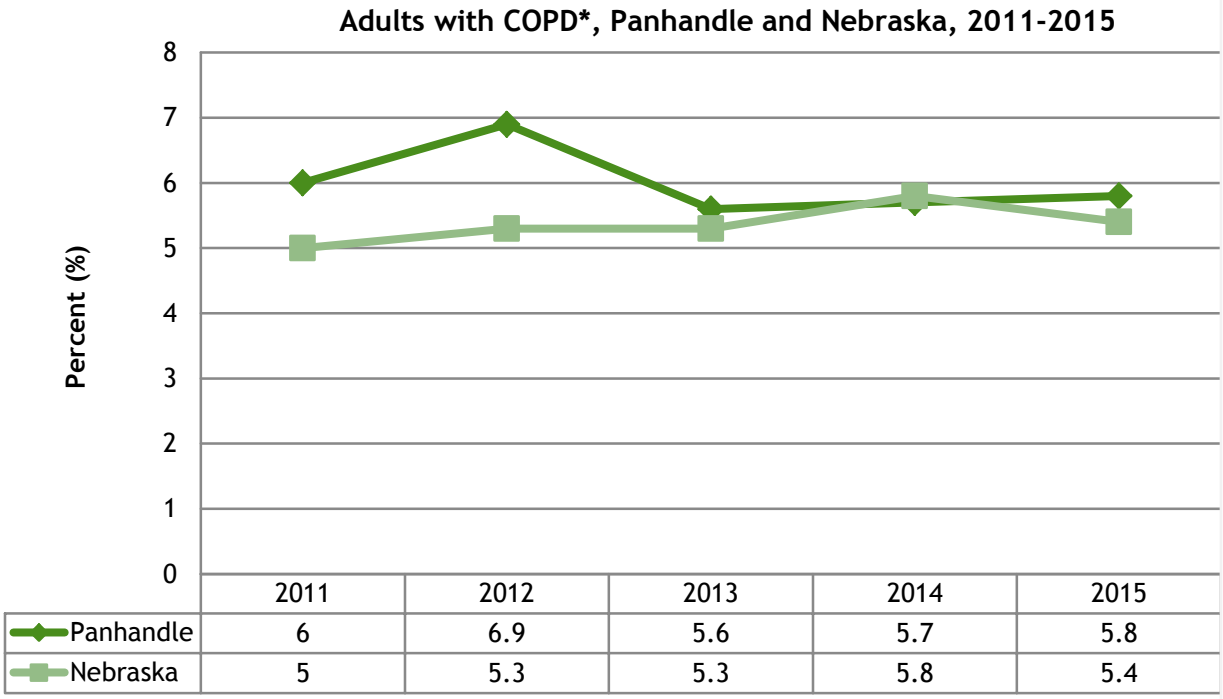
Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) refers to a variety of diseases that cause the blockage of airflow and other breathing-related problems. COPD includes emphysema, chronic bronchitis, and sometimes asthma. Tobacco smoke is a large factor in developing COPD, as well as exposure to air pollutants and respiratory infections. Approximately 6.4% of Americans (15.7 million) have been diagnosed with COPD. More than 50% of adults with COPD may not know they have it.[14]

COPD Prevalence

The percentage of adults that report they have COPD in the Panhandle has remained fairly similar to that of the state, with a slight uptick in 2012 (see Figure 50). There were no significant differences in any of the years.

Figure 50. Adults with COPD, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report 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. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

COPD Mortality

Table 27. Number of deaths from COPD, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	2,626	2,721	2,822	2,917	2,966	3,037	3,059	3,104	3,215
Panhandle	189	194	218	206	206	200	209	192	193

Source: Nebraska Vital Records

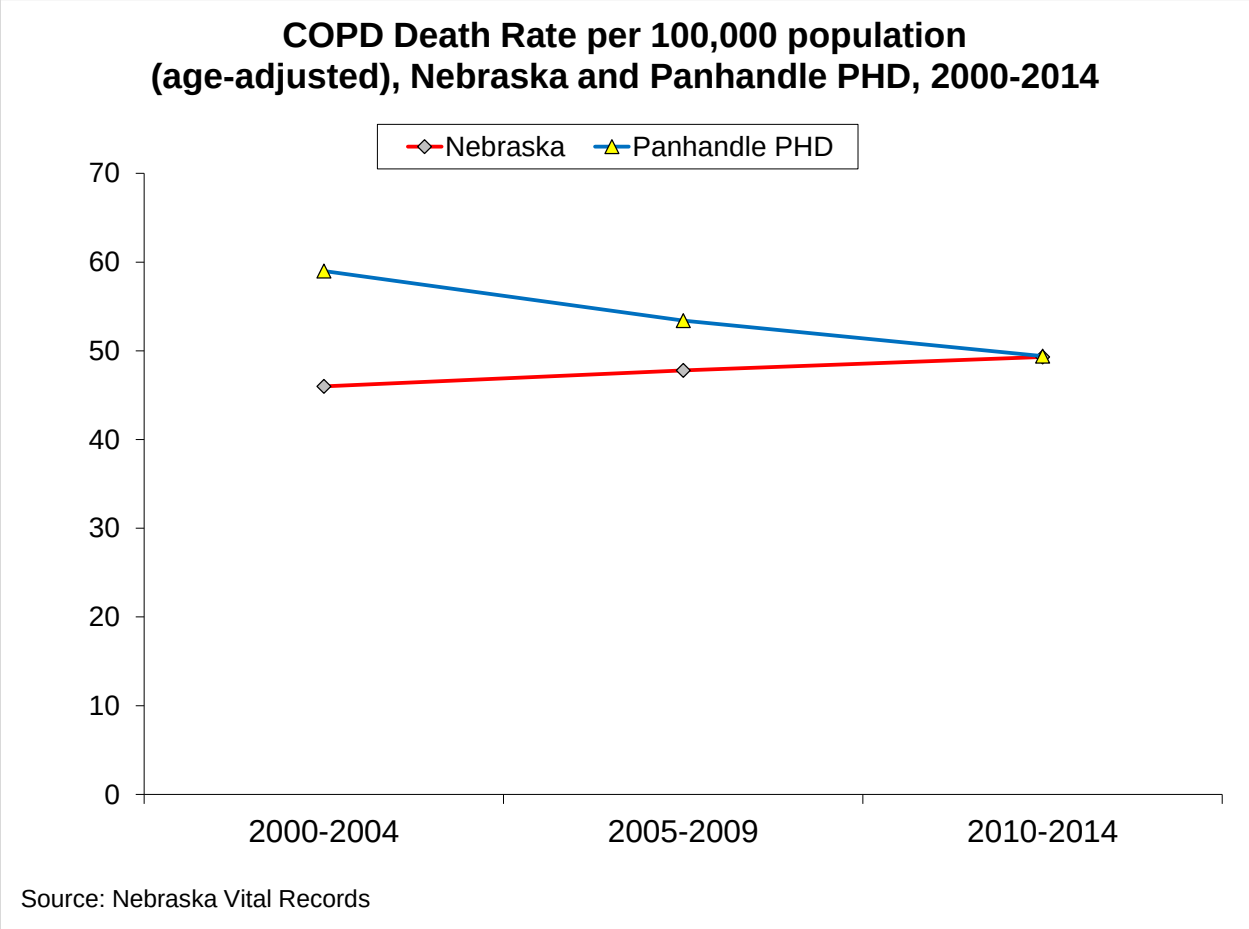
The number of deaths from COPD had an uptick during 2007-2009, and has been decreasing since then (see Table 27). Similar to the number of deaths, the COPD death rate per 100,000 population in the Panhandle had an uptick during 2007-2009 and has been decreasing since (see Table 28). The rate of death from COPD has consistently been slightly higher in the Panhandle compared to the state of Nebraska, but the gap between the two is closing (see Figure 51).

Table 28. COPD death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	44.3	45.3	46.5	47.5	47.6	48.2	47.6	47.6	48.5
Panhandle	48.7	49.5	55.8	52.7	52.7	50.8	52.6	48.2	49.2

Source: Nebraska Vital Records

Figure 51. COPD death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



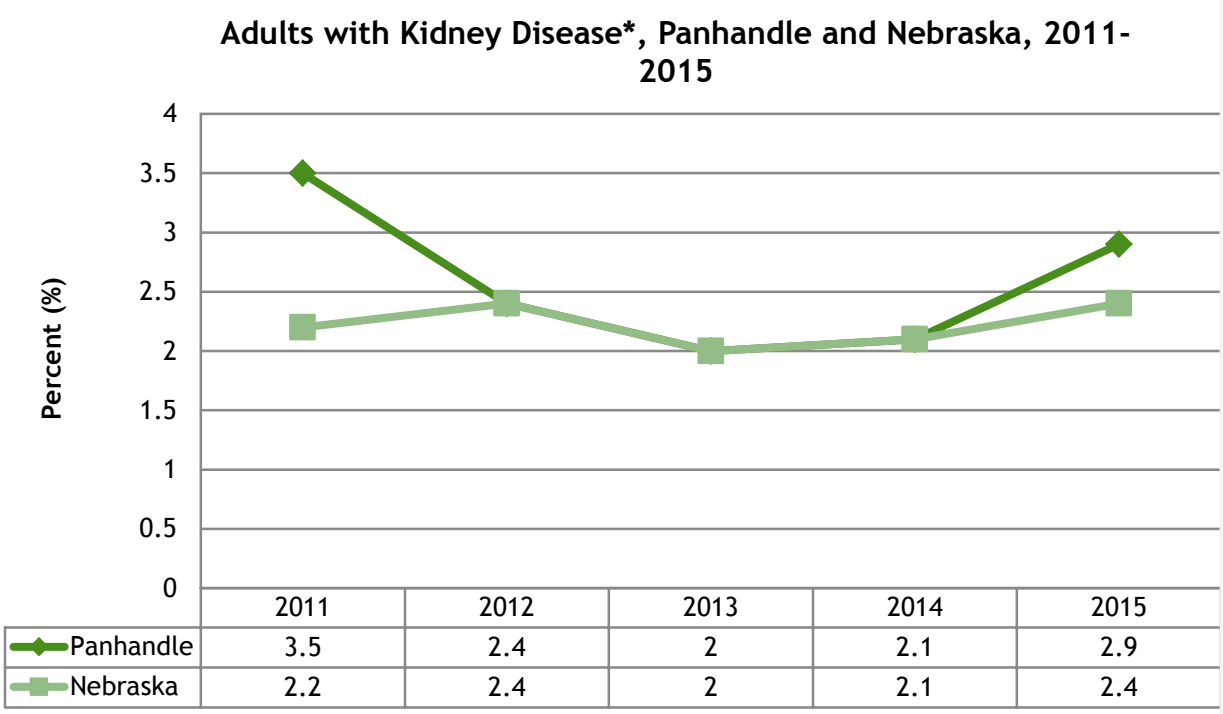
Source: Nebraska Vital Records

Kidney Disease

"Chronic kidney disease (CKD) is a condition in which the kidneys are damaged or cannot filter blood as well as healthy kidneys. Because of this, excess fluid and waste from the blood remain in the body and may cause other health problems".[15] Approximately 15% (30 million) of US adults have CKD. About half of those with severely reduced kidney function from CKD are unaware of their condition. Risk factors for developing CKD are: diabetes, high blood pressure, heart disease, obesity, and family history.[15]

Kidney Disease Prevalence

Figure 52. Adults with kidney disease, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	3.5	2.4	2	2.1	2.9
Nebraska	2.2	2.4	2	2.1	2.4

*Percentage of adults 18 and older who report they were ever told they have kidney disease. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

The percentage of Panhandle adults reporting they have kidney disease is similar for that of the state of Nebraska, with the only significant difference being in 2011 (see Figure 52). From 2012 forward, the percentages have been relatively similar.

Kidney Disease Mortality

Table 29. Number of deaths from neph/nephrosis, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	758	783	797	818	766	725	655	702	748
Panhandle	41	38	39	41	35	34	29	32	35

Source: Nebraska Vital Records

The number of deaths by nephrosis (kidney disease) has remained relatively stable from 2005-2015 (see Table 29), with number between 29 and 41. The death rate per 100,000 population has consistently been lower than that of the state (see Table 30).

Table 30. Neph/nephrosis death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	12.4	12.5	12.6	12.8	11.8	11.0	9.9	10.4	10.9
Panhandle	10.6	9.8	9.7	9.8	8.2	8.0	6.8	7.7	8.2

Source: Nebraska Vital Records

Risk and Protective Factors for Chronic Disease

Complete 2011-2015 combined data for the Behavioral Risk Factor and Surveillance System in the Panhandle can be found in Appendix G.

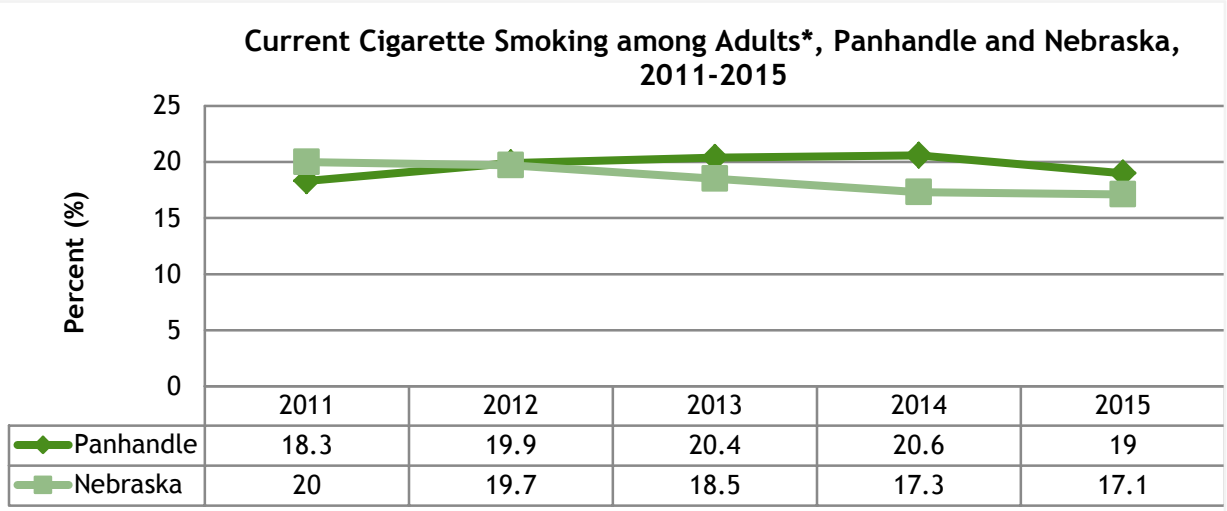
Tobacco Use

Tobacco use is the number one leading cause of preventable death, disease, and disability in the United States.[16] Approximately 75,000 Nebraskans suffer from at least one serious disease that can be attributed to smoking.[17] The United States as a whole spends almost $170 billion per year on medical care to treat smoking-related disease, and Nebraskans spend approximately $795 million.[16,17]

Tobacco Use among Adults

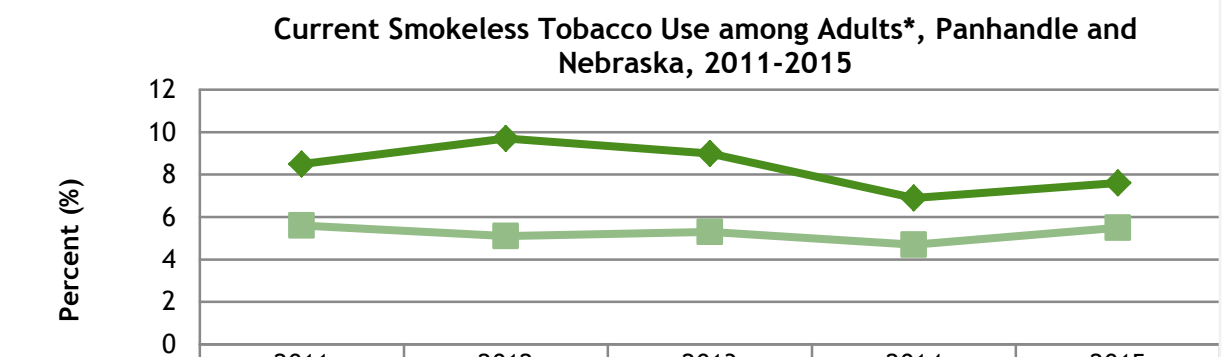
The percentage of adults who reported smoking in the Panhandle was lower than the state from 2011 to 2012, but has been higher from 2013 to 2015 (see Figure 53). The percentage of adults who report using smokeless tobacco (chew, snuff, snus) in the Panhandle has consistently been higher than that of the state with a significant difference in 2011, 2012, 2013, and 2014 (see Figure 54).

Figure 53. Current cigarette smoking among adults, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report that they currently smoke cigarettes either every day or on some days. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 54. Current smokeless tobacco use among adults, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	8.5	9.7	9	6.9	7.6
Nebraska	5.6	5.1	5.3	4.7	5.5

*Percentage of adults 18 and older who report that they currently use smokeless tobacco product (chewing tobacco, snuff, or snus) either every day or on some days. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

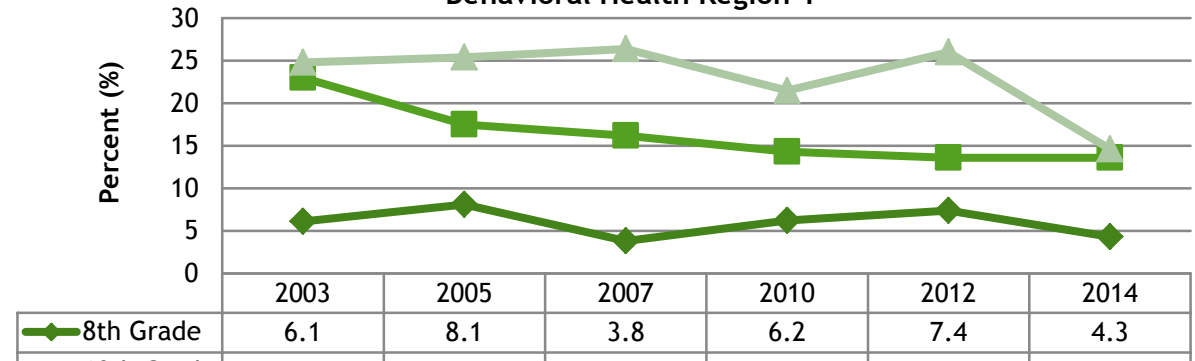
Tobacco use among Youth

Cigarette Smoking among Youth

Past 30 day use of cigarettes in Panhandle youth has had a slight downward trend in 10th and 12th grade from 2003 to 2014 (see Figure 55). Past 30 day use in Panhandle 8th graders has remained relatively unchanged. Lifetime cigarette use for Panhandle youth (see Figure 57), has a clear downward trend in all grades, indicating that initiation of cigarette smoking is decreasing in youth.

Figure 56 gives some indication as to where Panhandle youth that used cigarettes in the past 30 days procured their cigarettes. In 2014, the majority of youth got cigarettes by borrowing them from someone else, with getting someone else to buy them ranking second.

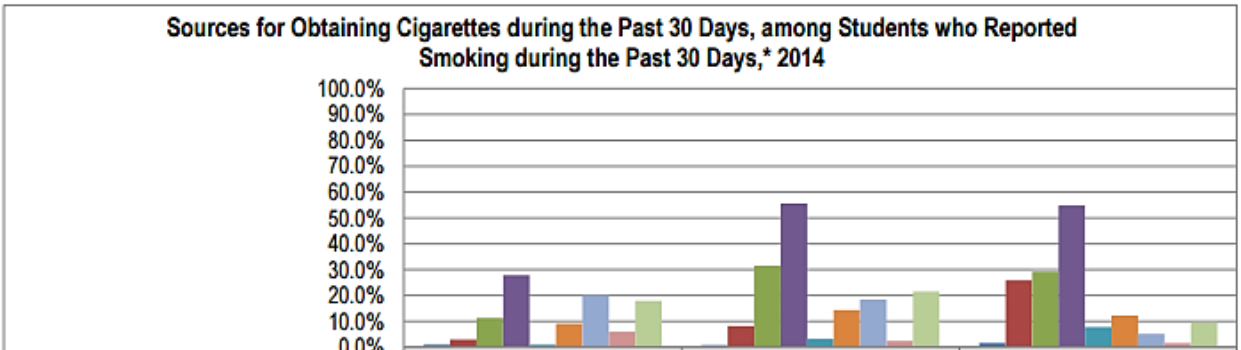
Figure 55. Past 30 day cigarette use among youth, 2003-2014, Behavioral Health Region 1



	2003	2005	2007	2010	2012	2014
8th Grade	6.1	8.1	3.8	6.2	7.4	4.3
10th Grade	23	17.5	16.2	14.3	13.6	13.6
12th Grade	24.8	25.4	26.4	21.5	26	14.6

Data from Behavioral Health Region 1 Nebrask Risk and Protective Factors Student Survey; Prepared by Kelsey Irvine, PPHD

Figure 56. Sources for obtaining cigarettes during the past 30 days, among students who reported smoking during the past 30 days, 2014

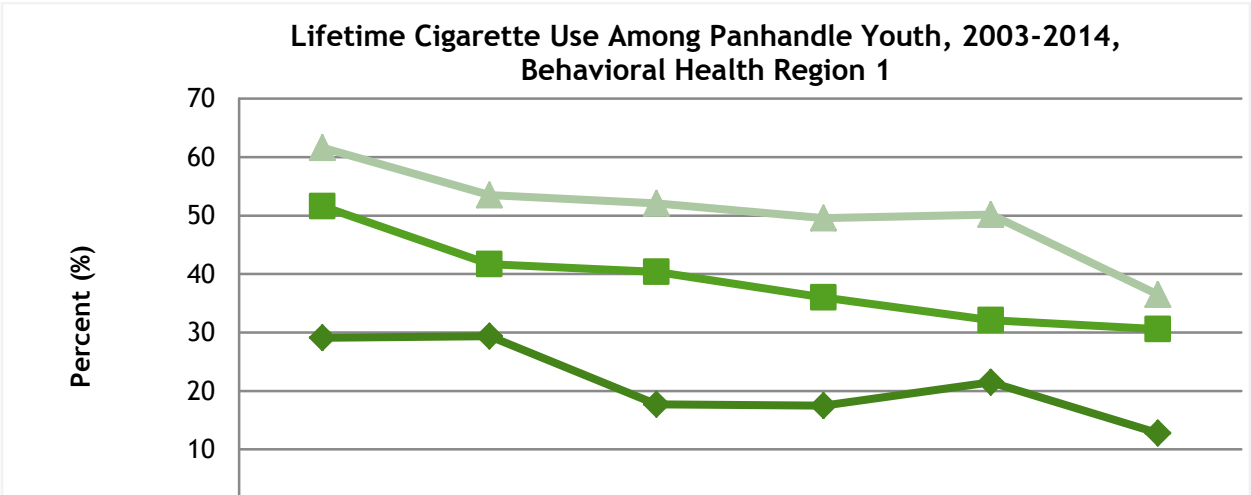


	8th (n=100)**	10th (n=126)**	12th (n=118)**
Bought them myself with a fake ID	1.0%	0.8%	1.7%
Bought them myself without a fake ID	3.0%	8.3%	25.9%
Gave someone money to buy them for me	11.3%	31.5%	29.3%
Borrowed them from someone else	27.8%	55.6%	54.8%
My parents gave them to or bought them for me	1.0%	3.2%	7.8%
Other family member gave them to or bought them for me	9.2%	14.4%	12.2%
Took them from home without my parents' permission	20.2%	18.4%	5.2%
Took them from a store or shop	6.0%	2.4%	1.7%
Got them some other way (not listed)	18.0%	21.6%	9.6%

*Notes. *Among past 30 day cigarette users, the percentage who reported obtaining cigarettes in each manner during the past 30 days. These scores may include students 18 and older.**The n-size displayed is the largest n-size across these questions. Because each source is asked individually, the n-size may vary across sources.*

Source: Region 1 Nebraska Risk and Protective Factors Student Survey

Figure 57. Lifetime cigarette use among youth, 2003-2014, Behavioral Health Region 1



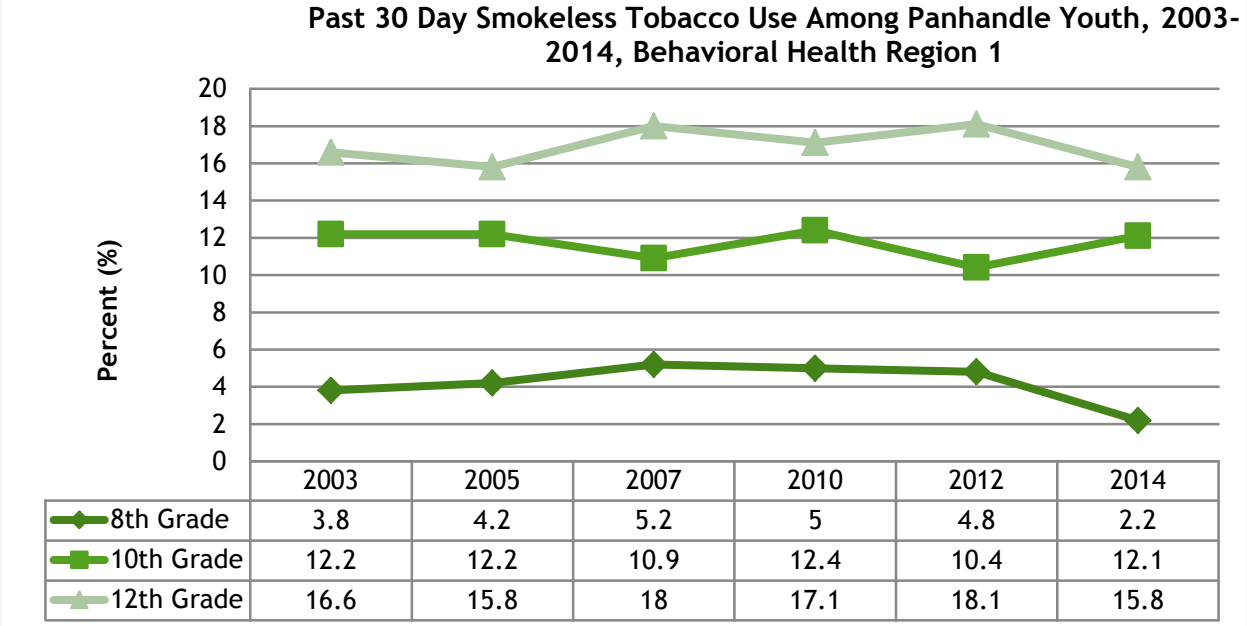
	2003	2005	2007	2010	2012	2014
8th Grade	29.1	29.4	17.7	17.5	21.5	12.8
10th Grade	51.6	41.7	40.4	36	32.1	30.6
12th Grade	61.6	53.5	52.1	49.6	50.2	36.5

Data from Behavioral Health Region 1 Nebrask Risk and Protective Factors Student Survey; Prepared by Kelsey Irvine, Panhandle Public Health District

Smokeless Tobacco Use among Youth

Past 30 day smokeless tobacco use in Panhandle youth (see Figure 58) has remained fairly consistent over the year. However, lifetime smokeless tobacco use among Panhandle Youth (see Figure 59) has showed a trend downward similar to that as lifetime cigarette use.

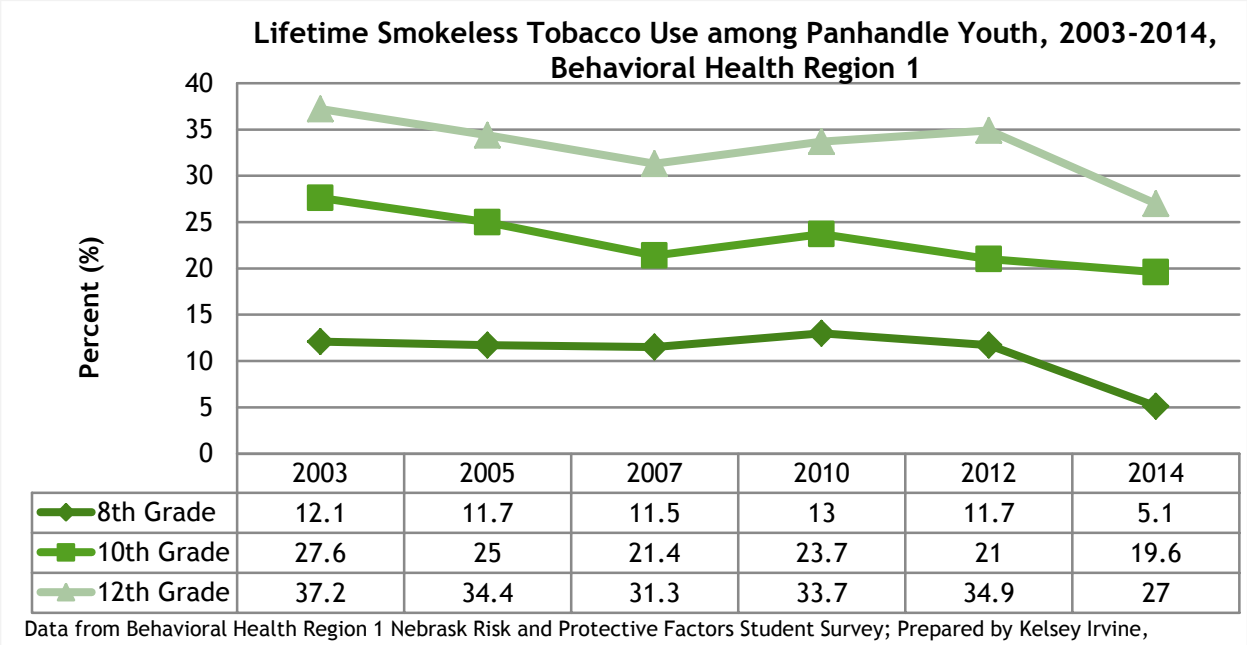
Figure 58. Past 30 day smokeless tobacco use among Panhandle youth, 2003-2014, Behavioral Health Region 1



	2003	2005	2007	2010	2012	2014
8th Grade	3.8	4.2	5.2	5	4.8	2.2
10th Grade	12.2	12.2	10.9	12.4	10.4	12.1
12th Grade	16.6	15.8	18	17.1	18.1	15.8

Data from Behavioral Health Region 1 Nebrask Risk and Protective Factors Student Survey; Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 59. Lifetime smokeless tobacco use among Panhandle youth, 2003-2014, Behavioral Region 1



	2003	2005	2007	2010	2012	2014
8th Grade	12.1	11.7	11.5	13	11.7	5.1
10th Grade	27.6	25	21.4	23.7	21	19.6
12th Grade	37.2	34.4	31.3	33.7	34.9	27

Data from Behavioral Health Region 1 Nebrask Risk and Protective Factors Student Survey; Prepared by Kelsey Irvine, Panhandle Public Health District

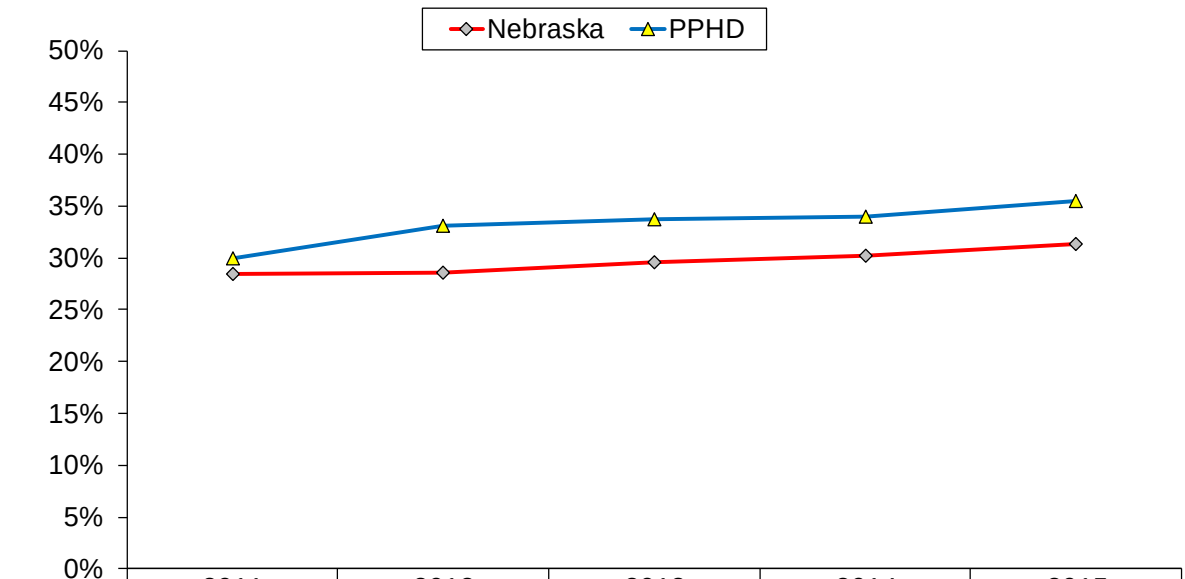
Obesity

Adult obesity is defined as a BMI of 30 or higher.[18] More than one third of adults in the US are obese. Obesity can contribute to conditions such as heart disease, stroke, type 2 diabetes, and cancer.[19]

Obesity among Adults

Obesity in Nebraska is a growing trend, with the number of adults reporting they are obese rising each year in both the state of Nebraska and the Panhandle. However, the rate of obesity in the Panhandle has historically been higher than the state, with a significant difference occurring in 2015 (see Figure 60).

Figure 60. Obesity among adults, Nebraska and Panhandle, 2011-2015



	2011	2012	2013	2014	2015
Nebraska	28.4	28.6	29.6	30.2	31.4
PPHD	29.9	33.1	33.7	34.0	35.5

*Percentage of adults 18 and older with a body mass index (BMI) of 30.0 or greater, based on self-reported height and weight
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Nutrition

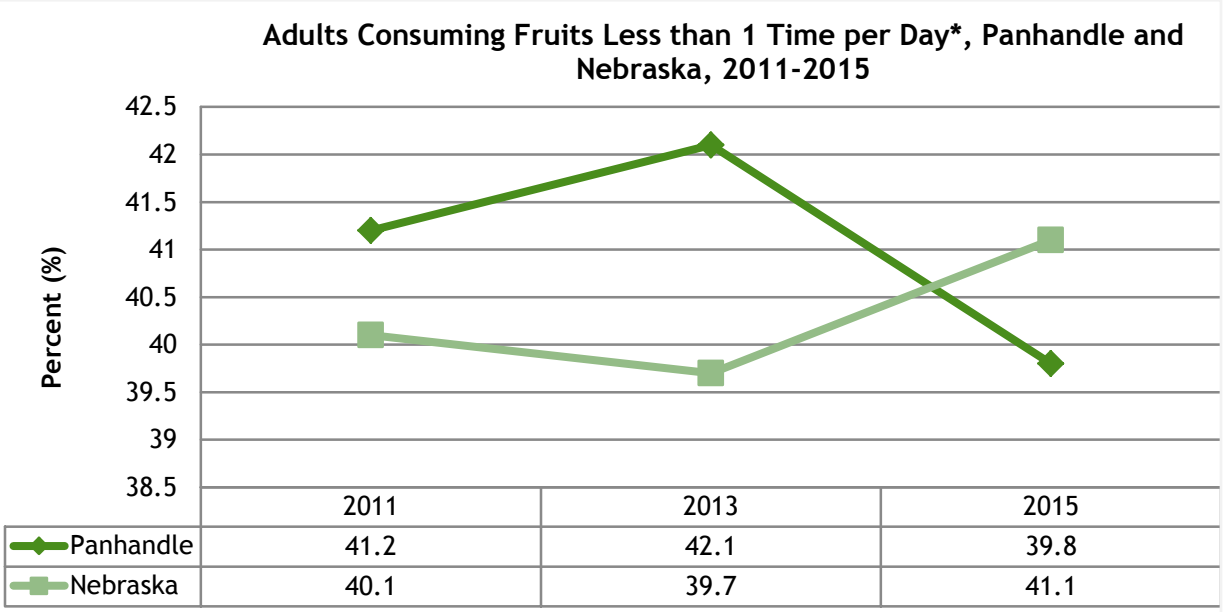
The typical American does not follow the Dietary Guidelines for healthy eating. Approximately three-fourths of Americans do not eat enough vegetables, fruits, dairy, or oils. More than 50% of Americans meet or exceed total grain and protein foods recommendations, however do not meet the recommendations for subgroups with these food groups (e.g., whole grains). The majority of Americans eat more than the recommended amount of added sugars, saturated fats, and sodium.[20] Poor nutrition can contribute to the development of preventable chronic disease.[21]

Fruit and Vegetable Consumption

Fruit and Vegetable Consumption among Adults

The percentage of Panhandle adults who report they consume fruits less than one time per day had a slight uptick in 2013, but decreased between 2013 and 2015 (see Figure 61). The percentage of Panhandle adults who report they consume vegetables less than one time per day has remained relatively constant (see Figure 62).

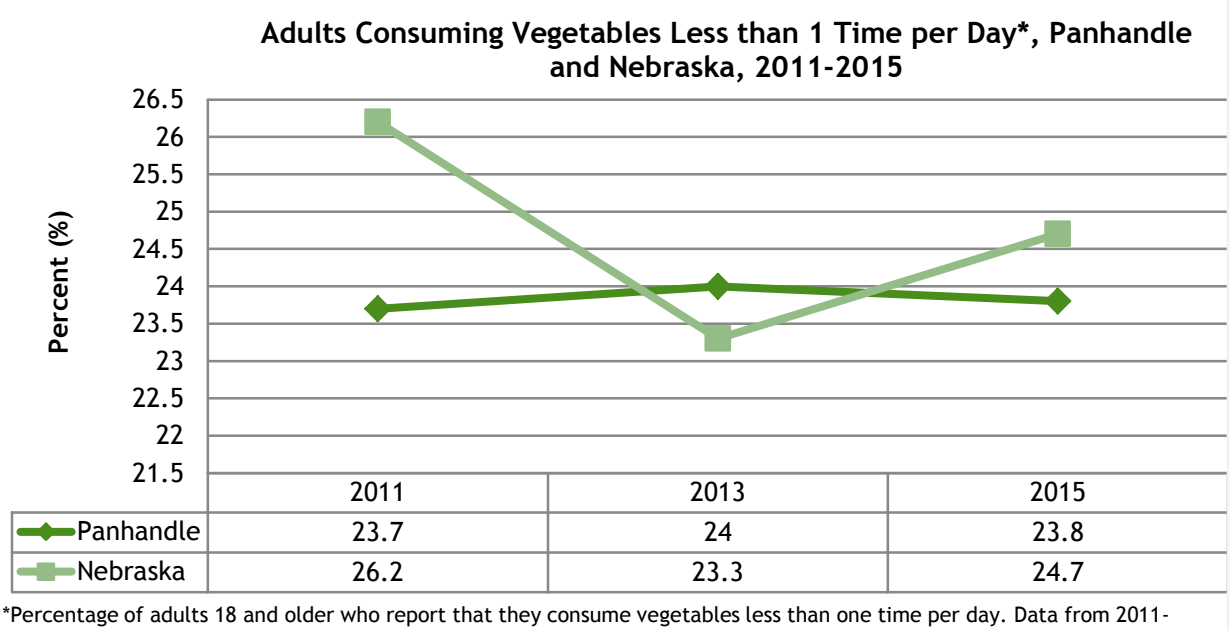
Figure 61. Adults consuming fruits less than 1 time per day, Panhandle and Nebraska, 2011-2015



	2011	2013	2015
Panhandle	41.2	42.1	39.8
Nebraska	40.1	39.7	41.1

*Percentage of adults 18 and older who report that they consume fruits less than one time per day. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 62. Adults consuming vegetables less than 1 time per day, Panhandle and Nebraska, 2011-2015



	2011	2013	2015
Panhandle	23.7	24	23.8
Nebraska	26.2	23.3	24.7

*Percentage of adults 18 and older who report that they consume vegetables less than one time per day. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health

Beverage Consumption

Beverage Consumption among Adults

Consumption of sugar-sweetened beverage has been measured by the BRFSS only once, in 2013. In 2013, 30.5% of Panhandle adult reported they consumed a sugar-sweetened beverage one or more time per day in the last 30 days, compared to 28.5% for the state.

Salt Consumption among Adults

In 2013, 47% of Panhandle adults reported they were watching or reducing their salt consumption, which increased to 51.1% in 2015. This is compared to the state at 46.3% and 46.8% in 2013 and 2015, respectively.

Table 31. Adults currently watching or reducing sodium or salt intake, Panhandle and Nebraska, 2013-2015

	2013	2015
Panhandle	47.0%	51.1%
Nebraska	46.3%	46.8%

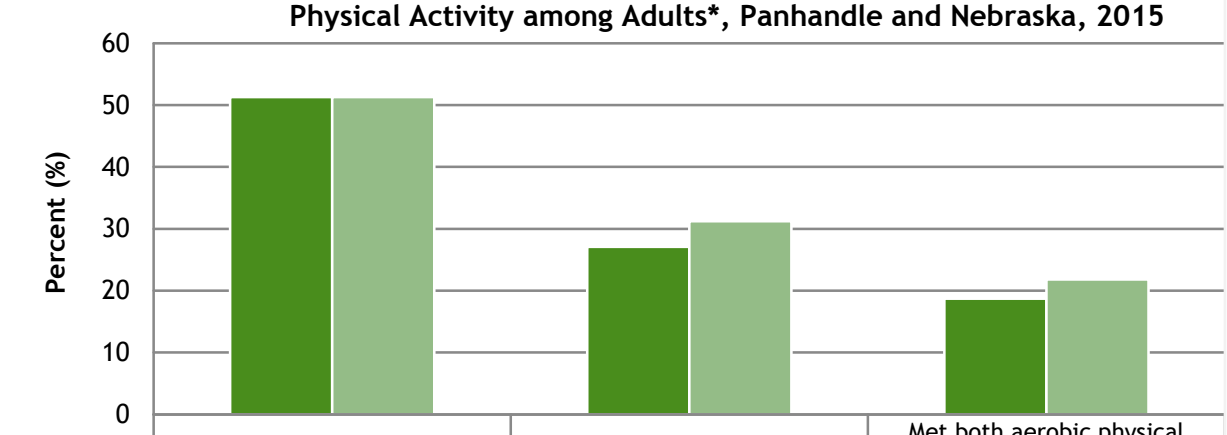
Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Physical Activity

Physical Activity among Adults

In 2015, 51.3% of Panhandle adults met aerobic physical activity recommendations, 27.1% met muscle strengthening recommendations, and only 18.7% met both recommendations. The comparison to the state can be found in Figure 64. The Panhandle falls slightly behind in meeting the muscle strengthening recommendation and combination of aerobic and muscle strengthening recommendation when compared to the state.

Figure 63. Physical activity among adults, Panhandle and Nebraska, 2015



*Percentage of adults 18 and older who report (1) 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, (2) that they are engaged in physical activities or exercises to strengthen their muscles two or more times per week during the past month, (3) that they met both the aerobic and muscle strengthening recommendations. Data from 2011-2015 Nebraska Behavioral Risk Factor

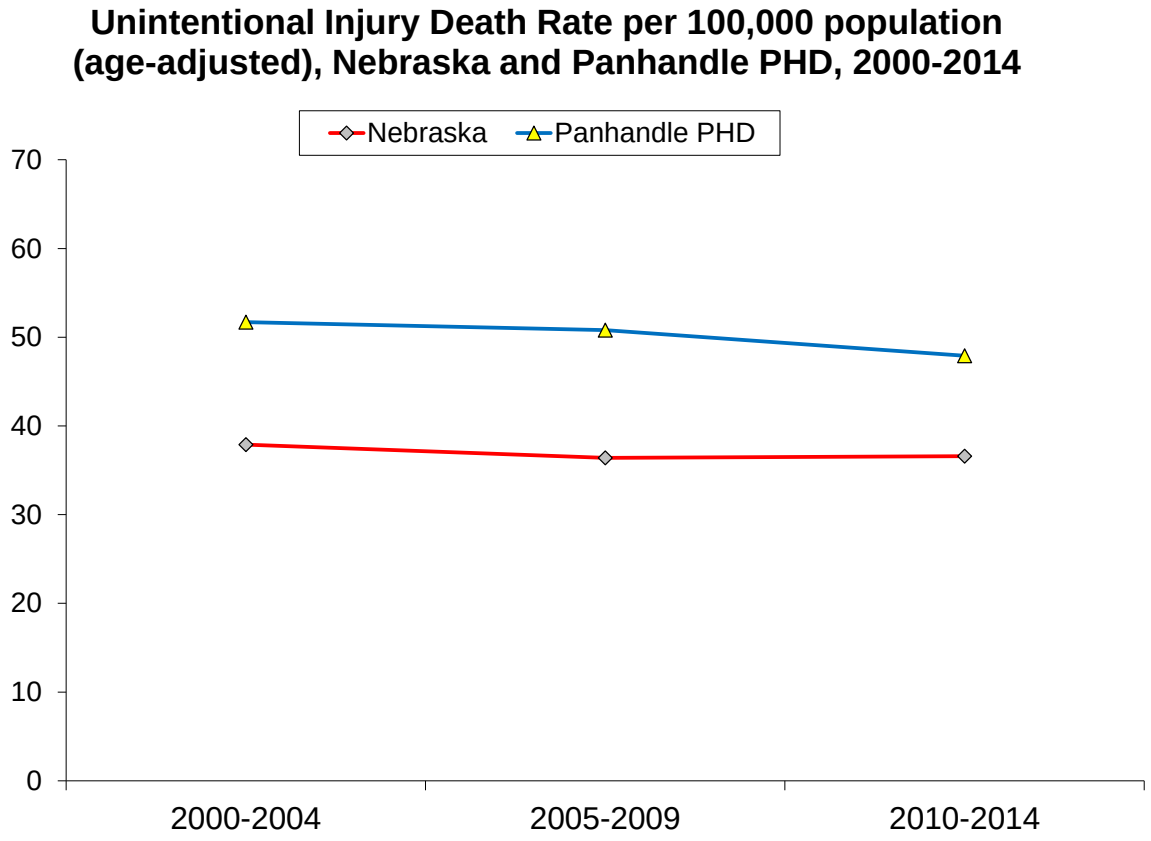
Injury

Unintentional Injury

Unintentional Injury Deaths

The unintentional injury death rate per 100,000 population in the Panhandle is much higher than the state of Nebraska (see Figure 64). This may be related to the agriculture and railroad industry that is so prevalent to the area.

Figure 64. Unintentional injury death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



Source: Nebraska Vital Records

Motor Vehicle Crashes

The number of motor vehicle crashes and results by county can be found in Table 32.

Table 32. Panhandle Motor Vehicle Crash Data by County, 2015

County	Crashes				Persons killed and injured	
	Total	Fatal	Injury	PDO*	Killed	Injury
Banner	28	0	8	20	0	10
Box Butte	174	1	40	133	1	50
Cheyenne	198	3	40	155	3	59
Dawes	144	3	35	106	3	52
Deuel	60	0	14	46	0	23
Garden	33	0	6	27	0	7
Grant	3	0	1	2	0	1
Kimball	75	2	26	47	3	49
Morrill	125	1	34	90	1	50
Scotts Bluff	694	4	227	463	4	325
Sheridan	86	3	19	64	3	29
Sioux	19	0	7	12	0	8
Nebraska	**33,988**	**218**	**11,649**	**22,121**	**246**	**16,806**

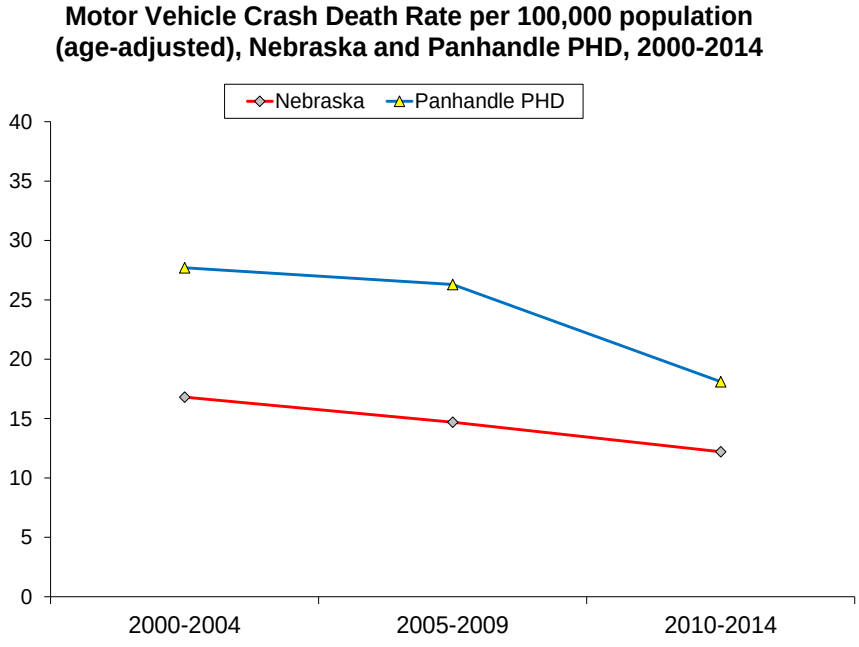
*PDO = Property damage only

Source: 2015 Nebraska Traffic Crash Facts Annual Report

Motor Vehicle Crash Deaths

The motor vehicle crash death rate per 100,000 population in the Panhandle is also higher than the state, however this rate has seen a consistent decrease from 2000-2014 (see Figure 65).

Figure 65. Motor vehicle crash death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014

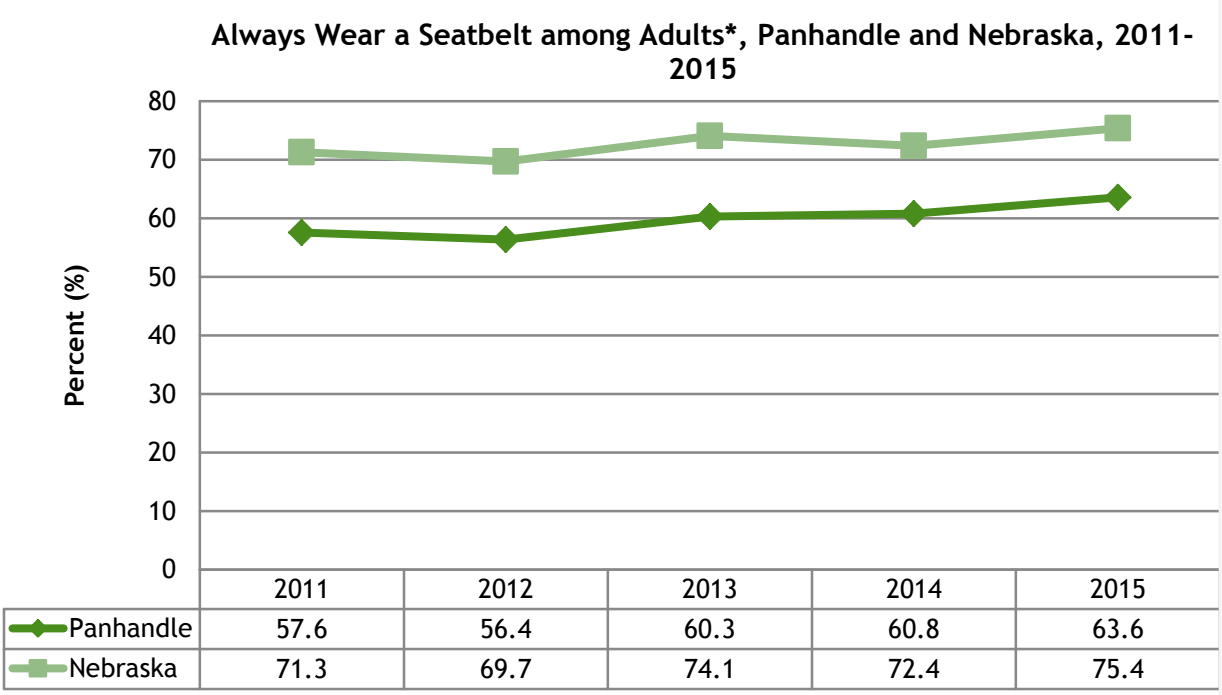


Source: Nebraska Vital Records

Seatbelt Usage

Figure 66 shows the percentage of Panhandle adults that report they always wear their seatbelt. The percentage of adults that reported wearing their seatbelt is much lower in the Panhandle than across the state of Nebraska.

Figure 66. Always wear a seatbelt among adults, Panhandle and Nebraska, 2011-2015



*Percentage of adults 18 and older who report that they always use a seatbelt when driving or riding in a car. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Distracted Driving

Texting while driving and talking on a cell phone while driving were measured by the BRFSS in 2013 and 2015 (see Tables 33 and 34). The percentage of adults who reported texting while driving was lower in the Panhandle than the state for both years. However, the percentage of adults who reported talking on a cell phone while driving was higher and increasing in the Panhandle as opposed to the state, which was lower and decreasing.

Table 33. Texted while driving in past 30 days among adults, Panhandle and Nebraska, 2013-2015

	2013	2015
Panhandle	22.2%	20.7%
Nebraska	26.8%	24.9%

Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Table 34. Talked on a cell phone while driving in past 30 days among adults, Panhandle and Nebraska, 2013-2015

	2013	2015
Panhandle	32.7%	34.4%
Nebraska	28.8%	26.1%

Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Falls

The percentage of adults who had a fall in the past year and were injured by a fall in the past year was measured by the BRFSS in 2013 and 2015 (see Tables 35 and 36). Adults in the Panhandle appear to fall more than adults across the state, with the percentage increasing from 2013 to 2015 as opposed to the decrease seen at the state level. The percentage of adults injured due to falls follows a similar pattern.

Table 35. Had a fall in past year among adults 45 years and older, Panhandle and Nebraska, 2013-2015

	2013	2015
Panhandle	32.7%	34.4%
Nebraska	28.8%	26.1%

Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Table 36. Injured due to a fall in past year among adults 45 years and older, Panhandle and Nebraska, 2013-2015

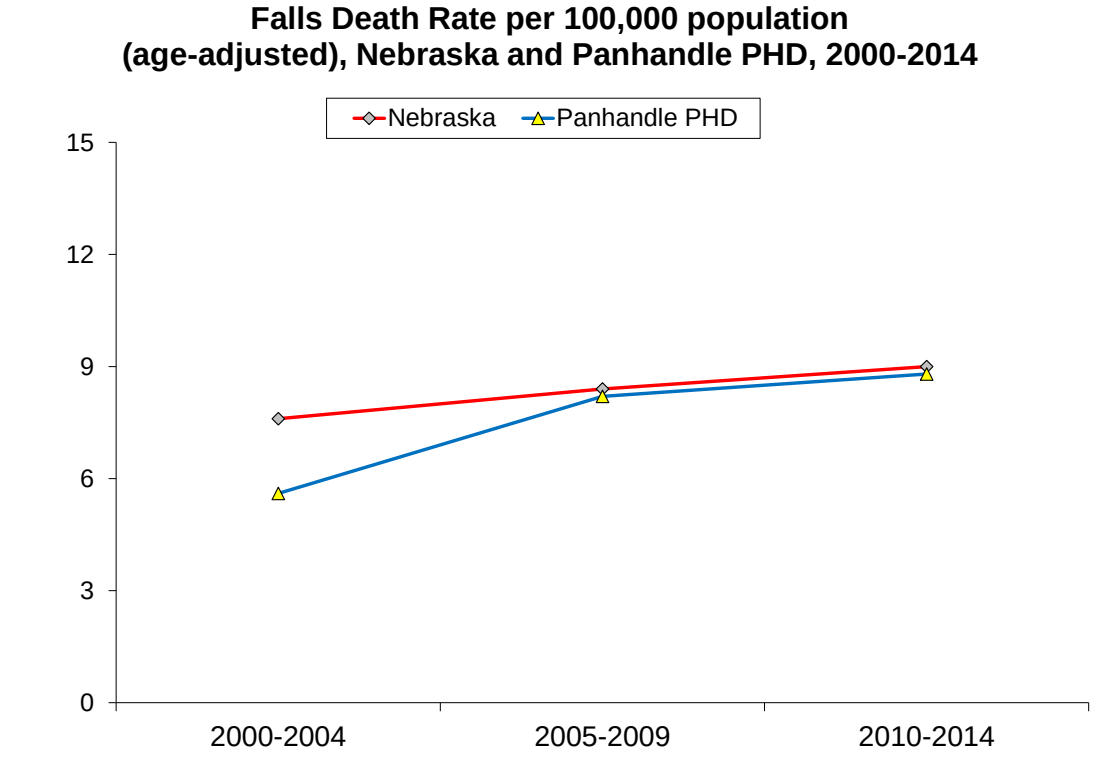
	2013	2015
Panhandle	12.0%	13.3%
Nebraska	9.9%	8.8%

Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Fall Deaths

Although the percentage of adults reporting having fallen or been injured by a fall is greater in the Panhandle, the falls death rate per 100,000 population is lower (see Figure 67). However, it is increasing and on the path to catch up to the falls death rate of the state.

Figure 67. Falls death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2000-2014



Source: Nebraska Vital Records

Intentional Injuries (Homicide)

Homicide

The number of homicides occurring in the Panhandle has seen a general decrease since 2006, compared to the increase seen in state numbers in recent years (see Table 37). The homicide death rate per 100,000 population in the Panhandle has historically been slightly higher or approximately even to that of the state, with a downturn during 2013-2015 (see Table 38).

Table 37. Number of deaths from homicide, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	170	204	197	184	170	187	205	202	213
Panhandle	9	14	13	11	8	11	11	8	5

Source: Nebraska Vital Records

Table 38. Homicide death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	3.3	3.9	3.7	3.5	3.2	3.5	3.8	3.7	3.8
Panhandle	4.0	5.9	5.4	4.6	3.5	4.9	4.9	3.5	2.2

Source: Nebraska Vital Records

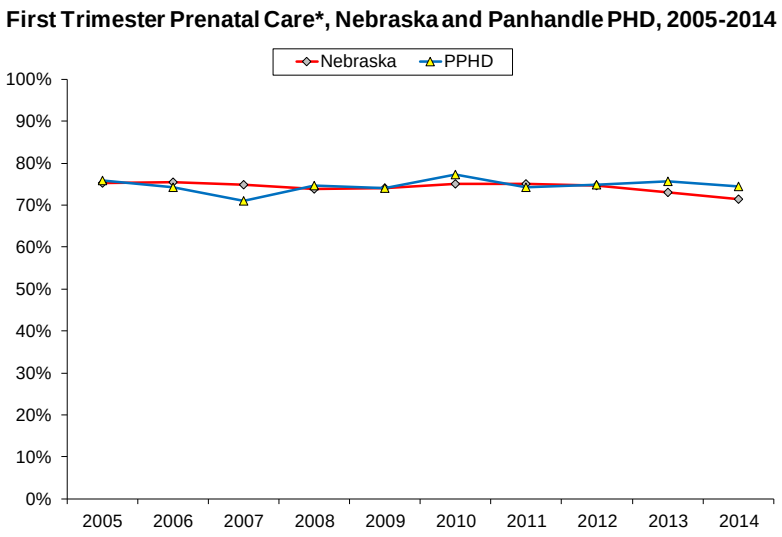
Maternal and Child Health

Births

Prenatal Care

The percentage of babies born to women who receive prenatal care beginning in their first trimester is very similar between the Panhandle and the state of Nebraska (see Figure 68).

Figure 68. First trimester prenatal care, Nebraska and Panhandle, 2005-2014



*Percentage of infants born to a woman receiving prenatal care beginning in the first trimester
Source: Nebraska Vital Records

Preterm Births

The percentage of total births that are preterm in the Panhandle and in Nebraska can be found in Table 39. The percentage of preterm births in the Panhandle is very similar to the percentage of preterm births at the state level.

Table 39. Percentage of births that are preterm, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	9.8%	9.7%	9.6%	9.7%	9.5%	9.4%	9.1%	9.1%	9.3%
Panhandle	8.1%	8.1%	8.5%	9.3%	9.3%	9.8%	9.1%	9.3%	8.7%

Source: Nebraska Vital Records

Low Weight Births

The percentage of low birth weights for 2011 and 2015 for each county in the Panhandle can be found in Table 40. Several counties in the Panhandle had a higher percentage of babies born at low birth weight when compared to the state in 2015, including Dawes, Deuel, Kimball, Morrill, and Scotts Bluff counties (highlighted).

Table 40. Low Birth Weight Births (2011 & 2015)

County	2011	% of births	2015	% of births
Banner	1	14.3%	0	0.0%
Box Butte	10	7.9%	10	6.0%
Cheyenne	9	7.9%	4	3.4%
Dawes	6	5.5%	8	9.2%
Deuel	2	11.1%	2	10.5%
Garden	1	4.5%	1	5.3%
Grant	1	8.3%	0	0.0%
Kimball	3	7.1%	5	10.6%
Morrill	2	3.5%	5	8.5%
Scotts Bluff	35	7.0%	52	10.4%
Sheridan	2	2.9%	1	2.0%
Sioux	0	0.0%	0	0.0%
Nebraska	**1,707**	**6.6%**	**1,898**	**7.1%**

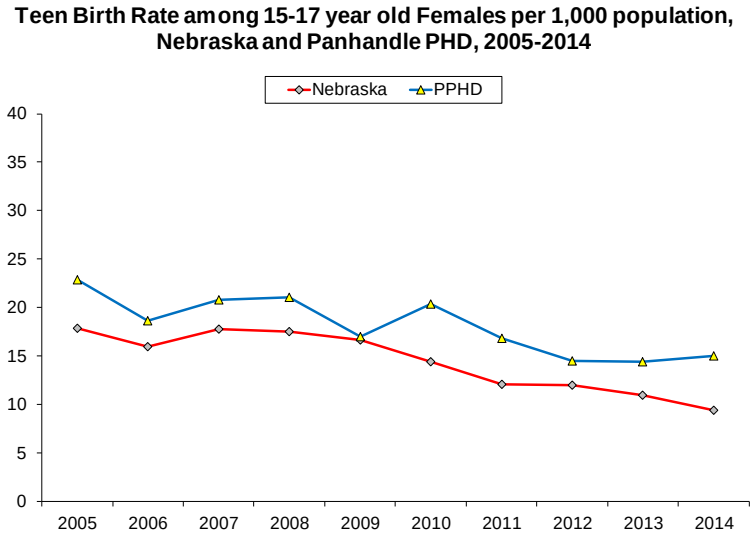
Source: 2016 Kids Count in Nebraska Report

Teen Births

The teen birth rate among 15-17 year old females per 1,000 population can be found in Figure 69. Although the teen birth rate in both the Panhandle and the state are trending down, the Panhandle has a consistently higher teen birth rate than the state level, with a slight uptick from 2012 to 2014.

The percentage of babies born to females age 10-17 for 2011 and 2015 is listed in Table 40. In 2015, Deuel, Garden, Morrill, Cheyenne, and Scotts Bluff Counties (highlighted) had higher rates of birth to teen moms that the state.

Figure 69. Teen birth rate among 15-17 year old females per 1,000 population, Nebraska and Panhandle, 2005-2014



Source: Nebraska Vital Records

Table 41. Births to Females Age 10-17 (2011 & 2015)

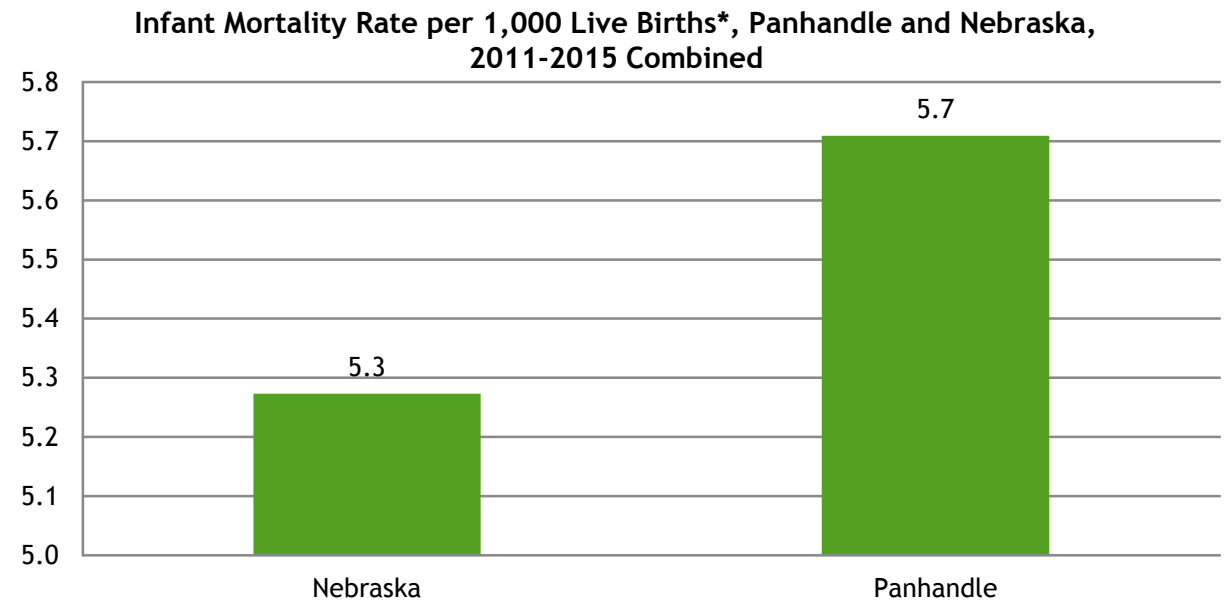
County	2011	% of births	2015	% of births
Banner	0	0.0%	0	0.0%
Box Butte	5	4.0%	2	1.2%
Cheyenne	2	1.8%	4	3.4%
Dawes	2	1.8%	1	1.1%
Deuel	1	5.6%	1	5.3%
Garden	1	4.5%	1	5.3%
Grant	0	0.0%	0	0.0%
Kimball	3	7.1%	0	0.0%
Morrill	0	0.0%	1	1.7%
Scotts Bluff	14	2.8%	13	2.6%
Sheridan	3	4.4%	0	0.0%
Sioux	0	0.0%	0	0.0%
Nebraska	**473**	**1.8%**	**379**	**1.4%**

Source: 2016 Kids Count in Nebraska Report

Infant Deaths

Infant death is defined as the death of an infant at less than 12 months of age. The rate of infant death in the Panhandle was slightly higher than the state of Nebraska (5.7 versus 5.3, respectively) during 2010-2015 combined (see Figure 70).

Figure 70. Infant mortality rate per 1,000 live births, Nebraska and Panhandle, 2011-2015 combined

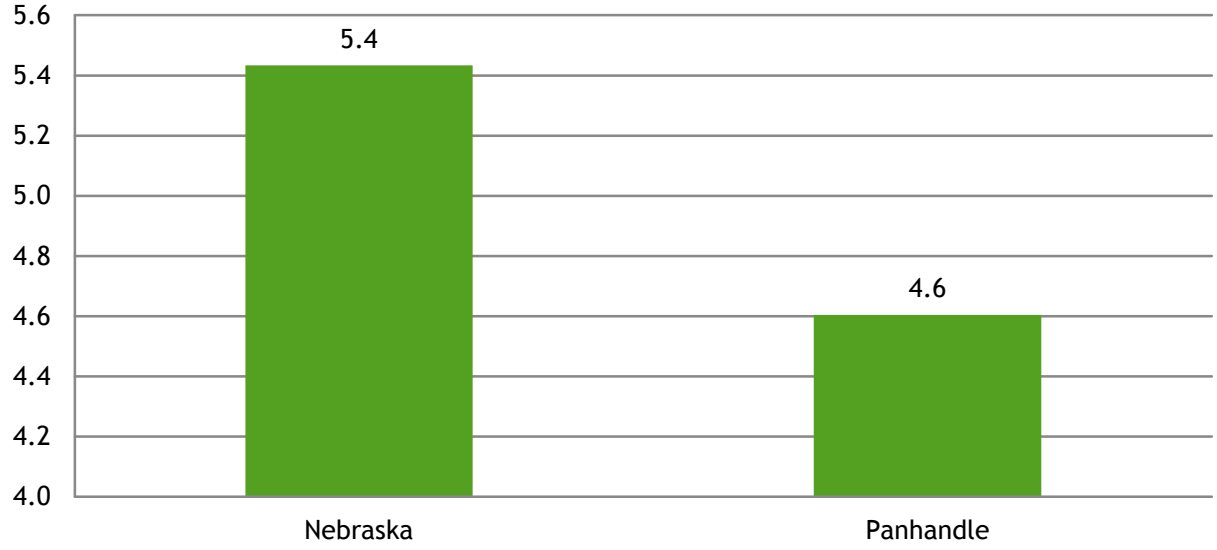


*Number of deaths to infants (less than 12 months old) per 1,000 live births
Source: Nebraska Vital Records
Prepared by Kelsey Irvine, Panhandle Public Health District

Fetal Deaths

Fetal death is defined as a death that occurs during pregnancy, at or after 20 weeks gestation (also known as a stillbirth). The fetal death rate in the Panhandle (4.6) was lower than that of the state (5.4) during 2011-2015 combined (see Figure 71).

Figure 71. Fetal mortality rate per 1,000 live births, Panhandle and Nebraska, 2011-2015



*A fetal death is a death that occurs during pregnancy, at or after 20 weeks gestation, and is also known as stillbirth
Source: Nebraska Vital Records
Prepared by Kelsey Irvine, Panhandle Public Health District

Childhood

Child Care

The following section describes the state of child care in each of the Panhandle counties, detailing the number of child care facilities and capacity per county (see Table 42), number of children the county covers by subsidy (provided by Educational Service Unit 13), children 5 and under living in poverty (see Table 43), number of children 4 years and younger in the county (see Table 44), and number of children 5 years and younger with both available parents working (see Table 45). When reading this section, it is important to consider the number of children with both available parents working (meaning someone other than a parent is supervising them during work hours), and the number of child care spots open for children 5 years and younger. The difference between the two indicate the number of children that receive childcare outside of formal childcare facilities.

Table 42. Number of child care facilities & capacity per county, by type

County	Number of facilities in county	Capacity
Box Butte		
Child Care Center	2	70
Family Child Care Home I	5	50
Family Child Care II	5	60
Preschool	3	58
Cheyenne		
Child Care Center	3	283
Family Child Care Home I	4	40
Family Child Care Home II	3	36
Preschool	2	24
Provisional Family Child Care Home II	1	11
School Age Only Child Care Center	1	200
School-Age-Only Child Care Center	2	195
Dawes		
Child Care Center	2	67
Family Child Care Home I	4	40
Family Child Care Home I	11	124
Preschool	1	20
Provisional Family Child Care Home I	1	10
Provisional Family Child Care Home II	3	36
Deuel		
Child Care Center	3	65
Garden		
Child Care Center	2	44
School Age Only Child Care Center	1	40
Grant		
Preschool	1	12
Kimball		
Family Child Care Home I	1	10
Morrill		
Child Care Center	1	49
Family Child Care Home 1	2	20
Provisional Family Child Care Home II	1	12
Scotts Bluff		
Child Care Center	15	932
Family Child Care Home I	15	150
Family Child Care Home II	16	189
Preschool	4	75
Provisional Child Care Center	4	116
Provisional Family Child Care Home I	3	30
Provisional Family Child Care Home II	1	12
School Age Only Child Care Center	3	195
Sheridan		
Child Care Center	1	29
Family Child Care Home I	5	50
Family Child Care Home II	1	12
Preschool	2	24

NOTE: Banner County and Sioux County have no formal child care available.
Source: NE DHHS Child Care Licensing List, January 2017

Table 43. Children 5 & Under in Poverty (2006-2010 & 2010-2014)

County	2006-2010	% of children ≤ 5	2010-2014	% of children ≤ 5
Banner	30	46.2%	5	9.1%
Box Butte	316	34.8%	356	48.2%
Cheyenne	95	11.5%	232	30.1%
Dawes	159	30.6%	114	19.3%
Deuel	54	37.5%	27	26.2%
Garden	39	36.8%	22	14.2%
Grant	11	30.6%	13	39.4%
Kimball	45	17.8%	71	21.5%
Morrill	127	33.4%	63	19.8%
Scotts Bluff	54	4.7%	162	13.8%
Sheridan	27	12.2%	24	11.3%
Sioux	120	22.8%	61	12.2%
Nebraska	**28,843**	**19.0%**	**32,507**	**21.2%**

Source: 2016 Kids Count in Nebraska Report

Table 44. Children 4 & Under (2011 & 2015)

County	2011	% of all children	2015	% of all children
Banner	32	21.5%	32	18.3%
Box Butte	789	25.2%	823	26.1%
Cheyenne	652	25.1%	632	23.9%
Dawes	488	19.7%	452	19.6%
Deuel	89	19.6%	102	23.0%
Garden	95	22.4%	79	20.8%
Grant	49	34.3%	49	33.3%
Kimball	236	25.7%	210	24.0%
Morrill	299	22.7%	260	20.2%
Scotts Bluff	2,678	26.6%	2,421	24.6%
Sheridan	294	22.2%	255	20.0%
Sioux	69	20.8%	28	23.3%
Nebraska	**131,568**	**25.5%**	**130,731**	**25.0%**

Source: 2016 Kids Count in Nebraska Report

Table 45. Children 5 & With All Available Parents Working (2006-2010 & 2010-2014)

County	2006-2010	% of children ≤ 5	2010-2014	% of children ≤ 5
Banner	20	33.9%	22	40.0%
Box Butte	457	53.5%	429	60.5%
Cheyenne	582	70.5%	553	72.6%
Dawes	428	83.3%	422	71.5%
Deuel	113	78.5%	87	84.5%
Garden	106	100.0%	146	94.2%
Grant	31	86.1%	16	48.5%
Kimball	143	56.5%	221	67.0%
Morrill	231	63.1%	198	62.3%
Scotts Bluff	2,316	77.3%	2,041	69.3%
Sheridan	272	68.3%	211	70.1%
Sioux	30	57.7%	45	75.0%
Nebraska	**110,466**	**73.6%**	**110,021**	**72.9%**

Source: 2016 Kids Count in Nebraska Report

Banner County

Banner County has no formal child care facilities, therefore no facilities accept subsidies for childcare. However, during 2010-2014, Banner County had 5 children aged 5 year and younger living in poverty. In 2015 Banner County had 32 children aged 4 and younger. During 2010-2014, 40% of children (22) aged 5 or younger had all available parents working.

Box Butte County

Child care centers in Box Butte County have spots available for 238 children 5 years and under. Centers in Alliance are licensed to accept 56 children by subsidy, and centers in Hemingford are licensed to accept 0 children by subsidy (23.52% overall). However, during 2010-2014, Box Butte County had a total of 356 children aged 5 years and younger living in poverty—300 more children than the number of subsidies offered. In 2015, Box Butte County had 823 children aged 4 and younger. During 2010-2014, 60.5% of children (429) aged 5 and younger had all available parents working.

Cheyenne County

Child care centers in Cheyenne County have spots for 789 children 5 years and under. Centers in Potter are licensed to accept 29 children by subsidy, and centers in Sidney are licensed to accept 254 children by subsidy (35.87% overall). During 2010-2014, Cheyenne County had a total of 232 children aged 5 and younger living in poverty, which is actually less than the number of children that child care centers are able to take by subsidy. Cheyenne County had 632 children aged 4 and under in 2015. 72.6% of children (553) aged 5 and younger had both available parents working during 2010-2014.

Dawes County

Child care centers in Dawes County have spots for 297 children 5 years and under. Centers in Chadron are licensed to accept 157 children by subsidy, and centers in Crawford are licensed to accept 12 children by subsidy (56.90% overall). During 2010-2014, Dawes County had 114 children aged 5 and younger living in poverty, which is actually less than the number of children that child care centers in the county accept on subsidy. Dawes County had 452 children aged 4 and younger in 2015. 71.5% of children (422) aged 5 and younger had both available parents working during 2010-2014.

Deuel County

Child care centers in Deuel County have spots for 65 children 5 years and under. Centers in Deuel County are licensed to accept 25 children by subsidy (38.46%). However, during 2010-2014, Deuel county had 27 children aged 5 and younger living in poverty—two more than the number children accepted by subsidy. Deuel County had 102 children aged 4 and younger in 2015. During 2010-2014, 84.5% children (87) aged 5 and younger in the county had both available parents working.

Garden County

Child care centers in Garden County have spots for 84 children 5 years and younger. Centers in Garden County are licensed to accept 24 children by subsidy (28.57%). During 2010-2014, Garden County had 22 children aged 5 and younger living in poverty, which is actually less

than the number of children accepted into child care centers on subsidy. In 2015, the county had 79 children aged 4 and younger. During 2010-2014, 94.2% of children (146) aged 5 and younger had all available parents working.

Grant County

Child care centers in Grant County have spots for 12 children 5 and under, and are not licensed to accept any children by subsidy. However, during 2010-2014, Grant County had 16 children aged 5 and younger living in poverty, none of which are accepted into child care centers on subsidy. In 2015, the county had 49 children aged 4 and younger. During 2010-2014, 48.5% of children (16) aged 5 and younger had all available parents working.

Kimball County

Child care centers in Kimball County have spots for 10 children 5 and under, and are licensed to accept 10 children by subsidy (100%). However, during 2010-2014, Kimball had 71 children aged 5 and younger who lived in poverty—61 children less than the amount of spots that are subsidized. In 2015, the county had 210 children aged 4 years and younger. During 2010-2014, 67% of children (221) aged 5 years and younger had all available parents working.

Morrill County

Child care centers in Morrill County have spots for 71 children 5 and under. No centers in Bayard are licensed to accept children by subsidy, and centers in Bridgeport are licensed to accept 49 children by subsidy (69.01% overall). However, during 2010-2014, 63 children aged 5 and younger lived in poverty—14 less than the amount of subsidized spots. In 2015, the county had 260 children aged 4 years and younger. During 2010-2015, 62.3% of children (198) aged 5 and younger had all available parents working.

Scotts Bluff County

Child care centers in Scotts Bluff County have spots for 1,699 children 5 years and younger. Centers in Gering are licensed to accept 202 children by subsidy, centers in Mitchell are licensed to accept 84 children by subsidy, and centers in Scottsbluff are licensed to accept 775 children by subsidy (62.45% overall). No centers in Morrill are licensed to accept children by subsidy. During 2010-2014, 162 children aged 5 years and younger lived in poverty, which is far less than the number of subsidized child care spots offered in the county. In 2015, Scotts Bluff County had 2,421 children 4 years and younger. During 2010-2014, 69.3% of children (2,041) aged 5 years and younger had all available parents working.

Sheridan County

Child care centers in Sheridan County have spots for 115 children 5 years and younger. Centers in Gordon are licensed to accept 20 children by subsidy, centers in Hay Springs are licensed to accept 29 children by subsidy, and centers in Rushville are licensed to accept 22 children by subsidy (61.74% overall). During 2010-2014, 24 children aged 5 years and younger lived in poverty, which is far less than the amount of subsidized child care spots available. In 2015, Sheridan County had 255 children aged 4 years and younger. During 2010-2015, 70.1% of children (211) aged 5 years and younger had all available parents working.

Sioux County

Sioux County has no formal child care facilities, therefore no facilities accept subsidies for childcare. During 2010-2014, 61 children aged 5 year and younger lived in poverty. In 2015, Sioux county had 28 children aged 4 years and younger. During 2010-2014, 75% of children (45) aged 5 years and younger had all available parents working.

Child Maltreatment

The number and rate of substantiated victims of child maltreatment for each Panhandle county for 2011 and 2015 are shown in Table 46. In general, the rate of child maltreatment has decreased in Panhandle counties from 2011 to 2015. However, Scotts Bluff County (highlighted) in particular continues to have a higher rate of child maltreatment than the state as a whole.

Table 46. Child Maltreatment (2011 & 2015)*

County	2011	Rate per 1,000 children	2015	Rate per 1,000 children
Banner	0	0.0	0	0.0
Box Butte	41	14.4	6	2.1
Cheyenne	16	6.7	0	4.1
Dawes	21	12.0	7	4.3
Deuel	9	21.8	1	2.5
Garden	2	5.3	0	0.0
Grant	0	0.0	0	0.0
Kimball	13	15.5	0	0.0
Morrill	9	7.4	9	7.6
Scotts Bluff	198	21.8	94	10.5
Sheridan	15	12.3	8	6.9
Sioux	0	0.0	0	0.0
Nebraska	**5,239**	**11.4**	**3,691**	**7.9**

*Number of substantiated victims of child maltreatment
Source: 2016 Kids Count in Nebraska Report

Mental Health and Suicide

Mental illness is a variety of mental disorders, or conditions that are characterized by a difference in mood, thinking, or behavior, linked to impaired functioning or distress. Depression is the leading type of mental illness, impacting more than 26% of the US adult population. Research indicates that mental disorders are strongly associated with the occurrence and treatment of many chronic diseases, such as diabetes, cancer, cardiovascular disease, asthma, and obesity, as well as with many risk factors for chronic disease (physical inactivity, smoking, drinking, etc.).[22]

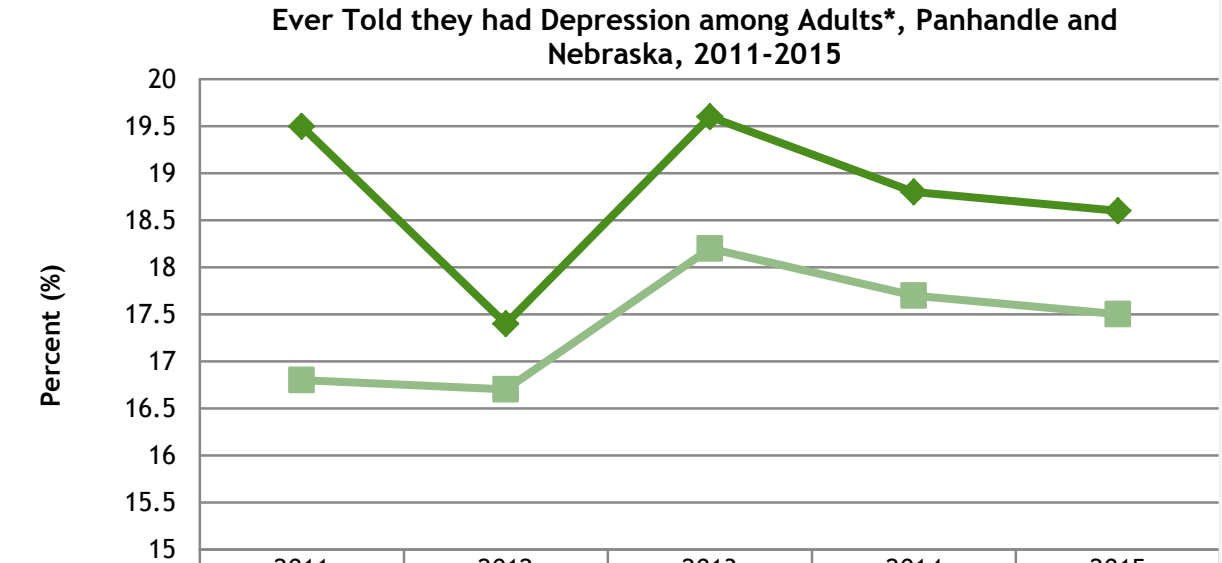
Mental Illness

Mental Illness among Adults

Figure 72 shows the percentage of adults in the Panhandle and state who report ever being told they had depression. The percentage of adults reporting depression in the Panhandle is consistently higher than that of the state, however the difference has never been significant. From 2013 to 2015 this percentage has been trending down.

The percentage of adults who report frequent mental distress (see Figure 73) was trending down, but had an upward tick from 2014 to 2015. The percentage of adults reporting frequent mental distress in the Panhandle has consistently been slightly higher than that of the state of Nebraska.

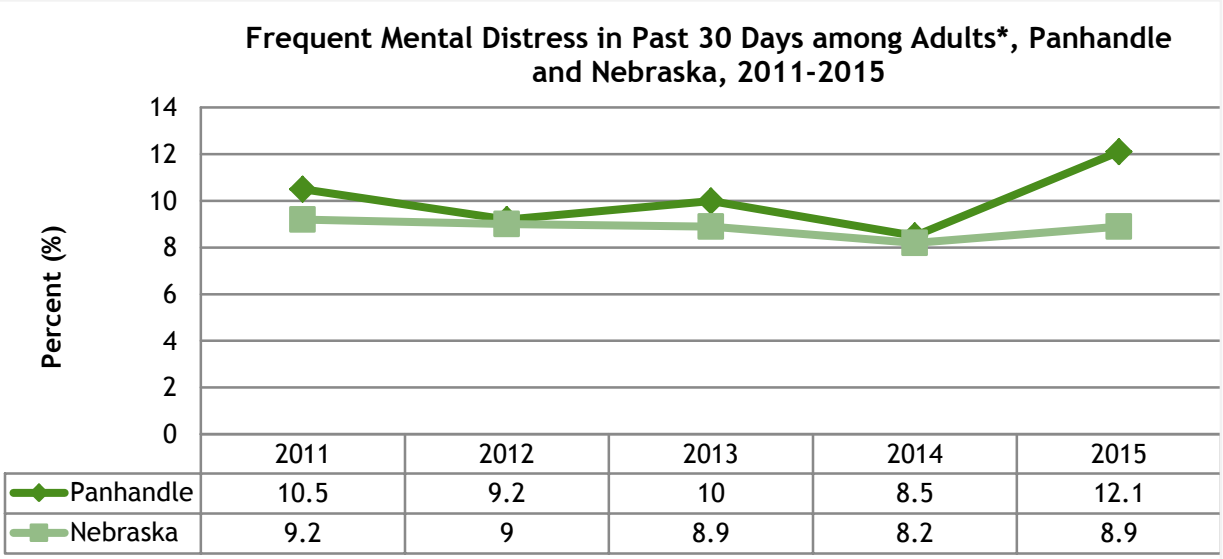
Figure 72. Adults with depression, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	19.5	17.4	19.6	18.8	18.6
Nebraska	16.8	16.7	18.2	17.7	17.5

*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). Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 73. Frequent mental distress in past 30 days among adults, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	10.5	9.2	10	8.5	12.1
Nebraska	9.2	9	8.9	8.2	8.9

*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. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Suicide

Death due to Suicide

Number and rate of deaths from suicide can be found in Tables 47 and 48. The number of deaths from suicide in the Panhandle increased from approximately 2005 to 2011, and has remained between about 40 and 46 per year since. The suicide death rate per 100,000 population has steadily increased

Table 47. Number of deaths from suicide, Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	564	573	542	547	540	602	636	702	691
Panhandle	32	38	41	42	43	39	46	40	44

Source: Nebraska Vital Records

Table 48. Suicide death rate per 100,000 population (age-adjusted), Panhandle and Nebraska, 2005-2015

	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015
Nebraska	10.6	10.6	10.0	10.0	9.8	10.8	11.4	12.5	12.2
Panhandle	11.9	13.5	14.4	14.3	15.0	14.2	17.9	15.9	17.5

Source: Nebraska Vital Records

Substance Abuse

Substance abuse includes the use of alcohol, illicit drugs, or misuse of over-the-counter or prescribed medications.

Alcohol Misuse

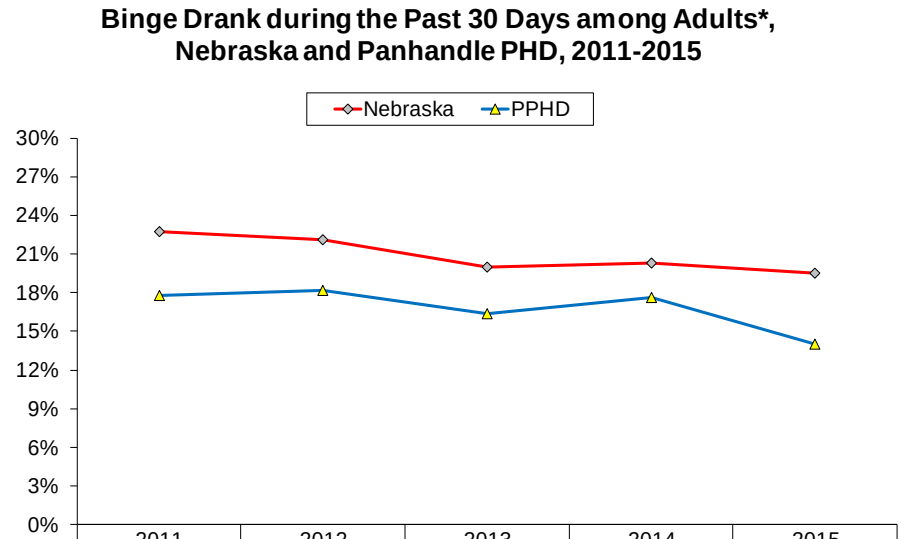
Misuse of alcohol includes underage drinking and binge drinking. Binge drinking is drinking 5 or more drinks in one occasion for men or 4 or more drinks in one occasion for women. Misuse of alcohol can contribute to increased health problems, such as injuries, violence, liver diseases, and cancer.[23]

Alcohol Use among Adults

Binge Drinking among Adults

Nebraska is known for its high rate of binge drinking. However, the Panhandle has a lower rate of binge drinking compared to the state (see Figure 74).

Figure 74. Binge drank during the past 30 days among adults, Nebraska and Panhandle, 2011-2015



	2011	2012	2013	2014	2015
Nebraska	22.7	22.1	20.0	20.3	19.5
PPHD	17.8	18.2	16.4	17.6	14.0

*Percentage of adults 18 and older who report having five or more alcoholic drinks for men/four or more alcoholic drinks for women on at least one occasion during the past 30 days
Source: Behavioral Risk Factor Surveillance System (BRFSS)

Alcohol Impaired Driving among Adults

The percentage of adults in the Panhandle that reported driving while under the influence of alcohol was lower than or equal to that of the state in 2013 and 2015 (see Table 49).

Table 49. Alcohol impaired driving in past 30 days among adults, Panhandle and Nebraska, 2013-2015

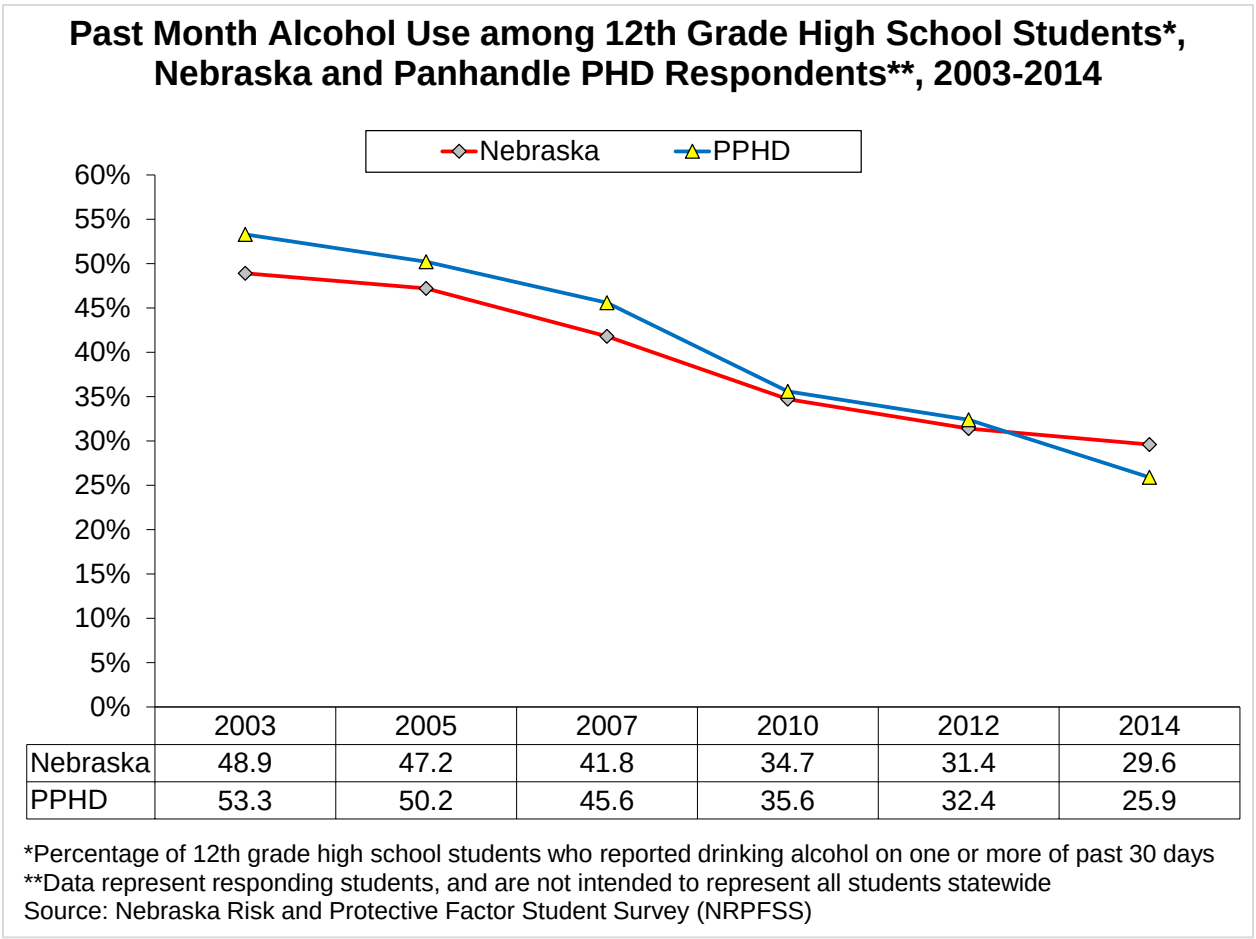
	2013	2015
Panhandle	2.5%	2.5%
Nebraska	3.4%	2.5%

Source: 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS)

Alcohol Use among Youth

Past month alcohol use among 12th graders in the Panhandle has decreased drastically from 2003 to 2014 (see Figure 75). From 2003 to 2012, the Panhandle had a higher percentage of 12th graders reporting that they used alcohol within the past month compared to the state. In 2014, the Panhandle dropped below the state.

Figure 75. Past month alcohol use among 12th grade high school students, Nebraska and Panhandle, 2003-2014



	2003	2005	2007	2010	2012	2014
Nebraska	48.9	47.2	41.8	34.7	31.4	29.6
PPHD	53.3	50.2	45.6	35.6	32.4	25.9

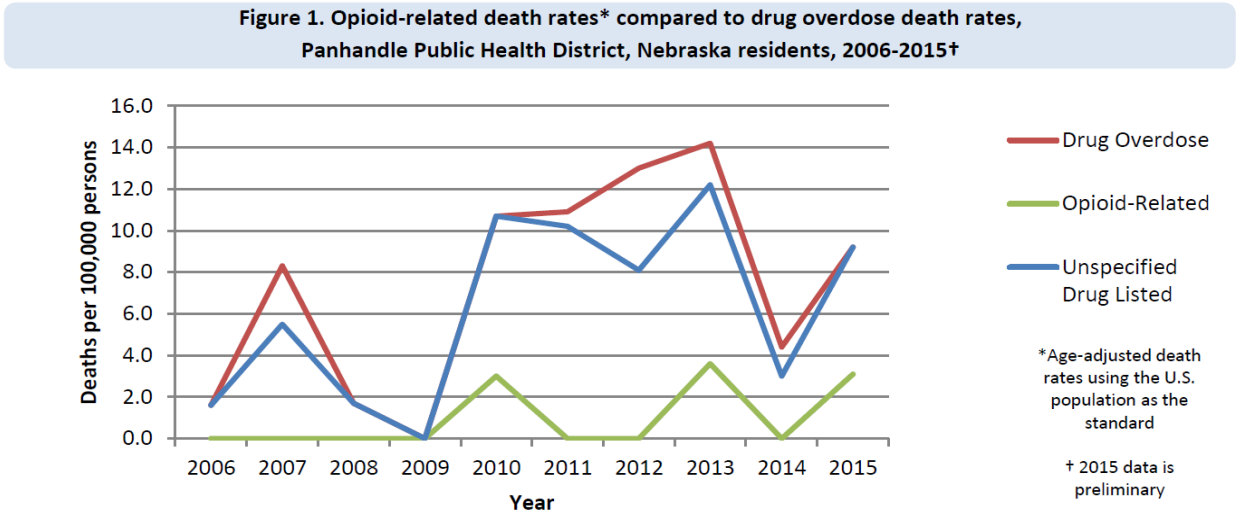
*Percentage of 12th grade high school students who reported drinking alcohol on one or more of past 30 days
**Data represent responding students, and are not intended to represent all students statewide
Source: Nebraska Risk and Protective Factor Student Survey (NRPFSS)

Drug Use

In late 2016, the Nebraska Panhandle (excluding Scotts Bluff County) was identified as a high-burden area for opioid related deaths. Opioids are a class of drugs that include pain relievers available by prescription (e.g., oxycodone, hydrocodone, codeine, morphine, etc.), synthetic opioids such as fentanyl, and the illegal drug heroin.[24]

Figure 76 and Table 50 detail trends of opioid related deaths in the Panhandle region (excluding Scotts Bluff County). In Figure 76, you can see a large spike in drug overdose deaths. In Table 50, you can see the demographic makeup of those people that have died in the Panhandle (excluding Scotts Bluff County) due to opioid related deaths. The majority are female, with 28% being 25-34 years of age, 24% being 35-44 years of age, and 28% being 55 and older. The majority (66%) of deaths were unintentional.

Figure 76. Opioid related death rates* compared to drug overdose death rates, Panhandle Public Health District (excluding Scotts Bluff County), Nebraska residents, 2006-2015†



Data source: Nebraska Death Certificate data (2015 Data is preliminary. Extracted 09/16/2016)

Table 50. Drug overdose deaths: Demographic characterstics and intent, Panhandle Public Health District (excluding Scotts Bluff County), Nebraska residents, 2006-2015†

Table 1. Drug overdose deaths: Demographic characteristics and intent, Panhandle Public Health District, Nebraska residents, 2010-2015†

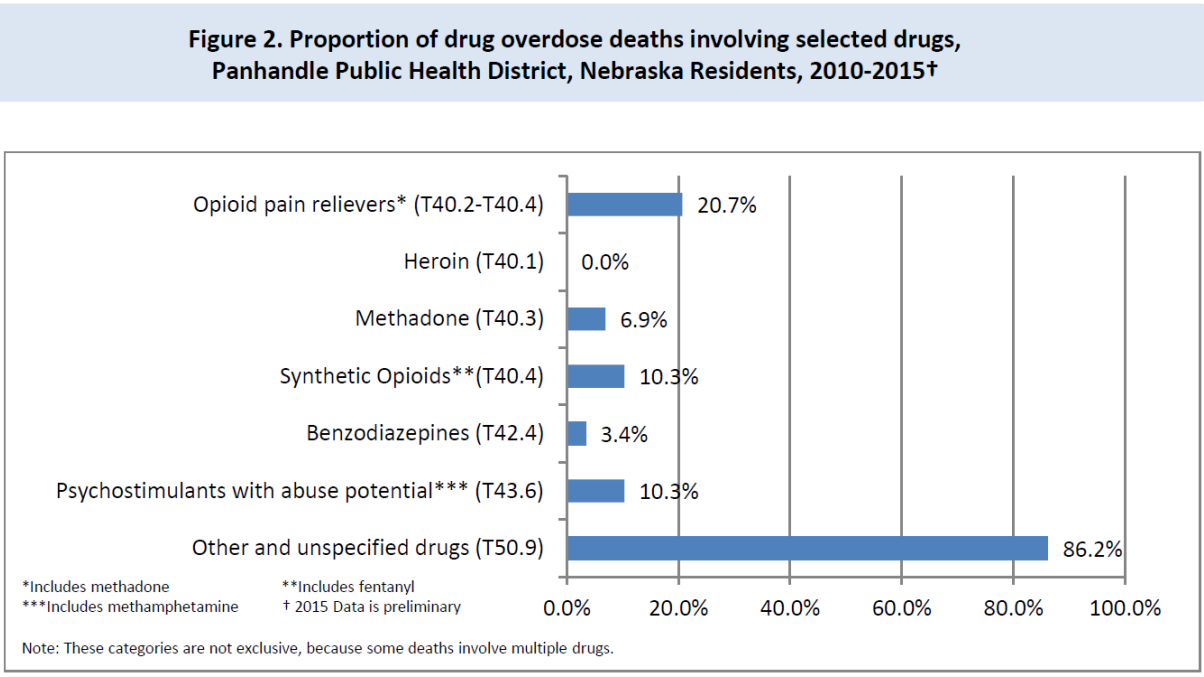
		Number	Percent	Rate per 100,000 persons**
Gender	Female	19	66%	12.2
	Male	10	34%	6.5
Age (in years)*	15-24	2	7%	5.0
	25-34	8	28%	24.3
	35-44	7	24%	21.3
	45-54	4	14%	8.8
	55 and older	8	28%	8.1
Intent	Unintentional (also known as "accidental")	19	66%	
	Suicide	7	24%	
	Missing Intent Information	3	10%	

*0-14 age group not included due to small numbers. **Rates utilized 2010 Nebraska Census Data. † 2015 data is preliminary

Data source: Nebraska Death Certificate data (2015 Data is preliminary. Extracted 09/16/2016)

Figure 77 shows the different types of drugs identified in the opioid related deaths. Of those identified, opioid pain relievers ranked the highest used.

Figure 77. Proportion of drug overdose deaths involving selected drugs, Panhandle Public Health District (excluding Scotts Bluff County), Nebraska residents, 2006-2015†



Data source: Nebraska Death Certificate data (2015 Data is preliminary. Extracted 09/16/2016)

Immunization and Infectious Diseases

Infectious diseases are caused by pathogenic microorganisms (bacteria, viruses, parasites, or fungi). The diseases are spread from one person to another, either directly or indirectly.

Immunizations

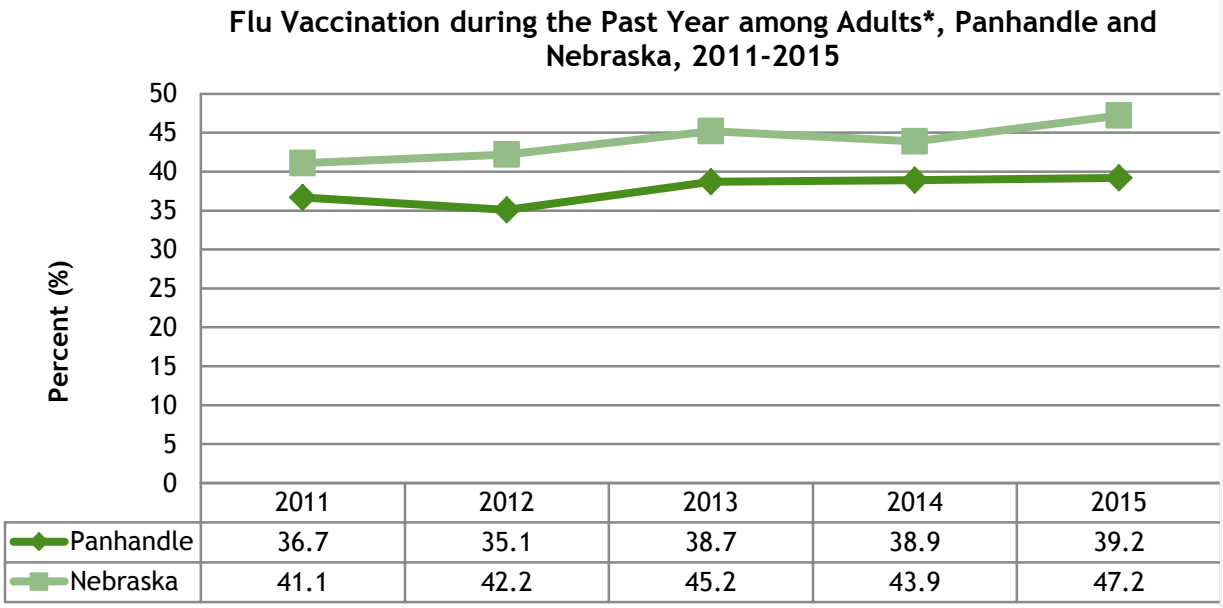
A large portion of infectious diseases have been eradicated or controlled by vaccination. However, a rising movement supporting anti-vaccination has led to under-immunized children, adolescents, and adults in the United States, leaving them susceptible to many vaccine preventable diseases.

Influenza Vaccination

The percentage of Panhandle adults that report having a flu vaccination during the past year has consistently been lower than the state of Nebraska, but is slowly increasing (see Figure 78).

The flu vaccination is highly recommended for people in vulnerable populations (children, pregnant people, and elderly people). The percentage of Panhandle adults 65 years and older that received a flu vaccination in the past year is much higher than the percentage of all adults, however is still lower than the state, and appears to be decreasing (see Figure 79).

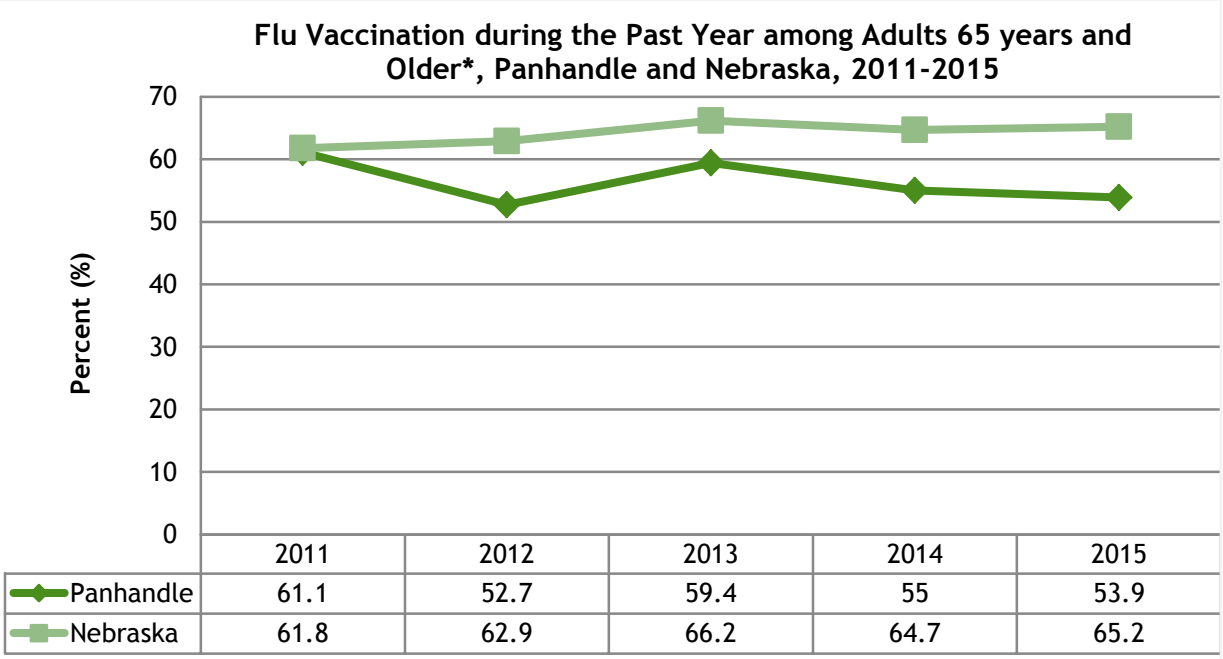
Figure 78. Flu vaccination during the past year among adults, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	36.7	35.1	38.7	38.9	39.2
Nebraska	41.1	42.2	45.2	43.9	47.2

*Percentage of adults 18 and older who report that they received an influenza vaccination during the past 12 months. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 79. Flu vaccination during the past year among adults 65 years and older, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	61.1	52.7	59.4	55	53.9
Nebraska	61.8	62.9	66.2	64.7	65.2

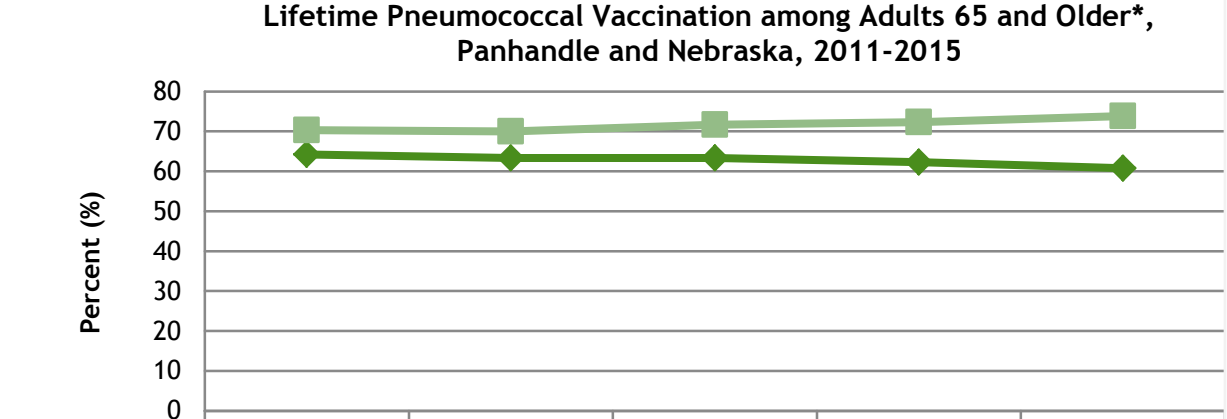
*Percentage of adults 65 and older who report that they received an influenza vaccination during the past 12 months. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Pneumococcal Vaccination

Pneumococcal vaccination can help prevent pneumococcal disease, and is recommended for all babies, children younger than 2 years old, all adults 65 years or older, and any person with a certain medical condition making them more susceptible to the disease.

The Panhandle has a slightly lower percentage of adults reporting they have been vaccinated when compared to the state (see Figure 80). The percentage of adults reporting pneumococcal vaccination is slowly decreasing.

Figure 80. Lifetime pneumococcal vaccination among adults 65 and older, Panhandle and Nebraska, 2011-2015



	2011	2012	2013	2014	2015
Panhandle	64.2	63.3	63.3	62.3	60.8
Nebraska	70.3	70	71.7	72.3	73.8

*Percentage of adults 65 and older who report that they have ever received a pneumococcal vaccination. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Shingles Vaccination

According to the CDC:

> Shingles is a painful rash that usually develops on one side of the body, often the face or torso. The rash forms blisters that typically scab over in 7 to 10 days and clears up within 2 to 4 weeks. For some people the pain can last for months or even years after the rash goes away. This long-lasting pain is called post-herpetic neuralgia (PHN), and it is the most common complication of shingles. Your risk of shingles and PHN increases as you get older.[25]

Approximately one out of every three people in the US will develop shingles, an estimated 1 million cases per year. Any person who has had the chickenpox may develop shingles. While shingles can develop in children, the risk increases with age—about half of all cases occur in individuals 60 years or older.[26]

In 2013, 22.4% of adults 50 years and older reported they had ever had a shingles vaccination, compared to 27.9% across the state.[26]

Influenza and Pneumonia

Mortality

The number of deaths and influenza death rate per 100,000 population during 2011-2015 combined is found in Table 51. The Panhandle had only 7 deaths from influenza, with a rate of 0.9 per 100,000 population, as opposed to the state's 1.5 per 100,000 population.

Table 51. Number of deaths and death rate per 100,000 population (age-adjusted) by influenza, Panhandle and Nebraska, 2011-2015 combined

	Number of deaths	Rate of death
Nebraska	179	1.5
Panhandle	7	0.9

Source: Nebraska Vital Records

The number of deaths and pneumonia death rate per 100,000 population during 2011-2015 combined is found in Table 52. The Panhandle had 79 deaths from pneumonia, with a rate of 11.4 deaths per 100,000 population, as opposed to the state's 13.1 per 100,000 population.

Table 52. Number of deaths and death rate per 100,000 population (age-adjusted) by pneumonia, Panhandle and Nebraska, 2011-2015 combined

	Number of deaths	Rate of death
Nebraska	1,515	13.1
Panhandle	79	11.4

Source: Nebraska Vital Records

HIV/AIDS

HIV (human immunodeficiency virus) is the virus that can lead to AIDS (acquired immunodeficiency syndrome) if not treated. It is impossible to cure HIV completely, so once contracted you have it for life. HIV attacks the body's immune system and reduces the number of cells that help the immune system fight of infection. People with HIV/AIDS contract opportunistic infections or cancers taking advantage of a very weak immune system, which is a signal that the HIV has developed to AIDS. HIV/AIDS is a bloodborne pathogen that can only be spread through contact with blood or other bodily fluids.[27]

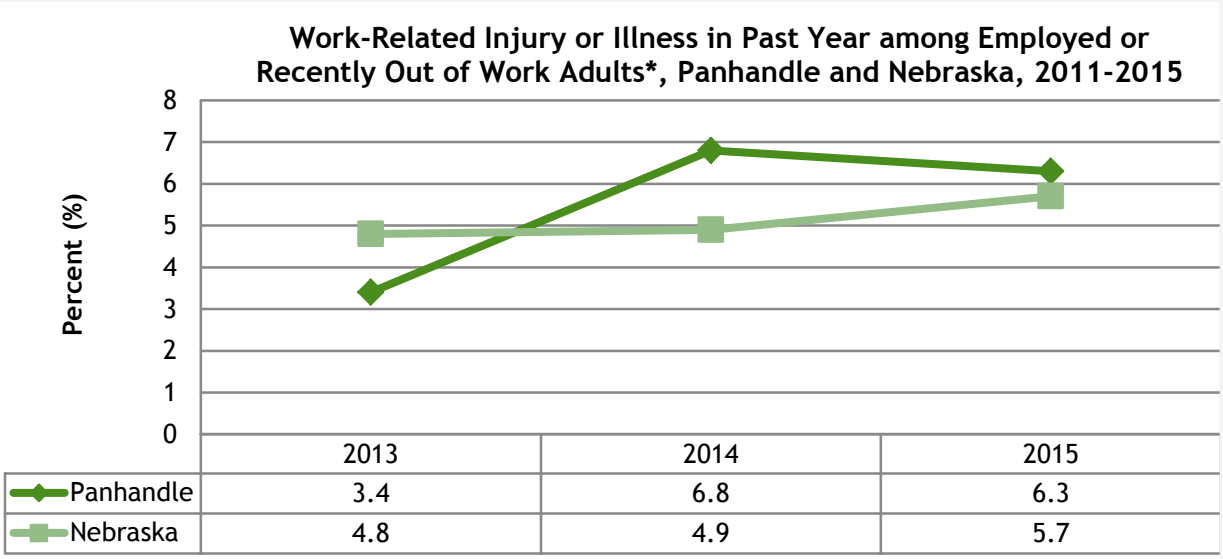
From 2012-2016, the Panhandle had only one new case of HIV/AIDS. Approximately 66 people currently live with HIV/AIDS in the Panhandle region.

Occupational Health and Safety

Non-Fatal Work-Related Injuries and Illnesses

Work-related injury or illness had an increase between 2013 and 2014, but a slight decrease from 2014 to 2015 (see Figure 81). From 2014 to 2015, the percentage of adults reporting work-related injury or illness was slightly higher in the Panhandle versus the state, but appears to be declining to meet the state.

Figure 81. Work-related injury or illness in past year among employed or recently out of work adults, Panhandle and Nebraska, 2011-2015



*Percentage of employed or recently out of work adults who reported they had a work-related injury or illness in the past year. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Health Disparities

As per Healthy People 2020:

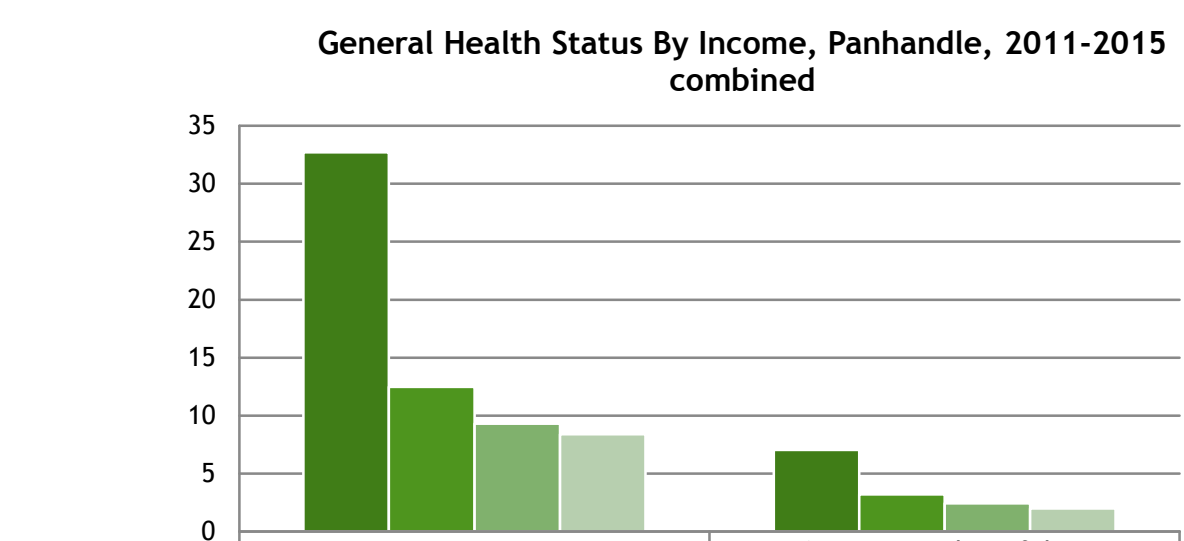
> Although the term *disparities* is often interpreted to mean racial or ethnic disparities, many dimensions of disparity exist in the United States, particularly in health. If a health outcome is seen to a greater or lesser extent between populations, there is disparity. Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status, and geographic location all contribute to an individual's ability to achieve good health.[28]

Disparities by Income

General Health Status Disparities by Income

Panhandle residents that make less are more likely to report their general health as fair or poor. Those with lower income also report greater average number of days where their physical health was not good in the past 30 days.

Figure 82. General health status by income, age-adjusted, Panhandle, 2011-2015 combined

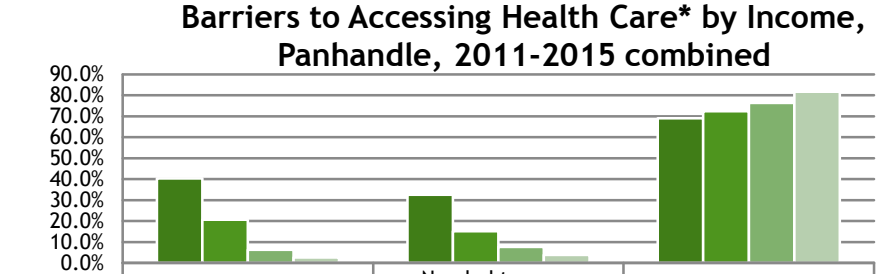


	General health fair or poor*	Average number of days physical health was not good in past 30 days**
<$25,000	32.7%	7.1
$25,000-$49,999	12.5%	3.2
$50,000-$74,999	9.3%	2.4
$75,000+	8.4%	2

*Percentage of adults 18 and older who report their general health status is fair or poor. **Average number of days physical health was not good in past 30 days reported by adults 18 and older. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Access to Health Care Disparities by Income

Figure 83. Barriers to accessing health care by income, age-adjusted, Panhandle, 2011-2015 combined

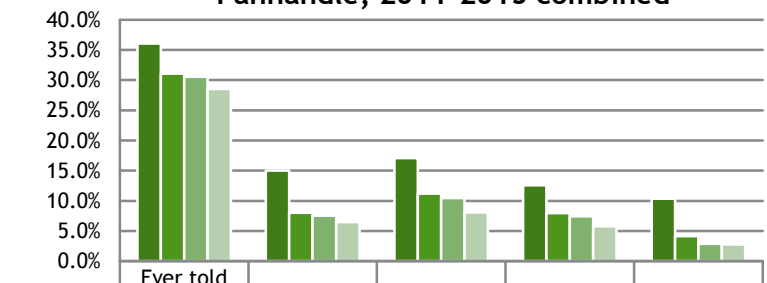


	No health care coverage, 18-64 year olds	Needed to see a doctor but could not due to cost in past year	Has a personal doctor or health care provider
<$25,000	40.3%	32.5%	69.0%
$25,000-$49,999	20.6%	15.1%	72.4%
$50,000-$74,999	6.2%	7.7%	76.4%
$75,000+	2.6%	3.9%	81.7%

*Percentage of adults 18-64 years of age who report they have no health care coverage, percentage of adults 18 and older report they needed to see a doctor but could not due to cost in the past year, and percentage of adults 18 and older who repor they have a personal doctor or health care provider. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Barriers to accessing health care can be seen in Figure 83. Health care coverage increases with income, as does the ability to cover the cost of a doctor visit. Lower income adults in the Panhandle report being unable to seek health care due to lack of insurance or cost of the visit at much higher rates than higher income individuals. Additionally, adults with higher incomes reported having a personal doctor or health care provider (primary care provider) at much higher percentages than those at lower incomes.

Figure 84. Chronic disease, age-adjusted, Panhandle, 2011-2015 combined



	Ever told they have high blood pressure	Ever told they have diabetes	Ever told they have asthma	Currently have asthma	Ever told they have COPD
<$25,000	36.1%	15.0%	17.1%	12.6%	10.4%
$25,000-$49,999	31.1%	8.0%	11.2%	8.0%	4.1%
$50,000-$74,999	30.6%	7.6%	10.5%	7.4%	2.9%
$75,000+	28.5%	6.5%	8.1%	5.8%	2.8%

*Percentage of adults 18 and older who report they have ever been told they have diabetes, high blood pressure, asthma, currently have asthma, and COPD. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Health Outcome Disparities by Income

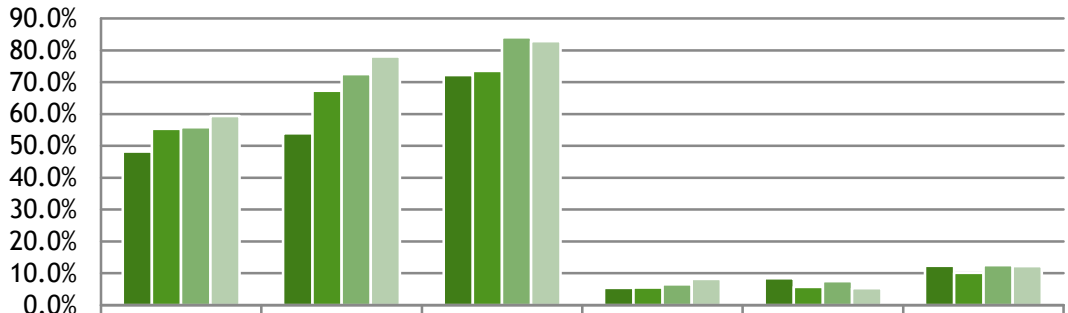
Chronic Disease Disparities by Income

As evidenced in Figure 84, the percentage of adults that report they suffer from hypertension, diabetes, asthma, and COPD increases as income lessens. Low income adults in the Panhandle suffer from these chronic diseases at a disproportionately higher rate than higher income adults.

Cancer Disparities by Income

Cancer screening occurs more in Panhandle adults with higher income levels (see Figure 85). While most negative health outcomes occur at higher rates in adults with lower incomes, the percentage of adults that report they have skin cancer is higher among those with higher incomes. The percentage of adults that report they have cancer other than skin cancer or cancer in any form is relatively even across incomes.

Figure 85. Cancer screening and diagnosis by income, age-adjusted, Panhandle, 2011-2015 combined



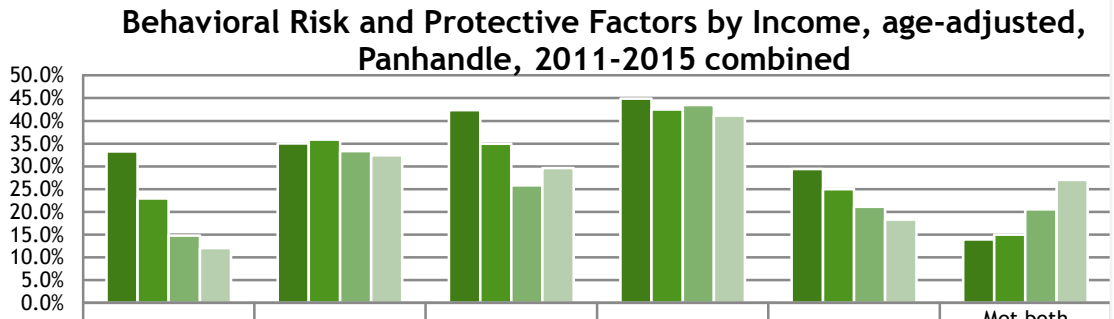
	Up-to-date on colon cancer screening, 50-75 year olds	Up-to-date on breast cancer screening, female 50-74 year olds	Up-to-date on cervical cancer screening, female 21-65 year olds	Ever told they have skin cancer	Ever told they have cancer other than skin cancer	Ever told they have cancer (in any form)
<$25,000	48.3%	54.0%	72.2%	5.4%	8.4%	12.3%
$25,000-$49,999	55.3%	67.3%	73.5%	5.5%	5.7%	10.2%
$50,000-$74,999	55.8%	72.6%	84.1%	6.5%	7.5%	12.6%
$75,000+	59.3%	78.1%	82.9%	8.2%	5.3%	12.3%

*Percentage of adults 50-75 years who report they are up to date on colon cancer screening, percentage of females 50-74 years old who report they are up to date on breast cancer screening, and females 21-65 years who report they are up to date on cervical cancer screening.
**Percentage of aduls 18 and older who report they have ever been told they have skin cancer, cancer other than skin cancer, and cancer in any form. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Risk and Protective Factors by Income

Figure 86 shows the following behavioral risk and protective factors by income: current cigarette smoking, obesity, sugar-sweetened beverage consumption, fruit consumption, vegetable consumption, and aerobic physical activity and muscle strengthening recommendations. Cigarette smoking decreases as income increases, and obesity follows a similar trend. Consumption of sugar-sweetened beverage decreases from those making less than $25,000 per year to those making between $50,000 to $74,999 per year, but increases in those that make greater than $75,000 per year. The percentage of adults that report eating fruits or vegetables less than one time per day is greater in lower incomes. The percentage of adults meeting both aerobic physical activity and muscle strengthening recommendations increases as income increases.

Figure 86. Behavioral risk and protective factors by income, age-adjusted, Panhandle, 2011-2015 combined



	Current cigarette smoking	Obese	Consumed sugar-sweetened beverages 1 or more times per day in past 30 days*	Consumed fruits less than 1 time per day**	Consumed vegetables less than 1 time per day**	Met both aerobic physical activity and muscle strengthening recommendations**
<$25,000	33.3%	35.0%	42.4%	44.9%	29.4%	13.9%
$25,000-$49,999	23.0%	35.9%	35.0%	42.5%	25.0%	15.0%
$50,000-$74,999	14.8%	33.4%	25.8%	43.5%	21.1%	20.6%
$75,000+	12.1%	32.4%	29.6%	41.2%	18.3%	27.0%

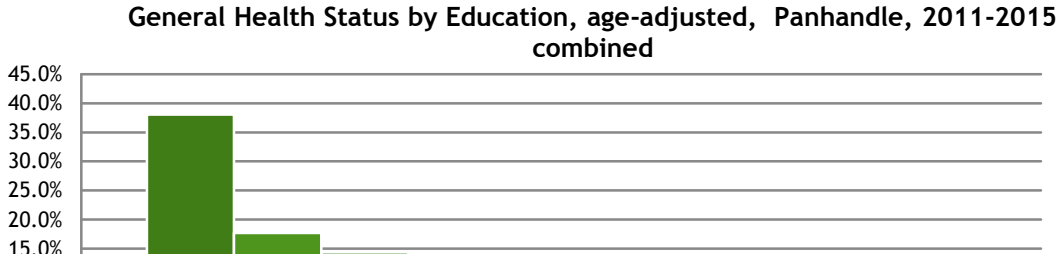
*Data from 2013 only. **Data from 2011, 2013, and 2015 only. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Disparities by Education

General Health Status Disparities by Education

Similar to income, Panhandle residents that are less educated are more likely to report their general health status is fair or poor. Those with lower education levels also report greater average number of days where their physical health was not good in the past 30 days.

Figure 87. General health status by income, age-adjusted, Panhandle, 2011-2015 combined



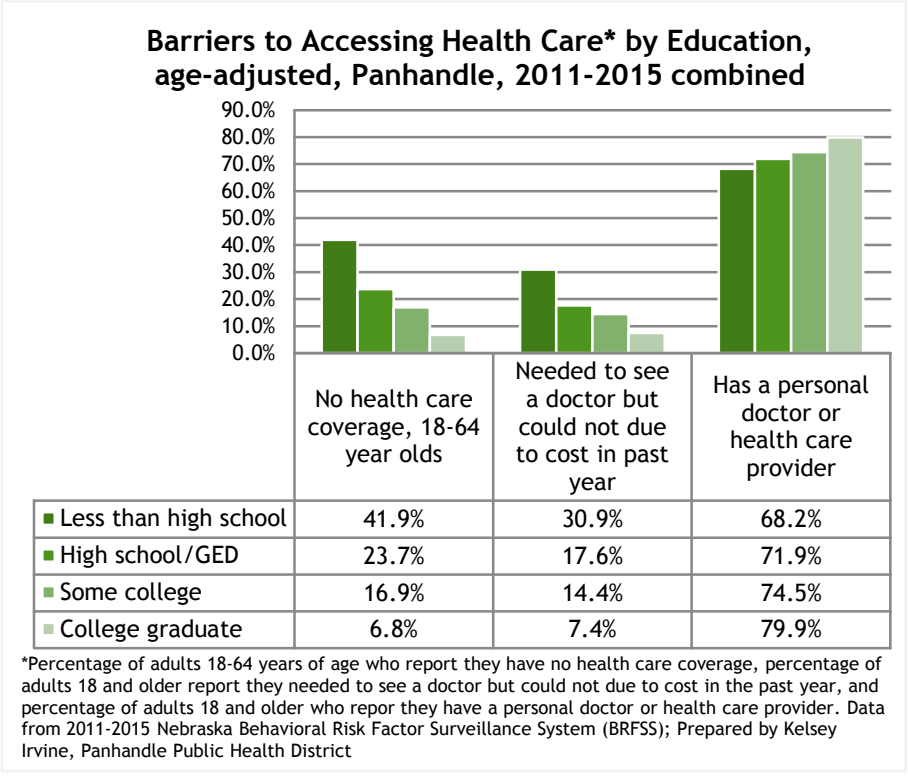
	General health fair or poor*	Average number of days physical health was not good in past 30 days**
Less than high school	38.1%	6.8
High school/GED	17.7%	3.7
Some college	14.4%	3.8
College graduate	7.5%	2.3

*Percentage of adults 18 and older who report their general health status is fair or poor. **Average number of days physical health was not good in past 30 days reported by adults 18 and older. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Access to Health Care Disparities by Education

Barriers to accessing health care can be seen in Figure 88. Similar to income, health care coverage increases with education, as does the ability to cover the cost of a doctor visit. Panhandle adults with lower education levels report being unable to seek health care due to lack of insurance or cost of the visit at much higher rates than individuals with higher education levels. Additionally, adults with higher education levels reported having a personal doctor or health care provider (primary care provider) at much higher percentages than those with lower education levels.

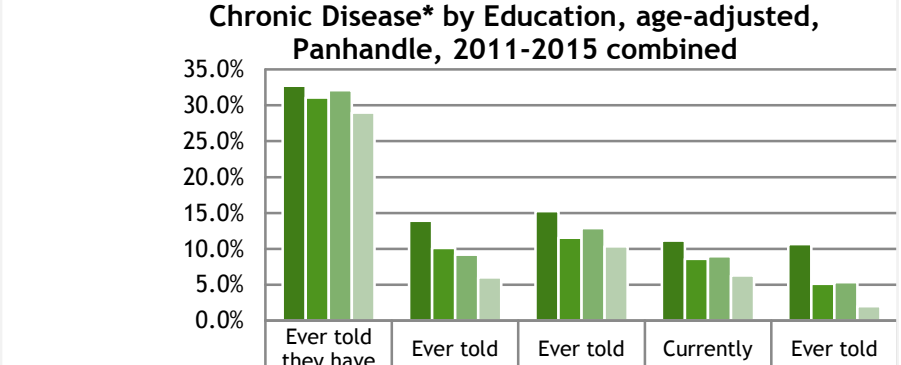
Figure 88. Barriers to accessing health care by education, age-adjusted, Panhandle, 2011-2015 combined



	No health care coverage, 18-64 year olds	Needed to see a doctor but could not due to cost in past year	Has a personal doctor or health care provider
Less than high school	41.9%	30.9%	68.2%
High school/GED	23.7%	17.6%	71.9%
Some college	16.9%	14.4%	74.5%
College graduate	6.8%	7.4%	79.9%

*Percentage of adults 18-64 years of age who report they have no health care coverage, percentage of adults 18 and older report they needed to see a doctor but could not due to cost in the past year, and percentage of adults 18 and older who repor they have a personal doctor or health care provider. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Figure 89. Chronic disease by education, age-adjusted, Panhandle, 2011-2015 combined



	Ever told they have high blood pressure	Ever told they have diabetes	Ever told they have asthma	Currently have asthma	Ever told they have COPD
Less than high school	32.8%	13.9%	15.3%	11.1%	10.7%
High school/GED	31.1%	10.1%	11.5%	8.6%	5.1%
Some college	32.1%	9.2%	12.9%	9.0%	5.3%
College graduate	29.0%	6.0%	10.3%	6.3%	2.0%

*Percentage of adults 18 and older who report they have ever been told they have diabetes, high blood pressure, asthma, currently have asthma, and COPD. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Health Outcome Disparities by Education

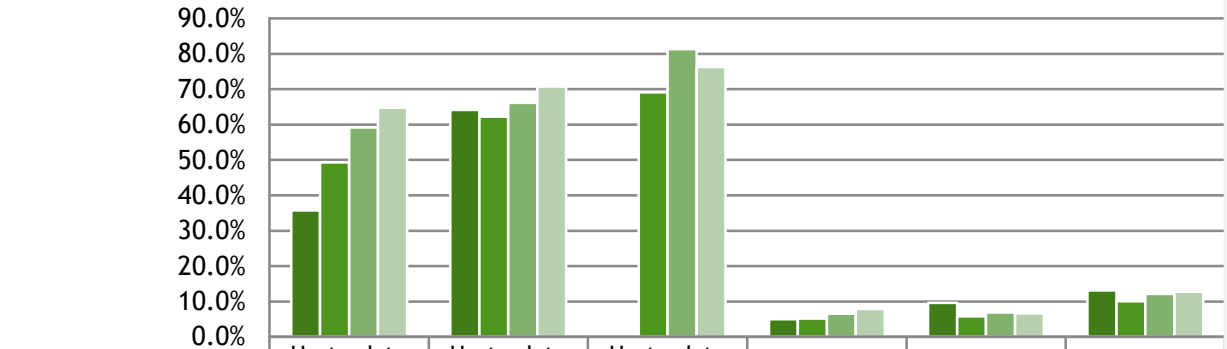
Chronic Disease Disparities by Education

Trends in chronic disease by education level are similar to those by income, with a general trend of higher rates of chronic disease in adults with lower education levels.

Cancer Disparities by Education

Disparities in cancer by education are similar to those by income. Cancer screening occurs more in Panhandle adults with higher levels of education (see Figure 90). While for most negative health outcomes a higher rate is seen in those at lower levels of education, the percentage of adults that report they have skin cancer is higher among those with higher levels of education. The percentage of adults that report they have cancer other than skin cancer or cancer in any form is relatively even across levels of education.

Figure 90. Cancer screening and diagnosis by education, age-adjusted, Panhandle, 2011-2015 combined



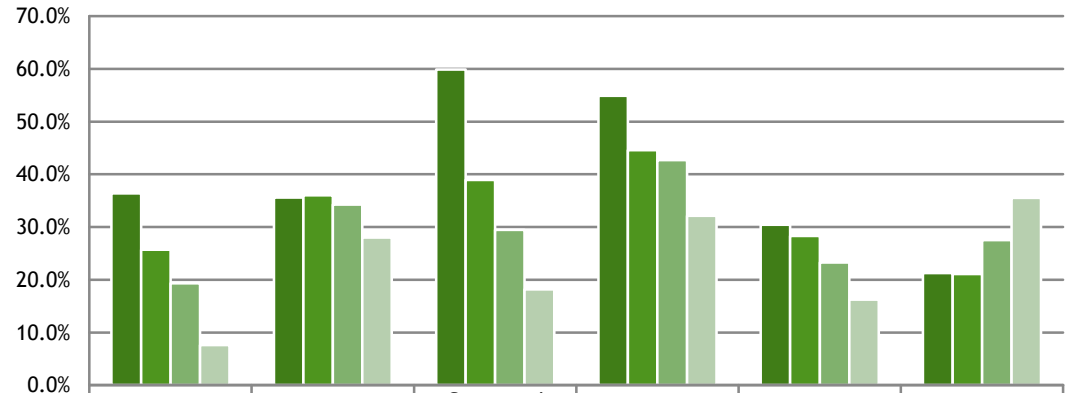
	Up-to-date on colon cancer screening, 50-75 year olds	Up-to-date on breast cancer screening, female 50-74 year olds	Up-to-date on cervical cancer screening, female 21-65 year olds	Ever told they have skin cancer	Ever told they have cancer other than skin cancer	Ever told they have cancer (in any form)
Less than high school	35.7%	64.1%	0.0%	5.0%	9.6%	13.1%
High school/GED	49.3%	62.3%	69.1%	5.2%	5.8%	10.1%
Some college	59.2%	66.1%	81.3%	6.6%	6.9%	12.2%
College graduate	64.8%	70.8%	76.3%	7.9%	6.6%	12.8%

*Percentage of adults 50-75 years who report they are up to date on colon cancer screening, percentage of females 50-74 years old who report they are up to date on breast cancer screening, and females 21-65 years who report they are up to date on cervical cancer screening.
**Percentage of aduls 18 and older who report they have ever been told they have skin cancer, cancer other than skin cancer, and cancer in any form. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Risk and Protective Factors by Education

Figure 91 shows the following behavioral risk and protective factors by education level: current cigarette smoking, obesity, sugar-sweetened beverage consumption, fruit consumption, vegetable consumption, and aerobic physical activity and muscle strengthening recommendations. Cigarette smoking decreases as education increases, and obesity follows a similar trend. Consumption of sugar-sweetened beverage decreases as education increases. The percentage of adults that report eating fruits or vegetables less than one time per day is greater in those with lower levels of education. The percentage of adults meeting both aerobic physical activity and muscle strengthening recommendations increases as education level increases.

Figure 91. Behavioral risk and protective factors by education, age-adjusted, Panhandle, 2011-2015 combined



	Current cigarette smoking	Obese	Consumed sugar-sweetened beverages 1 or more times per day in past 30 days*	Consumed fruits less than 1 time per day**	Consumed vegetables less than 1 time per day**	Met muscle strengthening recommendation**
Less than high school	36.4%	35.6%	59.8%	54.9%	30.4%	21.3%
High school/GED	25.7%	36.0%	38.9%	44.6%	28.3%	21.1%
Some college	19.4%	34.2%	29.4%	42.7%	23.2%	27.5%
College graduate	7.6%	28.0%	18.2%	32.1%	16.2%	35.5%

*Data from 2013 only. **Data from 2011, 2013, and 2015 only. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Disparities by Race

Mortality Disparities by Race

Despite suffering disproportionately from negative health outcomes (see Figure 94), the age-adjusted rate of death per 100,000 population of minority populations is less than that of the majority Non-Hispanic Whites (see Table 53).

Table 53. Overall number of deaths and death rate per 100,000 population (age-adjusted), Nebraska and Panhandle, 2011-2015 combined

	Overall Deaths	
	# deaths	AAR
Nebraska		
White, NH	74,074	724.5
Minority	5,282	636.6
Panhandle		
White, NH	4,529	766.2
Minority	315	638.6

NOTE: AAR = Age-adjusted rate

Source: Nebraska Vital Records

Birth Disparities by Race

Birth outcomes for Non-Hispanic White peoples versus minority populations in Nebraska and the Panhandle can be found in Table 54. Across the Panhandle and the state of Nebraska, birth outcomes for minority populations are consistently worse than for the Non-Hispanic White majority. However, this difference is more pronounced in the Panhandle.

Table 54. Birth outcomes by White Non-Hispanic versus Minority population, Panhandle and Nebraska, 2011-2015 combined

		Infant Mortality Rate		Fetal Mortality Rate*		First Trimester Prenatal Care	Low Birth Weight Births	Very Low Birth Weight Births	Preterm Births	Teen Birth Rate among 15-17 Year Old Females per 1,000 Population		Teen Birth Rate among 15-19 Year Old Females per 1,000 Population		Adolescent (10-17 year old) Births as a Percentage of all Births
	# births	# deaths	rate	# deaths	rate	%	%	%	%	# births	rate	# births	rate	%
Nebraska														
White, NH	96,163	445	4.6	461	4.8	78.2	6.2	1.0	9.0	897	6.4	4,023	17.1	0.9
Minority	34,953	243	7.0	251	7.2	60.4	8.2	1.5	10.0	1,145	24.3	3,700	47.1	3.4
Panhandle														
White, NH	4,056	21	5.2	14	3.5	77.3	6.8	0.8	8.0	60	9.7	251	24.3	1.5
Minority	1,356	10	7.4	11	8.1	67.6	9.4	2.1	11.1	67	30.9	213	58.9	5.1

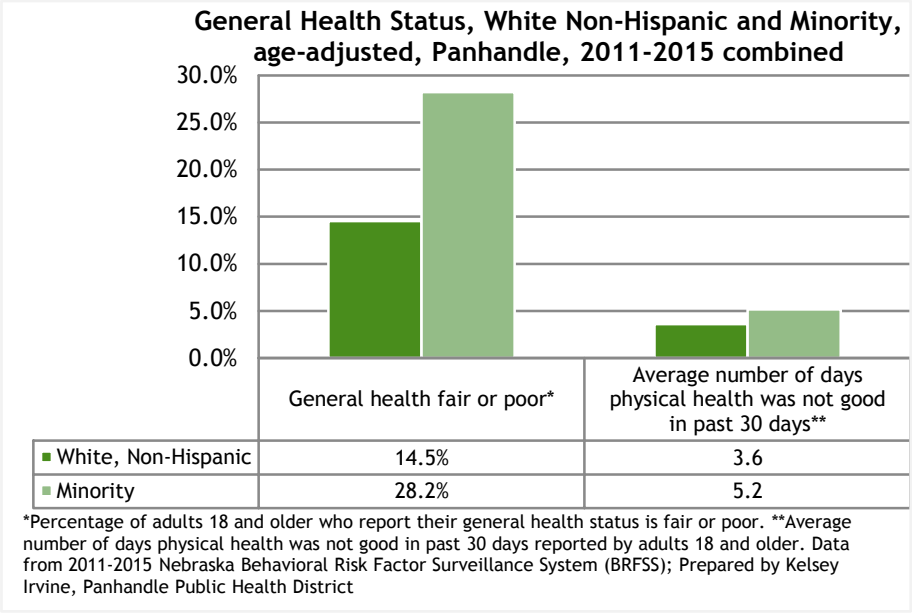
*Rate is per 1,000 live births

Source: Nebraska Vital Records

General Health Status Disparities by Race

General health status is shown in Figure 92, by percentage of adults reporting their general health as fair or poor and average number of days that physical health was not good in past 30 days. For minority populations, the percentage reporting their general health was fair or poor is much higher than that of the majority Non-Hispanic White population. Minority groups also reported a greater average number of days that physical health was not good in the past 30 days.

Figure 92. General health status, White Non-Hispanic and minority, Panhandle, 2011-2015 combined



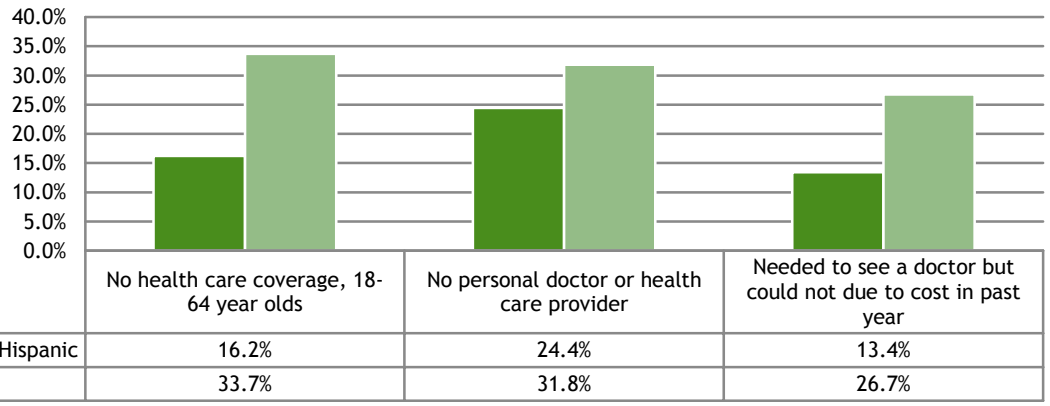
	General health fair or poor*	Average number of days physical health was not good in past 30 days**
White, Non-Hispanic	14.5%	3.6
Minority	28.2%	5.2

*Percentage of adults 18 and older who report their general health status is fair or poor. **Average number of days physical health was not good in past 30 days reported by adults 18 and older. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Access to Health Care Disparities by Race

Figure 93 shows three indicators for access to care. The percentage of minority adults in the Panhandle that report they have no health care coverage is more than double compared to the majority Non-Hispanic White population. Minority populations additionally have higher rates of having no personal doctor or health care provider (primary care provider) and not being able to see a doctor due to cost.

Figure 93. Barriers to accessing health care, White Non-Hispanic and Minority, age-adjusted, Panhandle, 2011-2015



	No health care coverage, 18-64 year olds	No personal doctor or health care provider	Needed to see a doctor but could not due to cost in past year
White, Non-Hispanic	16.2%	24.4%	13.4%
Minority	33.7%	31.8%	26.7%

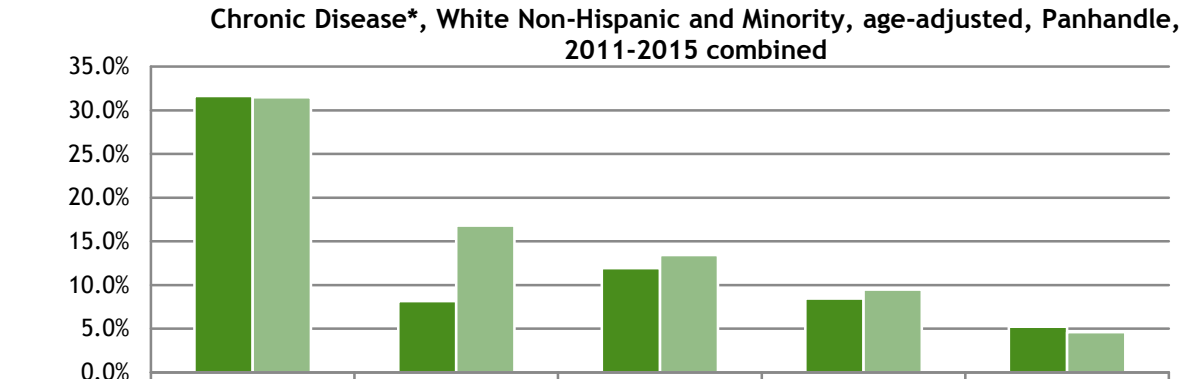
*Percentage of adults 18-64 years of age who report they have no health care coverage, percentage of adults 18 and older report they needed to see a doctor but could not due to cost in the past year, and percentage of adults 18 and older who repor they have a personal doctor or health care provider. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Health Outcome Disparities by Race

Chronic Disease Disparities by Race

Chronic diseases are generally seen in higher rates in minority races compared to the majority Non-Hispanic White population. In the Panhandle, the percentage of adults with high blood pressure is almost identical between the minority population and the Non-Hispanic White population. Adults in the minority population in the Panhandle report higher rates of diabetes and asthma, however they report lower rates of COPD.

Figure 94. Chronic disease, White Non-Hispanic and minority, age-adjusted, Panhandle, 2011-2015 combined



	Ever told they have high blood pressure	Ever told they have diabetes	Ever told they have asthma	Currently have asthma	Ever told they have COPD
White, Non-Hispanic	31.6%	8.2%	11.9%	8.5%	5.2%
Minority	31.5%	16.8%	13.4%	9.5%	4.6%

*Percentage of adults 18 and older who report they have ever been told they have diabetes, high blood pressure, asthma, currently have asthma, and COPD. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

The rate of death per 100,000 population from heart disease in the Panhandle is lower among minority groups than the majority Non-Hispanic White population. The rate of death per 100,000 population from stroke, diabetes, and asthma is higher in minority groups than the majority Non-Hispanic White population, specifically the rate of death from diabetes which is more than double for minority groups (see Table 55).

Table 55. Number of deaths and death rate per 100,000 population (age-adjusted) by chronic disease, Nebraska and Panhandle, 2011-2015 combined

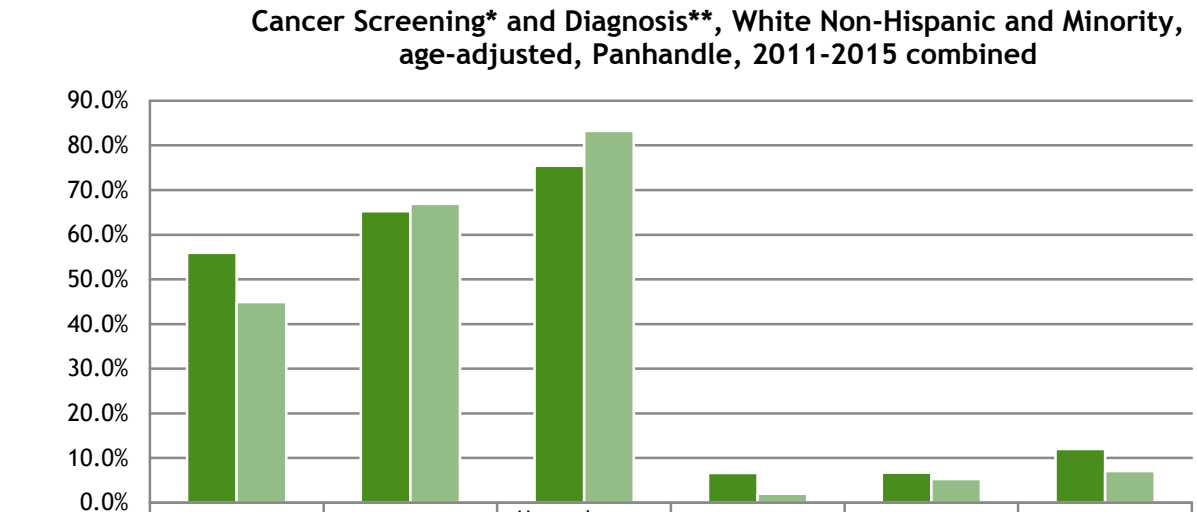
	Heart Disease		Stroke		Diabetes		Asthma	
	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR
Nebraska								
White, NH	15,966	149.5	3,718	34.9	2,122	21.1	130	1.3
Minority	812	109.9	246	35.2	267	36.8	19	1.6
Panhandle								
White, NH	1,052	160.8	238	37.1	142	25.1	8	1.4
Minority	54	124.0	19	45.1	31	61.2	1	2.6

NOTE: AAR = Age-adjusted rate
Source: Nebraska Vital Records

Cancer Disparities by Race

The disparities in cancer in the Panhandle area are different than expected, as evidenced by the previous sections on income and education level. A higher percentage of minority populations report being up to date on colon cancer screenings, which is unusual when compared to the typical health differences between minority groups and the majority Non-Hispanic White population. Additionally, a higher percentage of the Non-Hispanic White population report they have been diagnosed with cancer as opposed to minority groups (see Figure 95).

Figure 95. Cancer screening and diagnosis, White Non-Hispanic and minority, age-adjusted, Panhandle, 2011-2015 combined



	Up-to-date on colon cancer screening, 50-75 year olds	Up-to-date on breast cancer screening, female 50-74 year olds	Up-to-date on cervical cancer screening, female 21-65 year olds	Ever told they have skin cancer	Ever told they have cancer other than skin cancer	Ever told they have cancer (in any form)
White, Non-Hispanic	55.9%	65.3%	75.5%	6.7%	6.7%	12.0%
Minority	44.9%	66.9%	83.3%	2.0%	5.3%	7.0%

*Percentage of adults 50-75 years who report they are up to date on colon cancer screening, percentage of females 50-74 years old who report they are up to date on breast cancer screening, and females 21-65 years who report they are up to date on cervical cancer screening.
**Percentage of aduls 18 and older who report they have ever been told they have skin cancer, cancer other than skin cancer, and cancer in any form. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

The age adjusted rate of death (per 100,000 population) by cancer (overall) is lower for minorities compared to Non-Hispanic Whites for the state, and this also rings true in the Panhandle (see Table 56). However, the rate of death by breast cancer is much higher for minorities in the Panhandle (15.2 per 100,000) versus the state (9.2 per 100,000).

Table 58 shows the incidence (new cases) of female breast cancer, and similar to the age-adjusted death rate (per 100,000 population), the incidence rate (per 100,000 population) is higher in minority groups versus Non-Hispanic Whites.

Table 56. Number of deaths and death rate per 100,000 population (age-adjusted) by cancer, Nebraska and Panhandle, 2011-2015 combined

	Cancer (overall)		Lung Cancer		Colon Cancer		Female Breast Cancer		Cervical Cancer		Prostate Cancer		Melanoma Cancer		Oral Cancer	
	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR	# deaths	AAR
Nebraska																
White, NH	16,167	163.1	4,197	42.4	1,599	16.1	1,106	11.2	95	1.1	856	8.2	306	3.2	227	2.3
Minority	1,105	139.8	273	35.9	120	16.0	75	9.2	16	1.5	50	8.5	4	0.5	19	2.1
Panhandle																
White, NH	857	150.9	200	34.8	100	18.6	50	8.8	3	0.5	48	7.4	13	2.7	10	2.1
Minority	45	93.0	4	8.1	5	12.2	7	15.2	1	1.3	0	0.0	1	1.3	0	0.0

NOTE: AAR = Age-adjusted rate
Source: Nebraska Vital Records

Table 57. Cancer mortality, number of deaths and mortality rates, by race, all sites and female breast, Panhandle, 2010-2014 combined

	NH-White		Hisp &/or NW	
Primary Site	Number	Rate	Number	Rate
All sites	875	153.6	49	107.2
Female breast	58	17.7	5	19.9

NOTE: All rates are age-adjusted to the 2000 US standard population; rates are the average annual number of cases/deaths per 100,000 population (gender-specific cancers are per 100,000 male or female population)
Source: Nebraska Vital Records

Table 58. Cancer incidence, number of cases and incidence rates, by race, all sites and female breast, Panhandle, 2009-2013 combined

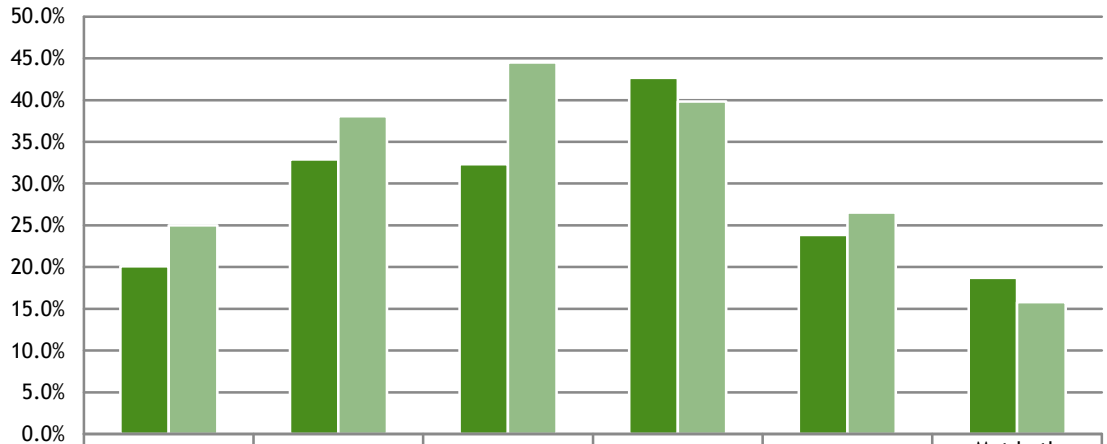
	NH-White		Hisp &/or NW	
Primary Site	Number	Rate	Number	Rate
All sites	2,192	415.6	171	361.3
Female breast	302	114.7	30	130.2

NOTE: All rates are age-adjusted to the 2000 US standard population; rates are the average annual number of cases/deaths per 100,000 population (gender-specific cancers are per 100,000 male or female population)
Source: Nebraska Vital Records

Risk and Protective Factors by Race

Panhandle adults from minority groups reported higher percentages of cigarette smoking, obesity, and consuming sugar-sweetened beverages more than one time per day. Minority groups report consuming fruits less than one time per day more often than the majority Non-Hispanic White population, however a lower percentage of the minority report consuming vegetables less than one time per day. A lower percentage of the minority reports meeting both aerobic physical activity and muscle strengthening recommendations.

Figure 96. Behavioral risk and protective factors, White Non-Hispanic and Minority, age-adjusted, Panhandle, 2011-2015 combined



	Current cigarette smoking	Obese	Consumed sugar-sweetened beverages 1 or more times per day in past 30 days*	Consumed fruits less than 1 time per day**	Consumed vegetables less than 1 time per day**	Met both aerobic physical activity and muscle strengthening recommendations**
White, Non-Hispanic	20.1%	32.9%	32.3%	42.7%	23.8%	18.7%
Minority	25.0%	38.1%	44.5%	39.8%	26.5%	15.8%

*Data from 2013 only. **Data from 2011, 2013, and 2015 only. Data from 2011-2015 Nebraska Behavioral Risk Factor Surveillance System (BRFSS); Prepared by Kelsey Irvine, Panhandle Public Health District

Community Themes and Strengths Assessment

Community Focus Groups

The Box Butte General Hospital (BBGH) service area includes both Box Butte County, where the hospital is located, and Grant County, where a clinic is located. BBGH held four focus groups between March and April of 2017. Three focus groups were held in Alliance (Box Butte County): one American Indian, one Hispanic, and one for the general community. Additionally, a general focus group was hosted in Hyannis (Grant County). See Table 60 for demographic information. Overall, 24 people gave input on the health status of the Box Butte General Hospital service area through focus groups. The focus group discussions were conducted to fulfill the Community Themes and Strengths Assessment component of the 2017 Mobilizing for Action through Planning and Partnerships (MAPP) process. The purpose of the focus group is to gather input from community members in order to develop a better understanding of the issues they feel are important, their concerns, and their overall perception of their community.

Table 59. BBGH Service Area Focus Group Summary

Focus groups held						
Hospital	**General Community**	**Hispanic**	**American Indian**	**LGTBQ**	**Total # of participants**	**Dates held**
Box Butte General Hospital	2	1	1	0	24	03/27/2017 03/27/2017 03/27/2017 04/17/2017

The focus groups were completed in collaboration with the Panhandle Public Health District (PPHD). The hospital was primarily responsible for recruiting focus group participants (see Appendix H for invitation to participate in focus group template), with PPHD providing assistance when needed. As per the MAPP process, groups were intended to be made up of 8-10 people, although some variance occurred. Hospital representatives identified potential focus group participants from the community and reached out via phone calls, emails, and social media to invite them to attend a focus group session.

PPHD staff facilitated the focus group sessions. Each focus group had a facilitator and a scribe, and was approximately 60-minutes long. The process is as follows:

1. Facilitator gives a brief overview of the purpose of the focus group.
2. Facilitator, scribe, and participants introduce themselves.
3. Facilitator outlines the focus group ground rules.
4. Ask focus group questions.

See Appendix I for focus group guide and Table 60 for the demographic information of. focus group participants (see Appendix J for the demographic survey).

Comments were captured by the scribe and analyzed. The analysis of the focus group data was guided by the Krueger approach.[29] Focus group transcripts were read and prevailing

themes were identified. Data was highlighted and sorted accordingly. Common themes were identified across the two focus groups when responses were categorized by (1) factors contributing to quality of life/strengths of the community and (2) factors decreasing quality of life/needs of the community.

Table 60. BBGH Service Area Focus Group Participant Demographic Information, N = 24

Zip Code	69301	75%	**Race***	White	71%
	69350	8%		Black or African American	0%
	69335	4%		Asian	0%
	69366	8%		Native Hawaiian or Other Pacific Islander	0%
	69333	4%		American Indian or Alaska Native	17%
County	Box Butte	71%		Other	4%
	Sheridan	4%		Prefer not to disclose	8%
	Grant	21%		No response	0%
	Garden	4%	**Health care payment method***	Pay cash	4%
Gender	Male	13%		Health Insurance	88%
	Female	88%		Medicaid	4%
	Trans	0%		Medicare	13%
	Other	0%		Veterans' Administration	0%
	Prefer not to disclose	0%		Indian Health Services	4%
	No response	0%		Other	4%
Age	Under 18 years	0%		No response	0%
	18-25 years	8%	**Source of health advice***	Internet	33%
	26-39 years	33%		Newspaper	0%
	40-54 years	33%		Magazine	0%
	55-64 years	17%		Friend or family member	0%
	65-80 years	4%		Physician or other provider	67%
	Over 80 years	4%		Other	0%
	No response	0%		No response	4%
Marital status	Never married	13%	**Employment Status***	Unemployed but not currently looking for work	4%
	Married/cohabiting	75%		Unemployed and looking for work	0%
	Separated	0%		Employed for wages	71%
	Divorced	8%		Self-employed	21%
	Widowed	4%		A homemaker	4%
	Other	0%		A student	0%
	Prefer not to disclose	0%		Military	0%
	No response	0%		Retired	8%
Household Income	Less than $20,000	4%		Unable to work	0%
	$20,000-$29,999	21%		No response	0%
	$30,000-$49,999	17%	**Military Status***	I served in the military	4%
	$50,000-$74,999	17%		My husband, wife, or significant other served in the military	17%
	$75,000-$99,999	13%		My child served in the military	21%
	Over $100,0000	21%		My brother/sister served in the military	25%
	No response	8%		My parent served in the military	25%
Highest education level	Less than high school graduate	0%		Other	8%
	High school diploma or GED	4%		None of the above	33%
	Some college	33%		No response	4%
	College degree or higher	58%	**Type of employer***	For profit	8%
	Other	4%		Non-profit	25%
	Prefer not to disclose	0%		Agriculture	4%
	No response	0%		Government	21%
Hispanic/Latino	No	88%		Health care	13%
	Yes	8%		Education	8%
	Prefer not to disclose	0%		Other	4%
	No response	4%		Not applicable	17%
				No response	4%

*Sections may add up to more than 100% because respondents can choose more than one answer. Data from PPHD Community Health Needs Assessment 2017 Focus Group Survey, Scotts Bluff County; Prepared by: Kelsey Irvine, Panhandle Public Health District

Community Perception of Strengths

The focus groups provided additional insight to the community's perception of the strengths of the hospital service area. There were several reoccurring themes across the service area, detailed in Table 61. The number in parentheses is the number of times the topic was mentioned in the focus groups.

Table 61. Community Perception of Strengths

Friendly & Safe Community (15)	Friendly Community (2)[A,C]
	Quiet Community (1)[A]
	Safe community (3)[A,C,D]
	Close-Knit Community (1)[A]
	Family-Oriented Community (8)[B,C]
Diverse Community (15)	Diverse Community (3)[A,C]
	Accepting of Diversity (racial, religious, sexual orientation) (12)[A,B,D]
Community Support & Partnership (13)	Community Pulls Together for Those in Need (13)[A,B,D]
Strong Economy (12)	Low cost of living (1)[A]
	Employment opportunities (9)[A,B,C,D]
	Transportation services (1)[A]
	Local businesses (1)[A]
Strong Local health Care (11)	Quality providers (1)[A]
	Local health care (4)[A,C,D]
	Specialists/specialty medicine offered locally (4)[A,B]
	Emergency response services (2)[B]
Strong Education System (8)	Strong school system (5)[A,D]
	Well-educated students (1)C
	High school completion options (1)[A]
	Child care/out of school care (1)[B]
Community Pride & Growth (8)	Community Growth (2)[A,D]
	Community Pride (6)[A,B]
Increasing & Retaining Population (8)	Increase in Young Population (5)[A,B]
	Increase in Population (3)[C]
Access to Community Recreation & Resources (7)	Community Activities (2)[A,D]
	Recreation Opportunities (3)[A]
	Community Fitness Opportunities (2)[A]
Availability & Awareness of Community Aid (7)	Community aid (3)[A,B,D]
	Awareness of community resources (4)[D]
Central & Attractive Location (6)	Centrally located (3)[A,B]
	Tourist attractions (3)[A]

[A]Alliance general community focus group
[B]Hyannis general community focus group
[C]Alliance Hispanic focus group
[D]Alliance American Indian focus group

Community Perception of Needs

The focus groups also provided insight to the community's perception of the needs of the service area. There were several reoccurring themes across the service area, detailed in Table 62. The number in parentheses is the number of times the topic was mentioned in the focus groups.

Table 62. Community Perception of Needs

Barriers to Accessing Health Care (25)	Distance as a barrier to health care (1)[B]
	Difficulty filling prescriptions in timely manner (2)[B]
	Lack of cultural competency (3)[C]
	Hours as a barrier to health care (1)[B]
	Difficulty getting appointments (3)[A,B]
	Cost as a barrier to health care (6)[A,B,C]
	Health insurance as a barrier to health care (9)[A,B,C,D]
Lack of Child Care/Out-of-School Care Options (20)	Lack of child care/out-of-school care (13)[A,B,D]
	Lack of quality child care/out-of-school care (2)[A]
	Hours as a barrier to child care/out-of-school care (5)[A]
Intolerance (18)	Divide between social classes (2)[D]
	Discrimination toward newcomers (2)[B]
	Intolerance of diversity (11)[A,B,C,D]
	Lack of diversity (1)[B]
	lack of diversity in leadership positions (2)[A]
Difficulty Maintaining Local Businesses (13)	Lack of local businesses (4)[A,B,D]
	Threat of local businesses closing (1)[A]
	Local businesses lack marketing (1)[A]
	Competition with neighboring communities (1)[A]
	High cost of local goods (6)[A,B,C]
Lack of Availability & Awareness of Community Aid (13)	Lack of community aid (1)[B]
	Lack of community aid for marginalized groups (2)[A,B]
	Barriers to applying for community aid (2)[C,D]
	Lack of awareness of community aid (8)[C,D]
Declining Economy (12)	Poverty (5)[A]
	High cost of living (3)[A]
	Declining Economy (1)[D]
	High cost of utilities (3)[D]
Lack of Employment (9)	Lack of employment opportunities (7)[A,B,D]
	Low paying jobs (2)[D]
Lack of Housing (9)	Lack of affordable housing (1)[D]
	Lack of available housing (8)A[,B,D]
Health Professional Shortage Area (9)	Inadequate emergency response services (3)[A]
	Lack of health care (2)[B]
	Lack of quality health care (1)[B]

	Lack of local health care providers, specialists, and services (1)[A]
	Lack of local pharmacist (1)[B]
	Locals seek health care elsewhere (1)[C]
Changing Population (6)	Decreasing population (2)[A,B]
	Aging population (4)[A,B]
Lack of Availability of & Participation in Community Recreation and Activities (6)	Cost as a barrier to participation in community activities (1)[D]
	Lack of activities for youth (5)[C,D]
Substance Use & Abuse (5)	Substance Abuse (4)[C,D]
	Community acceptance of alcohol use (1)[D]
Lack of Behavioral Health Services (4)	Lack of substance abuse treatment (2)[D]
	Lack of mental health services (2)[D]
Lack of Support for Success in School (3)	Low graduation rates for minority students (1)[C]
	Retiring teachers (2)[B]
Need for Stronger Elder Care (3)	Lack of in-home services/home-based care (3)[B]
Resistance to Change (3)	Resistance to Change (3)[B,C]
Health Literacy (2)	Misuse of emergency services (2)[A]

[A]Alliance general community focus group
[B]Hyannis general community focus group
[C]Alliance Hispanic focus group
[D]Alliance American Indian focus group

Community Health Survey

The community health survey (see Appendix K) was distributed to Panhandle residents via paper and electronically. Paper copies of the survey were distributed by the hospitals and community-based organizations, in addition to being shared during the focus groups. The electronic copy was shared online via social media and email. The survey was predominantly made up of statements with a Likert-type scale response option (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) and Not Applicable as answer options, along with a variety of questions that probed further. A total of 223 respondents from within the Box Butte General Hospital (BBGH) service area (Box Butte and Grant Counties) responded to the survey. 199 respondents were from Box Butte County, 20 respondents were from Grant County, and an additional 4 respondents did not indicate a county but had a zip code that fell within Box Butte or Grant counties. Counts and percentages from the survey responses were calculated using Microsoft Excel.

See Appendix L for full survey responses and Table 63 for the demographic makeup of respondents.

Table 63. BBGH Service Area 2017 Community Health Survey Demographics, N = 223

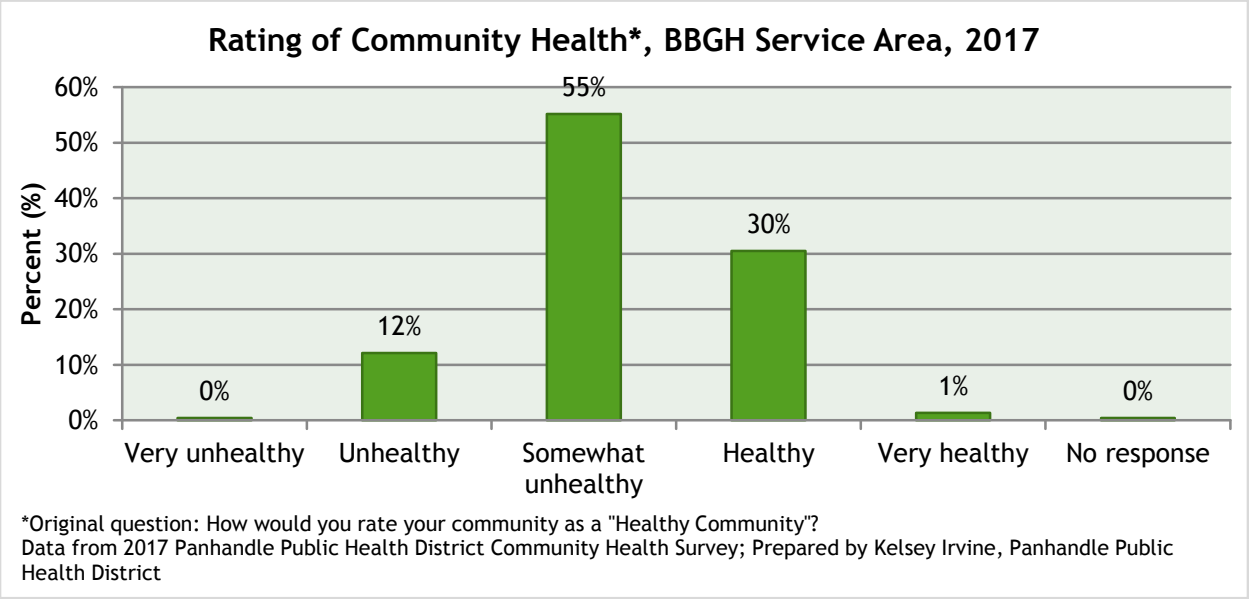
County	Box Butte	89.24%	199	**Household income**	Less than $20,000	7.62%	17
	Grant	8.97%	20		$20,000 to $29,999	11.66%	26
	No response	1.79%	4		$30,000 to $49,999	21.52%	48
Zip code	69301	80.72%	180		$50,000 to $74,999	25.11%	56
	69333	0.90%	2		$75,000 to $99,999	13.90%	31
	69348	9.87%	22		Over $100,000	13.45%	30
	69350	6.28%	14		No response	6.73%	15
	69366	1.79%	4	**Education level**	Less than high school graduate	2.24%	5
	No response	0.45%	1		High school diploma or GED	31.39%	70
Gender	Male	20.63%	46		College degree or higher	52.91%	118
	Female	77.58%	173		Prefer not to disclose	3.59%	8
	Trans	0.00%	0		Other (please specify)	5.83%	13
	Prefer not to disclose	1.79%	4		No response	4.04%	9
	Other (please specify)	0.00%	0	**Hispanic/Latino**	Yes	8.97%	20
	No response	0.00%	0		No	82.96%	185
Age	Under 18 years	0.00%	0		Prefer not to disclose	5.38%	12
	18-25 years	4.93%	11		No response	2.69%	6
	26-39 years	30.49%	68	**Race**	White	90.13%	201
	40-54 years	21.97%	49		Black or African American	0.00%	0
	55-64 years	27.35%	61		Asian	0.00%	0
	65-80 years	12.11%	27		Native Hawaiian or Other Pacific Islander	0.00%	0
	Over 80 years	1.79%	4		American Indian or Alaska Native	1.79%	4
	No response	1.35%	3		Prefer not to disclose	4.93%	11
Marital status	Married/cohabiting	69.96%	156		Other (please specify)	1.35%	3
	Divorced	8.52%	19		No response	1.79%	4
	Never married	10.31%	23	**Health care payment**	Pay cash (no insurance)	7.17%	16
	Separated	1.35%	3		Health insurance (e.g., private insurance, Blue Shield, HMO, through employer)	83.41%	186
	Widowed	4.48%	10		Medicaid	6.28%	14
	Prefer not to disclose	0.90%	2		Medicare	13.90%	31
	Other (please specify)	2.24%	5		Veterans' Administration	4.04%	9
	No response	2.24%	5		Indian Health Services	0.45%	1
					Other	3.59%	8
				Military service	I served in the military	8.07%	18
					My husband, wife, or significant other served in the military	17.49%	39
					My child served in the military	11.66%	26
					My parent served in the military	26.01%	58
					My brother/sister served in the military	20.63%	46
					Other	4.93%	11
					None of the above	40.81%	91

Data from Panhandle Public Health District 2017 Community Health Survey
Prepared by Kelsey Irvine, Panhandle Public Health District

Rating of Community Health

When asked to rank the health of their community, responses leaned to the unhealthy side, with 55% of respondents ranking community health as somewhat unhealthy and 12% unhealthy. 30% ranked the community health as healthy and 1% very healthy.

Figure 97. Rating of community health, BBGH Service Area, 2017



*Original question: How would you rate your community as a "Healthy Community"?
Data from 2017 Panhandle Public Health District Community Health Survey; Prepared by Kelsey Irvine, Panhandle Public Health District

Questions with Likert-type scale responses (Strongly disagree to strongly agree) of the Community Health Survey can be found in Figures 98 and 99. Questions are related to quality of life for children, access to care, quality of life overall, ability to make change, military friendliness, safety and support, employment, housing, transportation, and quality of life for the elderly. All responses with counts and percentages can be found is Appendix L.

Figure 98. Community Health Survey, BBGH Service Area, 2017

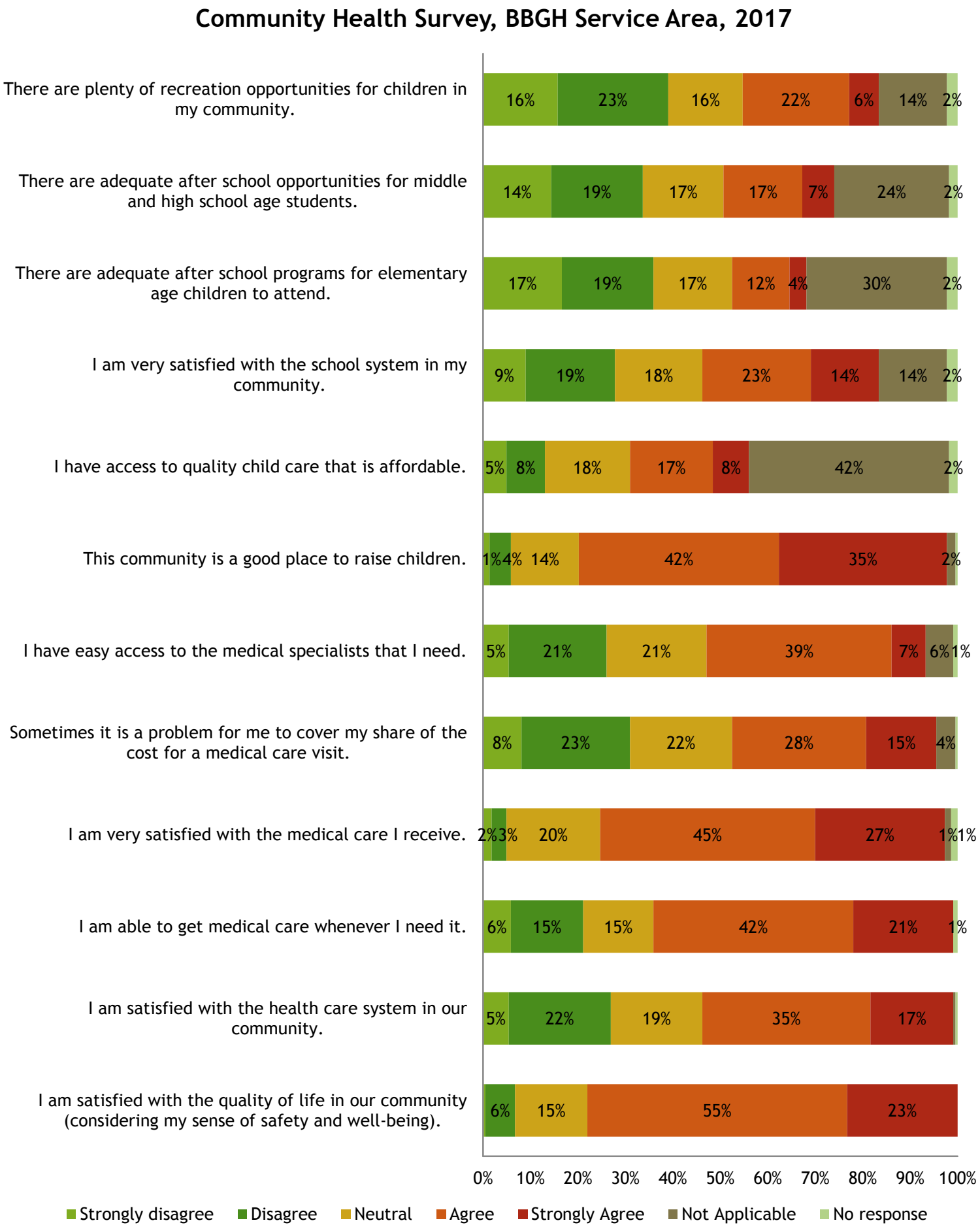
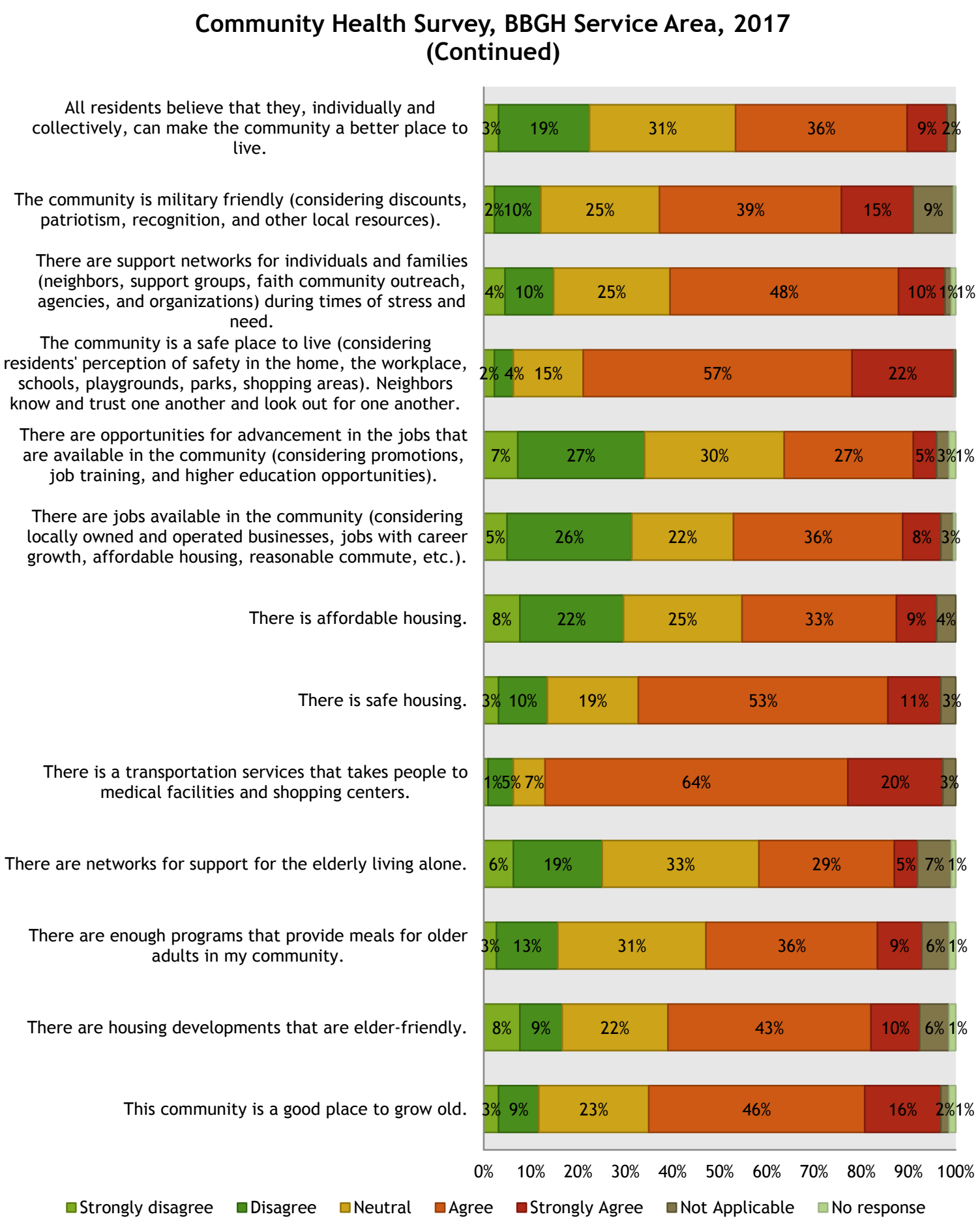


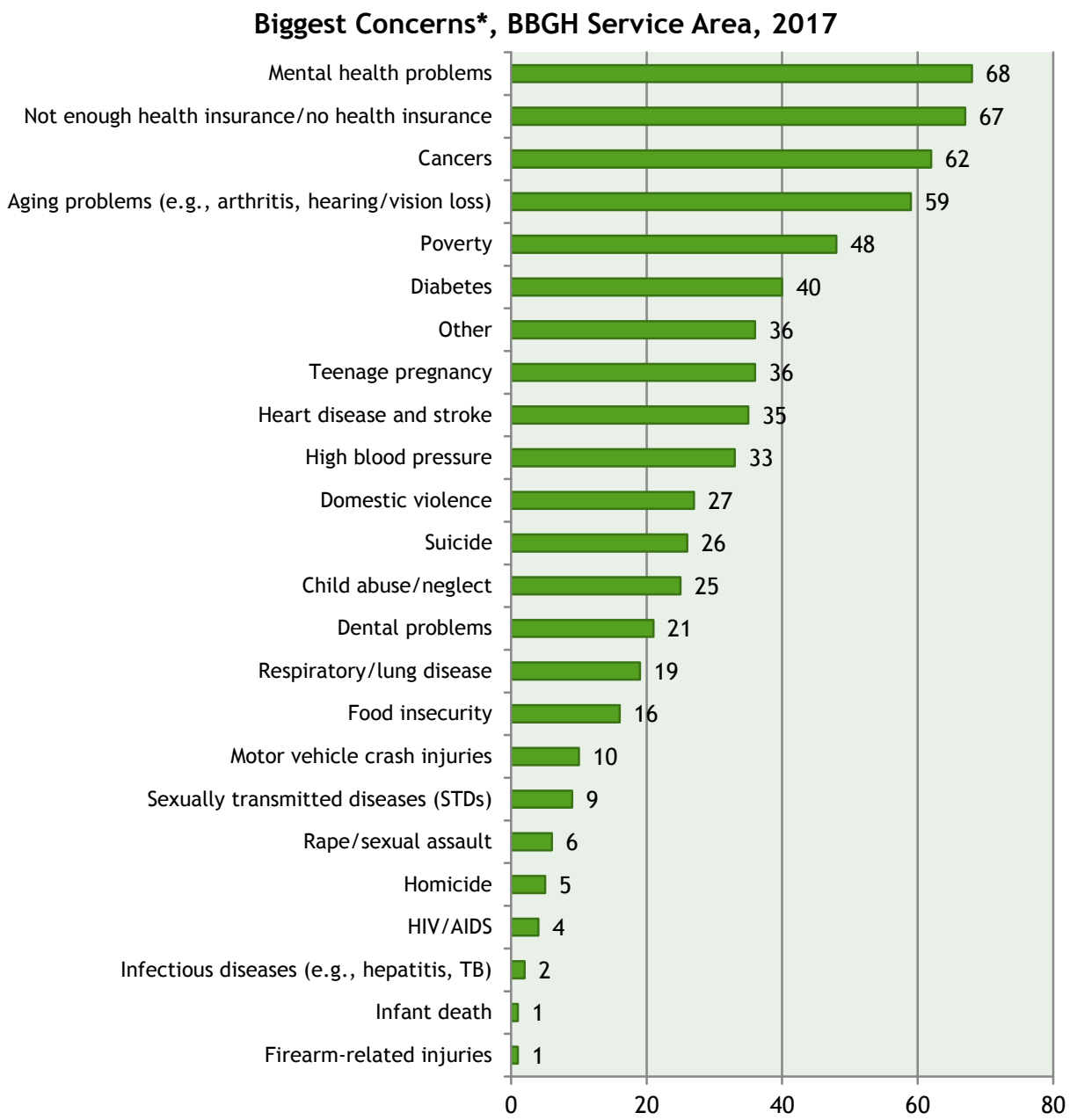
Figure 99. Community Health Survey, BBGH Service Area, 2017



Biggest Concerns in the Community

The Community Health Survey asked respondents to rate their three biggest concerns in the community (responses found in Figure 100). The top three concerns were mental health problems, not enough insurance/no health insurance, and cancers, followed by aging problems, poverty, and diabetes.

Figure 100. Biggest concerns, BBGH Service Area, 2017

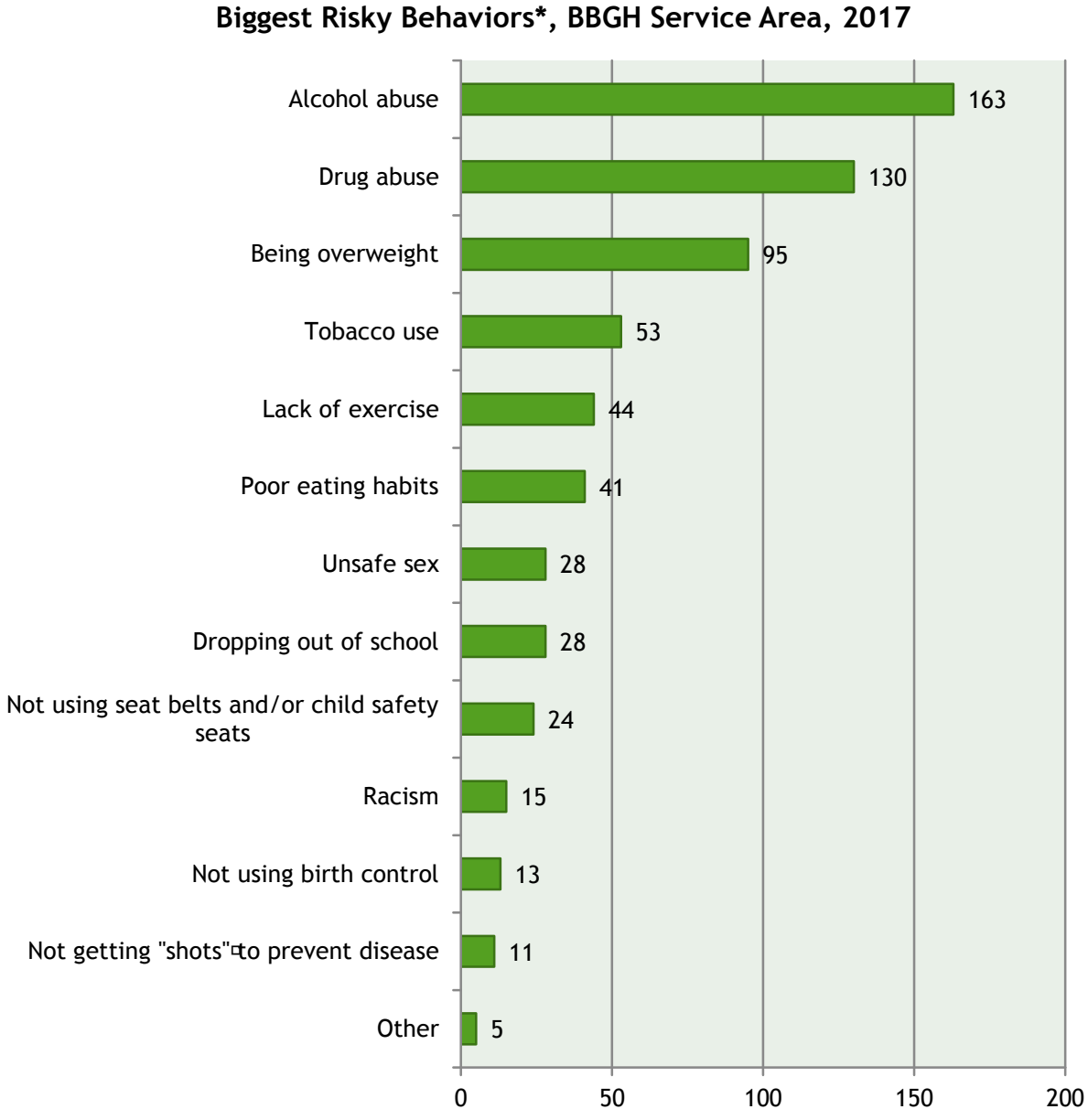


*Original question: In the following list, what do you think are your 3 biggest concerns in our community? (concerns that have the greatest impact on overall community health). Data from 2017 Panhandle Public Health District Community Health Suvey; Prepared by Kelsey Irvine, Panhandle Public Health District

Risky Behaviors

The Community Health Survey asked respondents to rank the three most risky behaviors in the community (see Figure 101). The top three risky behaviors were: alcohol abuse, drug abuse, and being overweight, followed by tobacco use, lack of exercise, and poor eating habits.

Figure 101. Perception of biggest risky behavior, BBGH Service Area, 2017



*Original question; In the following list, what do you think are the 3 most important "risky behaviors" in our community? (those behaviors that have the greatest impact on overall community health)
Data from 2017 Panhandle Public Health District Community Health Suvey
Prepared by Kelsey Irvine, Panhandle Public Health District

Forces of Change Assessment

In addition to Visioning, the Forces of Change Assessment was also completed at the 2017 Health Summit. After the conclusion of the Visioning process, several speakers spoke to the health status of the Nebraska Panhandle:

- Description of the MAPP Process by Kim Engel, PPHD Director.
- Vision to Help Nebraska become the Healthiest State in the Nation by Dr. Ali Khan, Dean of the University of Nebraska Medical Center, College of Public Health.
- Community Health Status by Jeff Armitage, Epidemiology Surveillance Coordinator with Nebraska Department of Health and Human Services.
- Demographics and Trends for the Panhandle by Daniel Bennett, Regional Planner with Panhandle Area Development District.

Sara Hoover (with PPHD) facilitated the Forces of Change Assessment, identifying the factors that will impact the work of the region going forward, using Technology of Participation (ToP) process that uses a metaphor of a wave: the new things on the **Horizon**, the ideas gaining traction and **Emerging**, the current things that are already **Established**, the ideas losing momentum and **Disappearing**, and the ongoing issues that affect the work as part of the **Undertow**. See Figure 107 for a compilation of the Forces of Change results.

Figure 102. 2017 Nebraska Panhandle Forces of Change Assessment

What is happening now that will impact our work?

Horizon	Emerging	Established	Disappearing	Undertow
• # Standard of Collaboration among community, clinical and social services • # Technology to improve access for all • Creating a culture of health (personal accountability) • Healthy eating the standard/norm (fruits/veggies accessible and desired by all) • Unified health services focus on prevention • # Unlimited access to care in rural Nebraska • # Rebuilding that sense of community and neighborhood – mutual reliance and responsibility • Physical activity opportunities in all of our communities • Usable consistent transportation • Investment in minority and immigrant for high need jobs • Concierge medicine • Healthy choice is the easy choice • ^ Uncertainty of health care coverage • Continue to expand telehealth networks • Get communities involved in gardens and growing food • Homeless shelter with wraparound services	• Healthy convenient food choices • Big employers closing • ^ Uncertainty of continued federal funding for social service activities • # Increased awareness of benefits of physical activity • Community assistant nurse • Sugar tax • Patient-centered medical homes • More rural transportation options • Increased use of technology to improve health care • Nutritional programs in schools • Growth of organic foods – bountiful baskets • # Universal coverage • Best practices • Telehealth mental health • # Healthy child nutrition program • Pay providers for keeping patients healthy (outcomes) • # Telehealth • # 2-year certificates, community colleges, online and on the job training	• PPHD • # Faith based practices • # Panhandle Partnership • ^ Acceptance of substance use • Health departments • #^ Agriculture • Community coalition for change • Limited funds to cities to make infrastructure changes • Legislative changes are difficult • ^ Stigma of walking and biking to work • # Tobacco policies • # Collaboration between communities • # PPHD Offerings – NDPP, radon, tobacco free campus, worksite wellness, Healthy Families America • Healthy nutrition options – MyPlate, farmers markets, bountiful baskets, NuVal – Choose Healthy Here, WIC, SNAP • # Rural Nebraska Healthcare Network • "It's always been that way" mentality • Medical support – healthcare system, Airlink, Dr. Webb, visiting physicians, Dental Day • Activity options – community centers, walking path, 5 and 10Ks, ½ marathons, triathalons, public school athletics, after school programs, Kids Fitness and Nutrition Day	• Young generation leaving after college • # Bachelor's degree = necessary for good jobs • ^ ACA • Silos in the Panhandle • Single provider care management • Landline (Black outs) • Recruitment of big business will save us • Sugar is not as bad as fat • White/rural areas don't have poverty • ^ Business climate (getting loans investments, small farms and ranches) • Silos in working toward better health outcomes • Shifting schools (country schools)	• Population changes (decreasing total population, decreasing youth population, increasing aging population) • Self-reliant attitude • Change in family unit – everyone needs to work, childcare, mental health, lack of resources • ^ Prejudice – race, mental health, poverty • ^ Poverty • Lobbying and advertising around tobacco, alcohol, and sugar • Fierce Independence • Participation • Rural • ^ Uncertainty of payment system – to multiple sectors – healthcare, schools, etc • Aging population • Cultural bias • Community norm – alcohol culture, drug abuse and availability of drugs • Brain drain • Lack of economic diversity – decreasing availability of good jobs/benefits • Increase in minority populations • Rural – decreasing population, aging population, decreasing political voice, decreasing tax base • Government regulations and politics • Cultural acceptance of racism and prejudices • Education and economic disparities • ^ Fear and resistance to change

KEY
Green # = Pleasing/Positive
Red ^ = Concerning/Negative
BOTH = #^ BOTH

Local Public Health System Assessment

The Local Public Health System Assessment (LPHSA) was completed in May 2017. A summary of the results can be found in Appendix M.

Community members were invited to participate in the LPHSA. Based off of the organization they represented, they were placed into groups that rated two Essential Services.

Groups were provided with the Essential Service description and Model Standard narrative, and discussion questions for each Model Standard. A PPHD staff member facilitated the discussion in each group, and an additional PPHD member acted as a scribe.

Participants rated each Model Standard using notecards with a rating of one to five, where 1 = No Activity, 2 = Minimal, 3 = Moderate, 4 = Significant, and 5 = Optimal. The facilitator assisted the group in reaching consensus for each Model Standard.

The facilitator and group also noted any strengths, weaknesses, short-term opportunities, and long-term opportunities associated with each Essential Service.

Prioritization

Priority areas were determined in a series of meetings hosted in August 2017. The meetings included broad representation from the hospital. Data from the Community Health Needs Assessment was presented, and a scoring matrix was used to determine the most important priority areas. The priority areas determined were:

- **Chronic Disease,** focusing on cardiovascular disease, diabetes, and cancer.
- **Access to Care**
- **Behavioral Health,** focusing on substance Abuse and mental and emotional well-being.
- **Aging Population**

The group also decided to keep a focus on **Social Determinants of Health** across all priority areas, specifically focusing on housing, transportation, poverty, and intolerance.

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Appendices

Appendix A: MAPP Steering Committee Membership List

Community Action Partnership of Western Nebraska	Betsy Vidlak
Rural Nebraska health Care Network	Boni Carrell
Regional West Garden County	Stacey Chudomelka Jenny Moffat Wendy Krueger
Gordon Memorial Health Services	Courtney Ostrander
Box Butte General Hospital	Dan Newhoff Lori Mazanec
Panhandle Area Development District	Daniel Bennett
Sidney Regional Medical Center	Evie Parsons Tammy Meier
Chadron Community Hospital	Anna Turman
Perkins County Health Services	James LeBrun Tiffany Peterson
Panhandle Public Health District	Kim Engel Jessica Davies Kelsey Irvine Melody Leisy Sara Hoover Tabi Prochazka
Regional West Medical Center	Joanne Krieg Julie Franklin Paulette Schnell
Kimball Health Services	Ken Hunter Laura Bateman Stephanie Pedersen
Educational Service Unit 13	Nicole Johnson
Morrill County Community Hospital	Robin Stuart Sylvia Lichius
Western Community Health Resources/ Chadron Community Hospital	Sandy Roes
Panhandle Partnership	Tyler Irvine

Appendix B: Rural Nebraska Hospital Network Membership List

Anna Turman, Chadron Community Hospital

Jason Petik, Sidney Regional Medical Center

Jim LeBrun, Perkins County Health Services

John Mentgen, Regional West Medical Center

Ken Hunger, Kimball Health Services

Lori Mazanec, Box Butte General Hospital

Robin Stuart, Morrill County Community Hospital

TBA, Gordon Memorial Hospital

William Giles, Regional West Garden County

Appendix C: Panhandle Partnership Membership List

Aging Office
AHEC
Alan Smith PhD
Alliance Area Family YMCA
Alzheimer's Association of Nebraska
Ancova Empowerment Project
Bayard Public Schools
Box Butte Family Focus Coalition
Box Butte General Hospital
CAPstone Child Advocacy Center
CASA Cheyenne County
CASA Scottsbluff County
Central Plains Center For Services
Chadron Community Hospital
Chadron Native American Center
Chadron Public Schools
Chadron State College
Cheyenne County
Cirrus House
City Of Hay Springs
Community Action Partnership Of Western Nebraska
Department of Health and Human Services
Disability Rights Nebraska
The DOVES Program
Educational Service Unit 13
Garden County
Garden County Hospital And Nursing Home
Garden County Schools
Golden Living Center Sidney
Gordon Memorial Hospital
Great Plains Center For Services
Heritage Of Bridgeport
Housing Authority Scottsbluff
Keep Chadron Beautiful
Kids Plus
Kimball County
Kimball Health Services
League Of Human Dignity
Lutheran Family Services
Mark Hald
McConaughy Discovery Center
Mediation West
Memorial Health Center
Minatare Public Schools
MLCS Family And Youth Services
Morrill County Hospital
National Association of Social Workers
Nebraska Advocacy Services
Nebraska Children's Home Society
Nebraska Federation Of Families
Nebraska Senior Health Insurance Information Program
North East Panhandle Substance Abuse Center
Northwest Community Action Partnership
Open Door Counseling
Panhandle Area Development District
Panhandle Independent Living Services
Panhandle Health Group
Panhandle Public Health District
Perkins County Health Services
Region 1 Office of Human Development
Region 1 Behavioral Health Authority
Regional West Medical Center
Saint Francis Community Services
Scottsbluff County
Scottsbluff County Detention Center
Skyview At Bridgeport
Speak Out
State Of Nebraska – UNL
SW-Wrap
Transformation Coaching
UNMC
Volunteers Of America
Western Community Health Resources
WNCC

Appendix D: 2017 Nebraska Panhandle Three-Year Vision

What does a healthy Panhandle look like in the next 3 years for all who live, learn, work, and play here?									
Culturally Sensitive and Peer-Driven Services	**Environments and Events for Active Living**	**Promoting Emotional Resilience**	**Creating and Supporting a Culture of Wellness**	**Healthy Eating**	**Establishing Healthy Habits Early On**	**Improving Access**	**Community-Oriented Healthcare**	**Financing Our Future**	**Prevent and Reduce Substance Use**
• Culturally sensitive and peer-driven services	• Safe walkable and biking communities • Opportun-ities for physical activity • 5K – more runs available in different locations • More activity less technology • Family activities	• Healthier ways to deal with stress • Emotional well-being • Better access to mental health services • Access to behavioral health services for youth and adults • Community support group behavior change	• Wellness culture important in the workplace • Health education – wellness • Healthy lifestyles • Incentives for individuals leading a healthy lifestyle • Employers focused on well-being of families • Healthy incentives • Cultural change toward health	• Community and school gardens – teaching food skills • Healthy food options • Increase nutrition awareness with nutrition programs – SNAP, food bank, commodities • Universally available nutritious food options • Incorpor-ation of local healthy food options • Access affordable healthy foods	• Focus on children – teaching about food choices and activity; access to nutritious foods; access to walkways and activity • Schools teaching elementary students healthy habits • Promoting a healthy lifestyle at a young age • Education – health literacy • Healthy family programs – nutrition, Healthy Families America • Parent education and support – nutrition, physical activity, how to cook	• Access to services • More access to dental and eye care • Availability of transportation for well-being • Access – enough providers, transporta-tion, insurance • Resource list or online database of services available • Mobile health services • Increased resources for elderly care • Safe housing – homeless-ness	• Increase health screening and prevention • Integrated population health – community and clinic/ hospital • Decrease chronic disease • Linking health care providers to community programs • Continued community, organizational and personal collaboration and working together	• Jobs with livable wages and benefits • Payor sources to keep hospitals and clinics paid/open • Accessible quality child care • Affordable transporta-tion, housing, and child care • Employers focused on well-being of families	• Tobacco free • Local taxes on tobacco, soda, and alcohol (booze) • Reducing binge drinking rates • Reduction – 20% in substance use

Appendix E: 2017 Health Summit Agenda

2017 Health Summit

For a Healthy, Safe, and Prosperous Panhandle

January 19, 2017 8:30 am – 4:00 pm
Gering Civic Center, Gering, NE

Opening Remarks – Welcome and Introductions

- *Kim Engel, Panhandle Public Health District*

Keynote Speaker

- *Dr. Ali Khan, Dean of UNMC College of Public Health*

Break

Vision – What does a healthy Panhandle look like in the next 3 years for all who live, learn, work, and play here?

- *Sara Hoover, Panhandle Public Health District*

Community Health Status

- *Jeff Armitage, Nebraska Department of Health and Human Services*

Lunch– Wild Cat and Dome Rock Rooms

Walking Break

Social and Economic Data

- *Daniel Bennett, Panhandle Area Development District*

Forces of Change – What is happening now that will impact our work?

- *Sara Hoover, Panhandle Public Health District*

Closing Remarks and Next Steps

- *Kim Engel, Panhandle Pubic Health District*

Please take a few minutes to give us your input on the factors that affect the health of our community. Go to www.pphd.org and click on 2017 Community Health Survey.

Appendix F: 2017 Health Summit Participant List

Name	Agency	Name	Agency
Carol Ackerman	Helping Hands	Lori Kneebone	Community Action Partnership Western Nebraska
Linda Ainslie	Panhandle Public Health District	Darrel Knote	PPHD Board of Health
Terri Allen	Scotts Bluff County/ Regional West Medical Center	Rosalie Kramer	Regional West Medical
Jeff Armitage	Nebraska DHHS	Joanne Krie	Regional West Medical Center
Sandra Babin	Panhandle Public Health District	Jeff Kriewald	Regional West Medical
Rhea Basa	Morrill County Community Hospital	Kendra Lauruhn	Panhandle Public Health District
Laura Bateman	Kimball Health Serivces	Jim LeBrun	Perkins County Health
Daniel Bennett	Panhandle Area Development District	Delana Legier	Community Action Partnership Western Nebraska
Brook Borgman	Regional West Physicans Clinic Internal Medicine	Deborah Levy	University of Nebraska College of Public Health
Anne Bowman	Scotts Bluff County Board of Health	Sylvia Lichius	Morrill County Community Hospital
Renee Carlson	Education Service Unit 13	Susan Lore	Box Butte County Commissioner
Boni Carrell	Rural Nebraska Healthcare Network	Derick Lorentz	Perkins County Health
Melissa Cervantes	Panhandle Public Health District	Brenda McDonald	Region I Behavioral Health Authority
Jordan Colwell	Regional West Physicians Clinic	Dave Micheels	DHHS – Office of Minority Health and Health Equity
Kim Croft	Regional West Medical Center	Faith Mills	Region I Behavioral Health Authority
Jessica Davies	Panhandle Public Health District	Jenny Moffat	Regional West Garden County
Ashley De Los Santos	District #12 Probation	Mary Moore	
Bobbi Doering	Regional West Physicians Clinic	Lindsey Mosel	Regional West Physicians Clinic Family Medicine
Diane Downer	City of Gering/Library	Dan Newhoff	Box Butte General Hospital
Kim Engel	Panhandle Public Health District	Evie Parsons	Sidney Regional Medical Center
J Everhart	Speakout	Tiffany Peterson	Perkins County Health
Jennifer Eversull	Panhandle Public Health District	Jennifer Phillips Ernest	Morrill County Hospital
Cheri Farris	Panhandle Public Health District	Tabi Prochazka	Panhandle Public Health District
Melissa Galles	Panhandle Public Health District	Barbara Quinn	Box Butte General Hospital
Robert Gifford	Banner County Commissioner	Mandi Raffelson	Sidney Regional Medical Center
Shelley Graves	Chadron Community Hospital	Lanette Richards	Monument Prevention Coalition
Brandon Grimm	University of Nebraska College of Public Health	Brisa Rocha	University of Nebraska Medical Center Student
Terri Gortemaker	PPHD Board of Health	Christina Rodriguez	Community Action Partnership Western Nebraska

Janelle Hansen	Panhandle Public Health District	Sandy Roes	Chadron Community Hospital/Western Community Health Resources
Myrna Hernandez	Panhandle Public Health District	Danielle Rose	Community Action Partnership Western Nebraska
Sara Hoover	Panhandle Public Health District	Misty Ross	
Nona Hubbard	Health Thyme, LLC	Angela Roulu	Regional West Medical Center
Kelsey Irvine	Panhandle Public Health District	Ricca Sanford	Regional West Garden County
Tyler Irvine	Panhandle Partnership	Cheri Scott	Bayard Public Schools
Mary Johnsen	Liberty Mobility Now Inc	Joe Simmons	Chadron Native American Center
Nici Johnson	Education Service Unit 13	Laurie Sisk	
Matt Kadlik	Wellness Health Fairs	Judy Soper	Deuel County Community Organizer
Jeff Kelley	Panhandle Area Development District	Erin Sorensen	Panhandle Public Health District
Jennifer Sorenson	Northwest Community Action Partnership	Patricia Wellnitz	PPHD Board of Health
Amber Springer	WellCare of Nebraska	Wendy Wells	University of Nebraska Medical Center
Kelly Stratman	NE Children's Home Society	Susan Wiedeman	Panhandle Coop
Robin Stuart	Morrill County Community Hospital	Jean Wilkinson	Helping Hands
Katherine Terrill	City of Kimball	Susan Wilson	Regional West
Jeff Tracy	Community Action Partnership Western Nebraska	Caroline Winchester	Chadron Public Schools
Steve Trickler	Aging Office of Western Nebraska	Winnie Voss	CAPStone Child Advocacy
Betsy Vidlak	Community Partnership Western Nebraska	Jerry Wellnitz	

Appendix G: BRFSS Demographic Summary Table for Entire 12 County Panhandle Region Adults 18 and Older, Years 2011-2015 Combined, By Overall & Gender

Indicators	Years Indicator Available	Overall			Male			Female			Gender Difference [d]
		n [a]	mean or % [b]	95% C.I. [c] (Low - High)	n [a]	mean or % [b]	95% C.I. [c] (Low - High)	n [a]	mean or % [b]	95% C.I. [c] (Low - High)	
General health fair or poor	(2011-2015)	8,972	17.8%	(16.7 - 18.9)	3,599	17.5%	(16.0 - 19.2)	5,373	18.0%	(16.5 - 19.5)	Non-Sig
Average number of days physical health was not good in past 30 days	(2011-2015)	8,811	4.0	(3.8 - 4.3)	3,552	3.9	(3.5 - 4.2)	5,259	4.2	(3.9 - 4.5)	Non-Sig
Physical health was not good on 14 or more of the past 30 days	(2011-2015)	8,811	13.1%	(12.1 - 14.1)	3,552	12.5%	(11.1 - 14.0)	5,259	13.7%	(12.4 - 15.0)	Non-Sig
Average number of days mental health was not good in past 30 days	(2011-2015)	8,889	3.3	(3.0 - 3.5)	3,580	2.8	(2.5 - 3.1)	5,309	3.7	(3.4 - 4.0)	Female Higher
Mental health was not good on 14 or more of the past 30 days (i.e., frequent mental distress)	(2011-2015)	8,889	10.1%	(9.2 - 11.0)	3,580	8.5%	(7.3 - 9.8)	5,309	11.6%	(10.4 - 12.9)	Female Higher
Average days poor physical or mental health limited usual activities in past 30 days	(2011-2015)	8,909	2.5	(2.3 - 2.7)	3,587	2.5	(2.2 - 2.8)	5,322	2.5	(2.2 - 2.7)	Non-Sig
Poor physical or mental health limited usual activities on 14 or more of the past 30 days	(2011-2015)	8,909	8.6%	(7.8 - 9.4)	3,587	8.6%	(7.5 - 10.0)	5,322	8.5%	(7.6 - 9.6)	Non-Sig
No health care coverage, 18-64 year olds	(2011-2015)	5,251	19.0%	(17.6 - 20.6)	2,281	20.0%	(17.8 - 22.4)	2,970	18.1%	(16.2 - 20.1)	Non-Sig
Has health care coverage, 18-64 year olds^	(2011-2015)	5,251	81.0%	(79.4 - 82.4)	2,281	80.0%	(77.6 - 82.2)	2,970	81.9%	(79.9 - 83.8)	Non-Sig
No personal doctor or health care provider	(2011-2015)	8,976	23.3%	(22.0 - 24.7)	3,597	30.4%	(28.3 - 32.6)	5,379	16.7%	(15.2 - 18.3)	Male Higher
Has a personal doctor or health care provider (one or more than one)^	(2011-2015)	8,976	76.7%	(75.3 - 78.0)	3,597	69.6%	(67.4 - 71.7)	5,379	83.3%	(81.7 - 84.8)	Female Higher
Has a personal doctor or health care provider (one or more than one), aged 65 years and older^	(2011-2015)	3,664	90.4%	(89.2 - 91.5)	1,296	88.1%	(85.8 - 90.0)	2,368	92.0%	(90.6 - 93.2)	Female Higher
Needed to see a doctor but could not due to cost in past year^	(2011-2015)	8,976	14.6%	(13.5 - 15.8)	3,600	12.9%	(11.4 - 14.7)	5,376	16.2%	(14.7 - 17.8)	Female Higher
Had a routine checkup in past year	(2011-2015)	8,841	57.4%	(55.9 - 58.8)	3,560	52.4%	(50.2 - 54.7)	5,281	62.1%	(60.2 - 63.9)	Female Higher
Ever told they had a heart attack	(2011-2015)	8,953	5.8%	(5.2 - 6.4)	3,586	7.4%	(6.5 - 8.4)	5,367	4.3%	(3.7 - 4.9)	Male Higher
Ever told they have coronary heart disease	(2011-2015)	8,912	4.7%	(4.2 - 5.3)	3,577	5.8%	(5.0 - 6.8)	5,335	3.7%	(3.2 - 4.3)	Male Higher
Ever told they had a heart attack or coronary heart disease	(2011-2015)	8,910	8.0%	(7.4 - 8.7)	3,568	9.8%	(8.7 - 11.0)	5,342	6.3%	(5.6 - 7.1)	Male Higher
Ever told they had a stroke	(2011-2015)	8,970	3.0%	(2.6 - 3.5)	3,593	3.1%	(2.5 - 3.8)	5,377	2.9%	(2.5 - 3.5)	Non-Sig
Had blood pressure checked in past year	(2013 & 2015)	1,576	85.6%	(82.8 - 88.0)	679	82.3%	(77.7 - 86.1)	897	89.1%	(85.9 - 91.6)	Non-Sig
Ever told they have high blood pressure (excluding pregnancy)^	(2011,2013,2015)	5,496	35.1%	(33.5 - 36.7)	2,163	38.2%	(35.6 - 40.8)	3,333	32.2%	(30.3 - 34.2)	Male Higher
Currently taking blood pressure medication, among those ever told they have high BP	(2011,2013,2015)	2,336	77.8%	(75.1 - 80.2)	952	72.2%	(68.0 - 76.1)	1,384	83.9%	(80.8 - 86.5)	Female Higher
Had cholesterol checked in past 5 years^	(2011,2013,2015)	5,313	72.2%	(70.4 - 73.9)	2,103	70.5%	(67.7 - 73.2)	3,210	73.8%	(71.4 - 76.0)	Non-Sig
Ever told they have high cholesterol, among those who have ever had it checked^	(2011,2013,2015)	4,582	36.6%	(34.8 - 38.3)	1,761	38.4%	(35.6 - 41.3)	2,821	34.9%	(32.7 - 37.1)	Non-Sig
Ever told they have diabetes (excluding pregnancy)^	(2011-2015)	8,992	11.0%	(10.2 - 11.8)	3,606	11.3%	(10.2 - 12.6)	5,386	10.7%	(9.7 - 11.7)	Non-Sig

Indicators	Years Indicator Available	Overall			Male			Female			Gender Difference [d]
		n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	
Ever told they have pre-diabetes (excluding pregnancy)	(2013-2014)	1,791	5.1%	(4.0 - 6.5)	704	5.8%	(4.1 - 8.2)	1,087	4.5%	(3.2 - 6.3)	Non-Sig
Ever told they have skin cancer	(2011-2015)	8,970	7.9%	(7.3 - 8.5)	3,592	8.7%	(7.7 - 9.7)	5,378	7.2%	(6.5 - 8.0)	Non-Sig
Ever told they have cancer other than skin cancer	(2011-2015)	8,978	7.9%	(7.2 - 8.6)	3,598	6.1%	(5.4 - 7.0)	5,380	9.5%	(8.5 - 10.6)	Female Higher
Ever told they have cancer (in any form)	(2011-2015)	8,950	14.1%	(13.2 - 14.9)	3,581	12.9%	(11.8 - 14.2)	5,369	15.1%	(13.9 - 16.4)	Non-Sig
Up-to-date on colon cancer screening, 50-75 year olds^	(2012-2015)	3,413	54.6%	(52.5 - 56.7)	1,433	52.1%	(48.8 - 55.4)	1,980	56.8%	(54.0 - 59.5)	Non-Sig
Up-to-date on breast cancer screening, female 50-74 year olds^	(2012 & 2014)	1,022	65.5%	(61.7 - 69.1)	-	-	- -	1,022	65.5%	(61.7 - 69.1)	NA
Up-to-date on cervical cancer screening, female 21-65 year olds^	(2012 & 2014)	814	76.9%	(72.9 - 80.5)	-	-	- -	814	76.9%	(72.9 - 80.5)	NA
Ever told they have arthritis	(2011-2015)	8,955	29.2%	(28.0 - 30.5)	3,591	26.2%	(24.4 - 28.2)	5,364	32.0%	(30.4 - 33.7)	Female Higher
Currently have activity limitations due to arthritis, among those ever told they have arthritis^	(2011,2013,2015)	1,904	47.7%	(44.8 - 50.7)	654	48.1%	(43.2 - 53.1)	1,250	47.4%	(43.9 - 51.0)	Non-Sig
Ever told they have asthma	(2011-2015)	8,960	11.9%	(11.0 - 12.9)	3,594	10.3%	(9.0 - 11.7)	5,366	13.5%	(12.2 - 14.9)	Female Higher
Currently have asthma	(2011-2015)	8,940	8.5%	(7.7 - 9.3)	3,583	6.7%	(5.7 - 7.9)	5,357	10.1%	(8.9 - 11.4)	Female Higher
Ever told they have COPD	(2011-2015)	8,947	6.0%	(5.4 - 6.7)	3,589	5.4%	(4.5 - 6.4)	5,358	6.6%	(5.8 - 7.6)	Non-Sig
Ever told they have kidney disease	(2011-2015)	8,965	2.6%	(2.2 - 3.0)	3,598	2.5%	(2.0 - 3.1)	5,367	2.6%	(2.2 - 3.2)	Non-Sig
Current cigarette smoking^	(2011-2015)	8,846	19.6%	(18.4 - 20.9)	3,550	20.5%	(18.7 - 22.5)	5,296	18.8%	(17.3 - 20.5)	Non-Sig
Attempted to quit smoking in past year, among current cigarette smokers	(2011-2015)	1,364	59.9%	(56.4 - 63.3)	584	60.5%	(55.4 - 65.4)	780	59.3%	(54.5 - 63.9)	Non-Sig
Current smokeless tobacco use^	(2011-2015)	8,866	8.4%	(7.5 - 9.3)	3,558	16.2%	(14.5 - 18.0)	5,308	1.0%	(0.7 - 1.6)	Male Higher
Has rule not allowing smoking anywhere inside their home	(2013-2015)	2,466	87.5%	(85.7 - 89.1)	968	87.2%	(84.4 - 89.6)	1,498	87.7%	(85.4 - 89.7)	Non-Sig
Obese (BMI=30+)^	(2011-2015)	8,579	33.2%	(31.8 - 34.7)	3,551	35.3%	(33.1 - 37.5)	5,028	31.2%	(29.5 - 33.0)	Male Higher
Obese (BMI=30+), among disabled^	(2011-2015)	2,497	41.9%	(39.2 - 44.7)	960	42.3%	(38.2 - 46.6)	1,537	41.5%	(38.0 - 45.1)	Non-Sig
Overweight or Obese (BMI=25+)	(2011-2015)	8,579	67.9%	(66.5 - 69.3)	3,551	73.9%	(71.8 - 75.9)	5,028	61.9%	(60.0 - 63.8)	Male Higher
Consumed sugar-sweetened beverages 1 or more times per day in past 30 days	(2013)	873	30.5%	(26.4 - 35.1)	364	36.8%	(30.5 - 43.7)	509	23.6%	(18.7 - 29.3)	Male Higher
Currently watching or reducing sodium or salt intake	(2013 & 2015)	1,570	49.0%	(45.6 - 52.3)	681	46.8%	(42.0 - 51.8)	889	51.2%	(46.8 - 55.6)	Non-Sig
Median times per day consumed fruits	(2011,2013,2015)	5,139	1.00	(1.00 - 1.05)	2,020	0.98	(0.95 - 1.00)	3,119	1.13	(1.06 - 1.14)	Female Higher
Consumed fruits less than 1 time per day	(2011,2013,2015)	5,139	41.1%	(39.2 - 42.9)	2,020	47.3%	(44.4 - 50.1)	3,119	35.3%	(33.0 - 37.7)	Male Higher
Median times per day consumed vegetables	(2011,2013,2015)	5,071	1.55	(1.50 - 1.58)	2,000	1.43	(1.38 - 1.51)	3,071	1.60	(1.57 - 1.68)	Female Higher
Consumed vegetables less than 1 time per day	(2011,2013,2015)	5,071	23.8%	(22.2 - 25.5)	2,000	26.3%	(23.8 - 28.9)	3,071	21.6%	(19.6 - 23.8)	Male Higher
No leisure-time physical activity in past 30 days^	(2011-2015)	8,722	26.9%	(25.6 - 28.1)	3,507	28.3%	(26.3 - 30.3)	5,215	25.6%	(24.0 - 27.2)	Non-Sig

Indicators	Years Indicator Available	Overall			Male			Female			Gender Difference [d]
		n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	
Met aerobic physical activity recommendation^	(2011,2013,2015)	5,079	49.2%	(47.4 - 51.1)	2,019	47.7%	(44.9 - 50.6)	3,060	50.6%	(48.2 - 53.0)	Non-Sig
Met muscle strengthening recommendation^	(2011,2013,2015)	5,185	24.8%	(23.2 - 26.5)	2,044	27.0%	(24.5 - 29.6)	3,141	22.8%	(20.9 - 24.9)	Non-Sig
Met both aerobic physical activity and muscle strengthening recommendations^	(2011,2013,2015)	5,043	17.3%	(16.0 - 18.8)	2,003	18.0%	(15.8 - 20.3)	3,040	16.7%	(15.0 - 18.6)	Non-Sig
Walked for at least 10 minutes at a time for any reason during a usual week	(2015)	699	82.4%	(78.0 - 86.1)	319	79.7%	(72.3 - 85.5)	380	85.2%	(80.3 - 89.1)	Non-Sig
Have access to safe places to walk in their neighborhood	(2015)	698	82.0%	(77.4 - 85.9)	319	79.7%	(72.0 - 85.8)	379	84.4%	(79.2 - 88.5)	Non-Sig
Always wear a seatbelt when driving or riding in a car^	(2011-2015)	8,580	59.7%	(58.2 - 61.1)	3,443	49.6%	(47.4 - 51.9)	5,137	69.0%	(67.2 - 70.8)	Female Higher
Texted while driving in past 30 days	(2012 & 2015)	1,536	21.4%	(18.5 - 24.7)	602	26.5%	(21.6 - 32.1)	934	16.8%	(13.6 - 20.5)	Male Higher
Talked on a cell phone while driving in past 30 days	(2012 & 2015)	1,538	67.6%	(64.4 - 70.6)	604	70.6%	(65.5 - 75.2)	934	64.9%	(60.8 - 68.8)	Non-Sig
Had a fall in past year, aged 45 years and older	(2012 & 2014)	2,696	33.5%	(31.2 - 36.0)	1,062	33.8%	(30.2 - 37.7)	1,634	33.3%	(30.3 - 36.5)	Non-Sig
Injured due to a fall in past year, aged 45 years and older	(2012 & 2014)	2,694	12.6%	(11.0 - 14.5)	1,061	10.1%	(7.9 - 12.9)	1,633	14.7%	(12.4 - 17.3)	Non-Sig
Ever told they have depression	(2011-2015)	8,970	18.8%	(17.7 - 19.9)	3,593	14.2%	(12.7 - 15.8)	5,377	23.0%	(21.5 - 24.7)	Female Higher
Frequent mental distress in past 30 days	(2011-2015)	8,889	10.1%	(9.2 - 11.0)	3,580	8.5%	(7.3 - 9.8)	5,309	11.6%	(10.4 - 12.9)	Female Higher
Currently taking medication or receiving treatment for a mental health condition	(2012)	576	15.1%	(11.0 - 20.4)	223	10.5%	(5.8 - 18.3)	353	19.3%	(13.4 - 27.0)	Non-Sig
Symptoms of serious mental illness in past 30 days	(2012)	571	4.1%	(2.2 - 7.3)	220	4.2%	(1.7 - 10.1)	351	4.0%	(1.8 - 8.4)	Non-Sig
Any alcohol consumption in past 30 days	(2011-2015)	8,713	52.1%	(50.6 - 53.5)	3,487	61.3%	(59.0 - 63.5)	5,226	43.5%	(41.6 - 45.4)	Male Higher
Binge drank in past 30 days^	(2011-2015)	8,659	16.8%	(15.6 - 18.1)	3,454	23.8%	(21.8 - 25.9)	5,205	10.3%	(9.1 - 11.7)	Male Higher
Heavy drinking in past 30 days	(2011-2015)	8,663	5.9%	(5.1 - 6.8)	3,466	8.4%	(7.0 - 9.9)	5,197	3.6%	(2.9 - 4.4)	Male Higher
Alcohol impaired driving in past 30 days	(2012 & 2014)	3,419	2.5%	(1.7 - 3.5)	1,414	4.5%	(3.1 - 6.5)	2,005	0.5%	(0.3 - 1.0)	Male Higher
Took pain medication prescribed by doctor in past year	(2012 & 2015)	1,593	37.4%	(34.0 - 40.9)	617	33.5%	(28.4 - 39.0)	976	40.8%	(36.3 - 45.5)	Non-Sig
Had leftover pain meds after last filled script, among those who took pain meds in past year	(2012 & 2015)	571	48.4%	(42.3 - 54.6)	199	42.5%	(33.1 - 52.5)	372	52.8%	(45.0 - 60.4)	Non-Sig
Had a flu vaccination in past year, aged 18 years and older	(2011-2015)	8,588	37.7%	(36.3 - 39.1)	3,450	32.2%	(30.2 - 34.3)	5,138	42.8%	(40.9 - 44.7)	Female Higher
Had a flu vaccination in past year, aged 65 years and older^	(2011-2015)	3,497	56.3%	(54.3 - 58.4)	1,252	55.2%	(51.8 - 58.6)	2,245	57.1%	(54.6 - 59.7)	Non-Sig
Ever had a pneumonia vaccination, aged 65 years and older^	(2011-2015)	3,409	62.8%	(60.7 - 64.8)	1,219	61.2%	(57.7 - 64.5)	2,190	63.9%	(61.3 - 66.4)	Non-Sig
Had a tetanus vaccination since 2005	(2013)	1,550	53.1%	(49.7 - 56.5)	642	61.7%	(56.6 - 66.4)	908	44.9%	(40.3 - 49.5)	Male Higher
Ever had a shingles vaccination, aged 50 years and older	(2014)	1,363	22.4%	(20.1 - 24.9)	566	23.4%	(19.7 - 27.5)	797	21.7%	(18.8 - 24.8)	Non-Sig
Ever been tested for HIV, 18-64 year olds (excluding blood donation)	(2011-2015)	4,936	28.8%	(27.2 - 30.6)	2,131	26.3%	(23.9 - 28.8)	2,805	31.5%	(29.2 - 33.9)	Female Higher

Indicators	Years Indicator Available	Overall			Male			Female			Gender Difference [d]
		n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	n [a]	mean or % [b]	95% C.I.[c] (Low - High)	
Visited a dentist or dental clinic for any reason in past year^	(2012 & 2014)	3,470	58.2%	(55.8 - 60.6)	1,431	54.2%	(50.4 - 57.9)	2,039	62.0%	(58.9 - 65.1)	Female Higher
Had any permanent teeth extracted due to tooth decay or gum disease	(2012 & 2014)	3,450	48.2%	(45.8 - 50.6)	1,423	46.0%	(42.3 - 49.7)	2,027	50.3%	(47.1 - 53.4)	Non-Sig
Had any permanent teeth extracted due to tooth decay or gum disease, 45-64 year olds^	(2012 & 2014)	1,310	55.2%	(51.7 - 58.7)	575	57.0%	(51.7 - 62.1)	735	53.5%	(48.9 - 58.1)	Non-Sig
Had all permanent teeth extracted due to tooth decay or gum disease, aged 65 years and older	(2012 & 2014)	1,417	16.4%	(14.1 - 19.0)	505	16.6%	(13.0 - 20.9)	912	16.3%	(13.5 - 19.6)	Non-Sig
Had all permanent teeth extracted due to tooth decay or gum disease, 65-74 year olds^	(2012 & 2014)	697	12.9%	(10.0 - 16.4)	276	12.4%	(8.4 - 17.9)	421	13.2%	(9.5 - 18.1)	Non-Sig
Housing insecurity in past year, among those who own or rent their home^	(2012-2013,2015)	1,978	29.0%	(26.0 - 32.1)	777	25.5%	(21.4 - 30.2)	1,201	32.1%	(28.1 - 36.3)	Non-Sig
Food insecurity in past year^	(2012-2013,2015)	2,147	20.2%	(17.7 - 22.9)	840	15.5%	(12.3 - 19.4)	1,307	24.3%	(20.9 - 28.2)	Female Higher
Provided regular care/assistance in past month to friend or family member with health issue	(2015)	696	28.8%	(24.6 - 33.4)	319	27.0%	(21.3 - 33.6)	377	30.7%	(24.8 - 37.2)	Non-Sig
Experienced more or worsening confusion or memory loss in past year, aged 45 years and older	(2015)	542	14.1%	(10.6 - 18.6)	232	18.1%	(12.2 - 25.8)	310	10.8%	(7.1 - 16.0)	Non-Sig
Get less than 7 hours of sleep per day	(2013-2014)	3,684	32.2%	(30.1 - 34.3)	1,544	32.3%	(29.2 - 35.5)	2,140	32.1%	(29.5 - 35.0)	Non-Sig
Average hours of sleep per day	(2013-2014)	3,684	7.1	(7.0 - 7.2)	1,544	7.1	(7.0 - 7.2)	2,140	7.1	(7.0 - 7.2)	Non-Sig
Work-related injury or illness in past year, among employed or recently out of work	(2013-2015)	1,508	5.6%	(4.3 - 7.3)	777	6.8%	(4.9 - 9.2)	731	4.0%	(2.5 - 6.4)	Non-Sig
Lacking confidence in their ability to fill out health forms	(2014-2015)	3,161	39.5%	(37.3 - 41.8)	1,334	47.6%	(44.2 - 51.0)	1,827	32.0%	(29.3 - 34.9)	Male Higher
Written health information is always or nearly always easy to understand	(2014-2015)	3,166	70.7%	(68.6 - 72.7)	1,332	64.6%	(61.3 - 67.8)	1,834	76.4%	(73.8 - 78.7)	Female Higher
Always or nearly always get help reading health information	(2014-2015)	3,230	13.8%	(12.3 - 15.5)	1,369	15.9%	(13.6 - 18.6)	1,861	11.8%	(10.0 - 13.9)	Non-Sig

Note: Data reflect the 12 counties of Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Grant, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux Counties that make up the Panhandle Public Health Department and the Scotts Bluff County Health Department Regions

Note: Data reflect both landline and cell phone responses

Note: This table is not intended to be inclusive of all BRFSS indicators; some were excluded due to small numbers at the LHD level

Note: This table excludes 2011 BRFSS optional module and state added questions data due to the data being landline only

Note: The results in this table were analyzed using SAS and SAS-callable SUDAAN software

Note: Use caution when interpreting statistical significance based on non-overlapping confidence intervals when the sample size within one or both of the comparison groups is small

[a] Non-weighted sample size among adults 18 and older (unless different age group noted)

[b] Weighted mean, median, or percentage (percentages are followed by the % symbol) among adults 18 and older (unless different age group noted)

[c] Low and High are the lower and upper limits of the 95% confidence interval, respectively

[d] Indicates whether there is a significant difference based on non-overlapping confidence intervals, "NA" indicates that a comparison cannot be made due to (1) the indicator is not applicable for one of the groups or (2) one or both groups had an insufficient number of respondents

^ Reflects a Nebraska Healthy People 2020 (HP2020) measure

* Data suppressed due to an insufficient number of respondents (i.e., fewer than 50)

Source: Nebraska Behavioral Risk Factor Surveillance System (BRFSS), October 2016

Appendix H: Invitation to Participate in Focus Group Template

<*Insert hospital*> and Panhandle Public Health District are holding a focus group <*insert date*> from <*insert time*> at <*insert location*>.

We value all opinions and we hope you choose to express them during the discussion. Everything said in this group will remain confidential. Input from the focus groups, as well as additional assessments, will contribute to the Community Health Needs Assessment and Improvement planning process. Thank you for your consideration.

Appendix I: Focus Group Guide for Community Themes and Strengths Assessment

Focus Group Guide for Community Themes and Strengths Assessment

We would like to talk with you today about your community and your ideas about the strengths and needs of your community. Everyone's opinion is important, so I want to make sure that all get a chance to talk. Feel free to respond to each other and give your opinion even if it differs from your neighbor. Occasionally I may interrupt to move on to the next question, but I will do so just to make sure we cover all the topics that we want to talk about today. It will never mean that I do not think what you are saying is important.

Let's take a minute to introduce ourselves before we get started. Could you please tell everyone your name and how long you have lived in name of community or health district? (*Have each person respond, but do not go around in a circle. Start with co-facilitator and end with facilitator*)

(You can review the following ground rules with the group if you would like)

Focus Group Ground Rules

We have a lot to cover, so we will all need to do a few things to get our jobs done:

1. Talk one at a time and in a voice at least as loud as mine.

2. We need to hear from every one of you during the discussion even though each person does not have to answer every question.

3. Feel free to respond to what has been said by talking to me or to any other member of the group. That works best when we avoid side conversations and talk one at a time.

4. There are no wrong answers, just different opinions. We are looking for different points of view. So just say what is on your mind.

5. We do have a lot to cover, so you may all be interrupted at some point in order to keep moving and to avoid running out of time.

6. We value your opinions, both positive and negative, and we hope you choose to express them during the discussion.

7. Everything you say in this group is to remain confidential. This means that we require that each one of you agree not to repeat anything talked about within this group to anyone outside of the group.

Again, this focus group is confidential. Notes will be made anonymously. We ask you to respect this understanding and refrain from speaking about specifics about this group with others afterwards.

Focus Group Questions: The questions in bold are the key questions to ask participants. The other questions are optional depending on how the focus group goes.

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?** *Probes: What does it look like; get an idea of physical boundaries—definition of community; what is different about here compared to there; what types of things are available here; what activities do you do here?*

2. **What do you view as strengths of your community?**

3. How do you think your community has changed in the last 5-10 years?

4. **What are some of the things that you see as lacking in your community?** *Probes: Needs; health needs.*

5. **In your family or your friends' families, what are your biggest concerns?** *Probes: personal needs, health, employment, education*
    a. *Reread named community and personal needs.* Which of these needs would you say is the most important? Remember it is okay if people have different opinions. Why is it the most important? Next most important?

6. **How would you describe the interactions between community members from different backgrounds?** *Probe: those who have lived here longer vs. new and among different races (How has this changed?)*

7. Where do you go for health care? *Probe: explore their perceptions of health care services; barriers/facilitators*

8. From where do you get most of your health information? *Probe: are they satisfied or would they prefer somewhere else*

9. **If a task force was being formed to improve things in your community, what topics do you think they would need to address and why?**

Optional

10. What kind of services and businesses are used most by community members? *Probe: different segments of the community including ethnic groups, women vs. men, persons with disabilities, persons with lower incomes.*

11. What kinds of services are not used by community members? *Probe: different segments of the community including ethnic groups, women vs. men, persons with disabilities, persons with lower incomes.*

12. What kinds of services do community members wish they had for everyone? *Probe: different segments of the community including ethnic groups, women vs. men, persons with disabilities, persons with lower incomes.*

Thank you for taking time to come talk with us today. What you have shared will help us work together to understand more about the strengths and needs of the community. We will be working over the next few months to put together what everyone who is participating in these groups has shared, and then we will present the results and future plans in a community meeting. We will send you a postcard to let you know when the meeting.

Appendix J: 2017 Focus Group Survey

2017 Focus Group Survey

Please provide the following information. It will be used for demographic purpose only. Keep in mind you will not be identified in any way with your answers.

1. What is your zip code?

   _____

2. What county do you live in?

   _____

3. Your gender:
   - ☐ Male
   - ☐ Female
   - ☐ Trans
   - ☐ Other: _____
   - ☐ Prefer not to disclose

4. Your age:
   - ☐ Under 18 years
   - ☐ 18-25 years
   - ☐ 26-39 years
   - ☐ 40-54 years
   - ☐ 55-64 years
   - ☐ 65-80 years
   - ☐ Over 80 years

5. Marital Status:
   - ☐ Never married
   - ☐ Married/ Cohabiting
   - ☐ Separated
   - ☐ Divorced
   - ☐ Widowed
   - ☐ Other: _____
   - ☐ Prefer not to disclose

6. Household income:
   - ☐ Less than $20,000
   - ☐ $20,000 to $29,999
   - ☐ $30,000 to $49,999
   - ☐ $50,000 to $74,999
   - ☐ $75,000 to $99,999

7. Your highest education level:
   - ☐ Less than high school graduate
   - ☐ High school diploma or GED
   - ☐ Some College
   - ☐ College degree or higher
   - ☐ Other: _____
   - ☐ Prefer not to disclose

8. Are you Hispanic or Latino?
   - ☐ No
   - ☐ Yes
   - ☐ Prefer not to disclose

9. Which one of these groups would you say best represents your race?
   - ☐ White
   - ☐ Black or African-American
   - ☐ Asian
   - ☐ Native Hawaiian or Other Pacific Islander
   - ☐ American Indian or Alaska Native
   - ☐ Other: _____
   - ☐ Prefer not to disclose

10. How do you pay for your health care? (Check all that apply)
    - ☐ Pay cash
    - ☐ Health insurance (e.g., private insurance, Blue Shield, HMO, through employer)
    - ☐ Medicaid
    - ☐ Medicare
    - ☐ Veterans' Administration
    - ☐ Indian Health Services
    - ☐ Other: _____

11. Where do you get the majority of your health advice from?
    - ☐ Internet (ie: google, WebMD, etc.)
    - ☐ Newspaper
    - ☐ Magazine
    - ☐ Friend or family member

- Over $100,000

12. Employment Status:
    - Unemployed but not currently looking for work
    - Unemployed and looking for work
    - Employed for wages
    - Self-employed
    - A homemaker
    - A student
    - Military
    - Retired
    - Unable to work

- Physician or other provider
- Other: _____

13. Have you or your family member ever served in the military? (Select all that apply)
    - I served in the military
    - My husband, wife, or significant other served in the military
    - My child served in the military
    - My parent served in the military
    - My brother/sister served in the military
    - Other: _____
    - None of the above

14. How would you describe your employer:
    - For profit
    - Non-profit
    - Agriculture
    - Government
    - Health Care
    - Education
    - Other: _____
    - Not applicable

Thank you for your response!

Appendix K: 2017 Community Health Survey

2017 Community Health Survey

Please take this survey. The estimated completion time is 10 minutes or less. The purpose of this survey is to get your input about the health of your community. The Panhandle Public Health District, area hospitals, and economic development will use the results and other information to identify the most pressing concerns which can be addressed through community action. Your opinion is important! Please let others know about this opportunity also. The survey is also available on line at www.pphd.org. Thank you for your time and input. If you have any questions, please contact us at 308-487-3600 ext. 106.

	Very unhealthy	Unhealthy	Somewhat unhealthy	Healthy	Very healthy
1. How would you rate your community as a "Healthy Community?"	☐	☐	☐	☐	☐

Please indicate your level of agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
2. I am satisfied with the quality of life in our community (considering my sense of safety and well-being).	☐	☐	☐	☐	☐	☐
3. I am satisfied with the health care system in our community.	☐	☐	☐	☐	☐	☐
4. I am able to get medical care whenever I need it.	☐	☐	☐	☐	☐	☐
4a. What clinic/hospital/health system do you go to for your normal provider? _____ _____						
4b. How far do you travel for a your normal provider? (in miles)	☐ 0-25	☐ 25-50	☐ 50-75	☐ 75+	☐ N/A	
4c. How long, from the time you call to make an appointment, are you able to see your normal provider?	☐ Same day	☐ Within 1 week	☐ Within 2 weeks	☐ Greater than 2 weeks	☐ N/A	
4d. What other types of health care services would you use if available in your community? _____ _____						
5. I am very satisfied with the medical care I receive.	☐	☐	☐	☐	☐	☐

Continue to next page

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
6. Sometimes it is a problem for me to cover my share of the cost for a medical care visit.	☐	☐	☐	☐	☐	☐
7. I have easy access to the medical specialists that I need.	☐	☐	☐	☐	☐	☐
7a. What clinic/hospital/health system do you go to for your specialist? _____ _____						
7b. How far do you travel for a specialist? (in miles)	☐ 0-25	☐ 25-50	☐ 50-75	☐ 75+	☐ N/A	
7c. How long, from the time you call to make an appointment, are you able to see your specialist?	☐ Same day	☐ within a week	☐ within 2 weeks	☐ greater than 2 weeks	☐ N/A	
7d. What other types of specialists would you see if available in your community? _____ _____						
8. This community is a good place to raise children.	☐	☐	☐	☐	☐	☐
9. I have access to quality child care that is affordable.	☐	☐	☐	☐	☐	☐
9a. My child care facility is licensed.	☐ Yes	☐ No	☐ Don't Know	☐ Not Applicable		
10. I am very satisfied with the school system in my community.	☐	☐	☐	☐	☐	☐
11. There are adequate after school programs for elementary age children to attend.	☐	☐	☐	☐	☐	☐
12. There are adequate after school opportunities for middle and high school age students.	☐	☐	☐	☐	☐	☐
13. There are plenty of recreation opportunities for children in my community.	☐	☐	☐	☐	☐	☐
14. This community is a good place to grow old.	☐	☐	☐	☐	☐	☐
15. There are housing developments that are elder-friendly.	☐	☐	☐	☐	☐	☐
16. There are enough programs that provide meals for older adults in my community.	☐	☐	☐	☐	☐	☐

Continue to next page

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
17. There are networks for support for the elderly living alone.	☐	☐	☐	☐	☐	☐
18. There is a transportation service that takes people to medical facilities or to shopping centers.	☐	☐	☐	☐	☐	☐
19. There is safe housing.	☐	☐	☐	☐	☐	☐
20. There is affordable housing.	☐	☐	☐	☐	☐	☐
21. There are jobs available in the community (considering locally owned and operated businesses, jobs with career growth, affordable housing, reasonable commute, etc.).	☐	☐	☐	☐	☐	☐
22. There are opportunities for advancement in the jobs that are available in the community (considering promotions, job training, and higher education opportunities).	☐	☐	☐	☐	☐	☐
23. The community is a safe place to live (considering residents' perception of safety in the home, the workplace, schools, playgrounds, parks, shopping areas). Neighbors know and trust one another and look out for one another.	☐	☐	☐	☐	☐	☐
24. There are support networks for individuals and families (neighbors, support groups, faith community outreach, agencies, and organizations) during times of stress and need.	☐	☐	☐	☐	☐	☐
25. The community is military friendly (considering discounts, patriotism, recognition, and other local resources).	☐	☐	☐	☐	☐	☐
26. All residents believe that they, individually and collectively, can make the community a better place to live.	☐	☐	☐	☐	☐	☐

Continue to next page

The following questions are about health problems and risky behaviors in our community.

27. In the following list, what do you think are your **3 biggest concerns** in our community? (concerns that have the greatest impact on overall community health)

Check only 3:

- ☐ Aging problems (e.g., arthritis, hearing/vision loss)
- ☐ Cancers
- ☐ Child abuse/neglect
- ☐ Dental problems
- ☐ Diabetes
- ☐ Domestic violence
- ☐ Firearm-related injuries
- ☐ Heart disease and stroke
- ☐ High blood pressure
- ☐ HIV/AIDS
- ☐ Homicide
- ☐ Poverty
- ☐ Infant death
- ☐ Infectious diseases (e.g., hepatitis, TB)
- ☐ Mental health problems
- ☐ Motor vehicle crash injuries
- ☐ Rape/sexual assault
- ☐ Respiratory/lung disease
- ☐ Sexually transmitted diseases (STDs)
- ☐ Suicide
- ☐ Teenage pregnancy
- ☐ Not enough health insurance/no health insurance
- ☐ Food insecurity
- ☐ Other _____

28. Of the problems that you marked, which one would you most likely work on?

_____

29. In the following list, what do you think are the **3 most important "risky behaviors"** in our community? (those behaviors that have the greatest impact on overall community health)

Check only 3:

- ☐ Alcohol abuse
- ☐ Being overweight
- ☐ Dropping out of school
- ☐ Drug abuse
- ☐ Lack of exercise
- ☐ Poor eating habits
- ☐ Not getting "shots" to prevent disease
- ☐ Racism
- ☐ Tobacco use
- ☐ Not using birth control
- ☐ Not using seat belts and/or child safety seats
- ☐ Unsafe sex
- ☐ Other _____

Continue to next page

The following questions are about economic development and opportunities in the region.

31. Which factors are most important to growing our economy in the region? **(Choose up to three)**

- ☐ Bringing in new businesses
- ☐ Supporting and growing existing businesses
- ☐ Growing new businesses from local entrepreneurs
- ☐ Improving education and training opportunities
- ☐ Increasing tourism
- ☐ Bringing in new restaurants, shops, & stores

32. What are the **top three** strengths of the Panhandle we can use to grow jobs and business?

- ☐ Cost of living
- ☐ Natural environment
- ☐ PreK-12 schools
- ☐ Colleges and higher education
- ☐ Opportunities to grow new businesses
- ☐ Lifestyle, quality of life
- ☐ Skilled workforce
- ☐ Business climate (getting loans and investment, taxes, government help for new businesses, etc.)
- ☐ Highway, rail, and airport access
- ☐ Labor costs
- ☐ Available commercial buildings/sites
- ☐ History and tourism
- ☐ Industry opportunity (name industry below)

  _____
- ☐ Other [specify]

  _____

33. Which factors are the biggest barriers to working or growing a business in your community? (select all that apply)

- ☐ Employee (or my own) transportation to work
- ☐ Low wages
- ☐ Lack of necessary job skills/education
- ☐ Resources for starting new businesses
- ☐ Lack of quality houses or apartments
- ☐ Run-down commercial buildings
- ☐ Tax burden
- ☐ Lack of resident involvement in decisions
- ☐ Lack of quality of life/recreation amenities
- ☐ Family/childcare/social issues
- ☐ Other [specify]

_____

34**. Agree or Disagree:** Our household's work and pay adequately meets mine and my family's needs.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

35**. Agree or Disagree:** I feel positively that there is opportunity for me and my family to pursue our future career aspirations in the Panhandle.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

36. How would you rate the preparedness of your community to handle dramatic changes to its health or economy? (i.e., recessions, natural disasters, closing of a major employer, etc.)

- ☐ Very prepared
- ☐ Adequately prepared
- ☐ Somewhat unprepared
- ☐ Mostly or very unprepared
- ☐ Don't know

37. What are **the three** biggest threats to preventing or responding to an economic or natural disaster in your community?

- ☐ Lack of resident participation in the community
- ☐ Overreliance on one industry or employer
- ☐ Business or personal debt
- ☐ Inadequate commercial building/land supply
- ☐ Inadequate preparation for a man-made or natural disaster
- ☐ Inadequate infrastructure
- ☐ Inability to attract and retain population
- ☐ Other [specify]

_____

Continue to next page

Please provide the following information. It will be used for demographic purposes only. Keep in mind you will NOT be identified in any way with your answers.

38. What is your zip code?	_____	43. What county do you live in?	_____
39. Your gender:	☐ Male ☐ Female ☐ Trans ☐ Prefer not to disclose ☐ Other [specify] _____	44. Are you Hispanic or Latino?	☐ Yes ☐ No ☐ Prefer not to disclose
40. Your age:	☐ Under 18 years ☐ 18-25 years ☐ 26-39 years ☐ 40-54 years ☐ 55-64 years ☐ 65-80 years ☐ Over 80 years	45. Which one of these groups would you say best represents your race?	☐ White ☐ Black or African American ☐ Asian ☐ Native Hawaiian or Other Pacific Islander ☐ American Indian or Alaska Native ☐ Prefer not to disclose ☐ Other [specify] _____
41. Marital status:	☐ Married/cohabiting ☐ Divorced ☐ Never married ☐ Separated ☐ Widowed ☐ Prefer not to disclose ☐ Other _____	46. Your highest education level:	☐ Less than high school graduate ☐ High school diploma or GED ☐ College degree or higher ☐ Prefer not to disclose ☐ Other [specify] _____
42. Household income:	☐ Less than $20,000 ☐ $20,000 to $29,999 ☐ $30,000 to $49,999 ☐ $50,000 to $74,999 ☐ $75,000 to $99,999 ☐ Over $100,000	47. How do you pay for your health care? (Check all that apply)	☐ Pay cash (no insurance) ☐ Health insurance (e.g., private insurance, Blue Shield, HMO, through employer) ☐ Medicaid ☐ Medicare ☐ Veterans' Administration ☐ Indian Health Services ☐ Other [specify] _____
48. Have you ever served in the military or are you the family member of someone who has served in the military? Select all that apply.	☐ I served in the military ☐ My husband, wife, or significant other served in the military ☐ My child served in the military		☐ My parent served in the military ☐ My brother/sister served in the military ☐ Other ☐ None of the above

Thank you very much for your response!

Appendix L: Responses to 2017 Panhandle Public Health District Community Health Survey, BBGH Service Area, N = 223

	Very unhealthy	Unhealthy	Somewhat unhealthy	Healthy	Very healthy	No response
How would you rate your community as a "Healthy Community"?	0%	12%	55%	30%	1%	0%
	1	27	123	68	3	1

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable	No response
Quality of Life							
I am satisfied with the quality of life in our community (considering my sense of safety and well-being).	0%	6%	15%	55%	23%	0%	0%
	1	14	34	122	52	0	0
Children							
This community is a good place to raise children.	1%	4%	14%	42%	35%	2%	0%
	3	10	32	94	79	4	1
I have access to quality child care that is affordable.	5%	8%	18%	17%	8%	42%	2%
	11	18	40	39	17	94	4

	Yes	*No*	*Don't know*	*Not applicable*	*No response*
My child care facility is licensed.	17%	8%	5%	67%	3%
	38	17	11	150	7

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable	No response
I am very satisfied with the school system in my community.	9%	19%	18%	23%	14%	14%	2%
	20	42	41	51	32	32	5
There are adequate after school programs for elementary age children to attend.	17%	19%	17%	12%	4%	30%	2%
	37	43	37	27	8	66	5
There are adequate after school opportunities for middle and high school age students.	14%	19%	17%	17%	7%	24%	2%
	32	43	38	37	15	54	4
There are plenty of recreation opportunities for children in my community.	16%	23%	16%	22%	6%	14%	2%
	35	52	35	50	14	32	5
Aging							
This community is a good place to grow old.	3%	9%	23%	46%	16%	2%	1%
	7	19	52	102	36	4	3
There are housing developments that are elder-friendly.	8%	9%	22%	43%	10%	6%	1%
	17	20	50	96	23	14	3
There are enough programs that provide meals for older adults in my community.	3%	13%	31%	36%	9%	6%	1%
	6	29	70	81	21	13	3
There are networks for support for the elderly living alone.	6%	19%	33%	29%	5%	7%	1%
	14	42	74	64	11	16	2
Transportation							

There is a transportation services that takes people to medical facilities and shopping centers.	1% 2	5% 12	7% 15	64% 143	20% 45	3% 6	0% 0
Housing							
There is safe housing.	3% 7	10% 23	19% 43	53% 118	11% 25	3% 7	0% 0
There is affordable housing.	8% 17	22% 49	25% 56	33% 73	9% 19	4% 9	0% 0
Employment							
There are jobs available in the community (considering locally owned and operated businesses, jobs with career growth, affordable housing, reasonable commute, etc.).	5% 11	26% 59	22% 48	36% 80	8% 18	3% 6	0% 1
There are opportunities for advancement in the jobs that are available in the community (considering promotions, job training, and higher education opportunities).	7% 16	27% 60	30% 66	27% 61	5% 11	3% 6	1% 3
Safety							
The community is a safe place to live (considering residents' perception of safety in the home, the workplace, schools, playgrounds, parks, shopping areas). Neighbors know and trust one another and look out for one another.	2% 5	4% 9	15% 33	57% 127	22% 48	0% 1	0% 0
Support							
There are support networks for individuals and families (neighbors, support groups, faith community outreach, agencies, and organizations) during times of stress and need.	4% 10	10% 23	25% 55	48% 108	10% 22	1% 3	1% 2
Military Friendliness							
The community is military friendly (considering discounts, patriotism, recognition, and other local resources).	2% 5	10% 22	25% 56	39% 86	15% 34	9% 19	0% 1
Ability to Improve							
All residents believe that they, individually and collectively, can make the community a better place to live.	3% 7	19% 43	31% 69	36% 81	9% 19	2% 4	0% 0
Medical Care							
I am satisfied with the health care system in our community.	5% 12	22% 48	19% 43	35% 79	17% 39	0% 1	0% 1
I am able to get medical care whenever I need it.	6% 13	15% 34	15% 33	42% 94	21% 47	0% 0	1% 2
I am very satisfied with the medical care I receive.	2% 4	3% 7	20% 44	45% 101	27% 61	1% 3	1% 3
Sometimes it is a problem for me to cover my share of the cost for a medical care visit.	8% 18	23% 51	22% 48	28% 63	15% 33	4% 9	0% 1

I have easy access to the medical specialists that I need.	5%	21%	21%	39%	7%	6%	1%
	12	46	47	87	16	13	2

How far do you travel for your normal provider? (in miles)	*0-25*	*25-50*	*50-75*	*75+*	*Not Applicable*	*No response*
	75%	4%	11%	9%	1%	0%
	168	9	24	20	2	0

How long, from the time you call to make an appointment, are you able to see your normal provider?	*Same day*	*Within1 week*	*Within 2 weeks*	*Greater than 2 weeks*	*Not applicable*	*No response*
	17%	59%	13%	8%	3%	0%
	37	131	30	18	6	1

How far do you travel for a specialist? (in miles)	*0-25*	*25-50*	*50-75*	*75+*	*Not Applicable*	*No response*
	23%	7%	23%	31%	12%	4%
	51	15	52	69	26	10

How long, from the time you call to make an appointment, are you able to see your specialist?	*Same day*	*Within1 week*	*Within 2 weeks*	*Greater than 2 weeks*	*Not applicable*	*No response*
	3%	21%	29%	31%	13%	4%
	6	47	64	69	28	9

Biggest Concerns in Community*	
Aging problems (e.g., arthritis, hearing/vision loss)	59
Cancers	62
Child abuse/neglect	25
Dental problems	21
Diabetes	40
Domestic violence	27
Firearm-related injuries	1
Heart disease and stroke	35
High blood pressure	33
HIV/AIDS	4
Homicide	5
Poverty	48
Infant death	1
Infectious diseases (e.g., hepatitis, TB)	2
Mental health problems	68
Motor vehicle crash injuries	10
Rape/sexual assault	6
Respiratory/lung disease	19

Sexually transmitted diseases (STDs)		9
Suicide		26
Teenage pregnancy		36
Not enough health insurance/no health insurance		67
Food insecurity		16
Other		36
Of the problems you marked, which one would you most likely work on?*	Aging problems (e.g., arthritis, hearing/vision loss)	10
	Cancers	12
	Child abuse/neglect	7
	Dental problems	2
	Diabetes	7
	Domestic violence	3
	Firearm-related injuries	0
	Heart disease and stroke	10
	High blood pressure	4
	HIV/AIDS	0
	Homicide	0
	Poverty	9
	Infant death	0
	Infectious diseases (e.g., hepatitis, TB)	0
	Mental health problems	18
	Motor vehicle crash injuries	1
	Rape/sexual assault	0
	Respiratory/lung disease	1
	Sexually transmitted diseases (STDs)	0
	Suicide	7
	Teenage pregnancy	6
	Not enough health insurance/no health insurance	11
	Food insecurity	6
Most Important Risky Behaviors*		
Alcohol abuse		163
Being overweight		95
Dropping out of school		28
Drug abuse		130
Lack of exercise		44
Poor eating habits		41
Not getting "shots"□ to prevent disease		11

Racism	15
Tobacco use	53
Not using birth control	13
Not using seat belts and/or child safety seats	24
Unsafe sex	28
Other	5

*Counts were used instead of percentages for this measure due to the small number of responses
Prepared by Kelsey Irvine, Panhandle Public Health District

Appendix M: Local Public Health System Assessment Summary of Results

Essential Service 3: Inform, Educate, and Empower People about Health Issues

Informing, educating, and empowering people about health issues encompass the following:

- Creating community development activities.
- Establishing social marketing and targeted media public communication.
- Providing accessible health information resources at community levels.
- Collaborating with personal healthcare providers to reinforce health promotion messages and programs.
- Working with joint health education programs with schools, churches, worksites, and others.

Essential Service 3		No Activity	Minimal	Moderate	Significant	Optimal
3.1.1.	Provide policymakers, stakeholders, and the public with ongoing analyses of community health status and related recommendations for health promotion policies?			■		
3.1.2.	Coordinate health promotion and health education activities at the individual, interpersonal, community, and societal levels?			■		
3.1.3.	Engage the community throughout the process of setting priorities, developing plans, and implementing health education and health promotion activities?		■			
3.2.1.	Develop health communication plans for media and public relations and for sharing information among LPHS organizations?				■	
3.2.2.	Use relationships with different media providers (e.g., print, radio, television, the Internet) to share health information, matching the message with the target audience?			■		
3.2.3.	Identify and train spokespersons on public health issues?		■			
3.3.1.	Develop an emergency communications plan for each stage of an emergency to allow for the effective dissemination of information?				■	
3.3.2.	Make sure resources are available for a rapid emergency communication response?				■	
3.3.3.	Provide risk communication training for employees and volunteers?			■		

Partners/Stakeholders: Legal Aid, Doves, WCHR, PADD, local community centers, PWWC, media, neighborhood groups, NCAP, United Way, HFA, Disability Rights of NE, EDN, PALS, Native Futures, DHHS, Cirrus House, Liberty Mobility Now, Doves, Region I BHA, CAPWN, SBCHD, PPHD, hospitals, UNMC, WNCC, UNL Extension, school systems, Aging Office, PILS, community organizations, faith-based organizations, CSC, Aging Disability Resource Center, United Health Care, PRMRS, Chambers of commerce, economic development, YMCA partnership, Panhandle Prevention Coalition, senior centers

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• PPHD – RNHN partnership • DOVES partnership • Networking • Coalition • Partnerships • Communication between PPHD & RNHN is good • Partnership between PPHD, RNHN & local law enforcement	• small newspapers • competition for numbers • Mileage / Distance • Disengaged population • Target Audience – make up & needs • Not knowing exactly what public health is • General public needs improvement • Language barriers • Difficult to provide for a specific personnel • volunteer training	• Incentives • resource directory – bump onto PPHD annual report • Engaging media • Communication to smaller communities	• Data • Partnerships • Partnership needs • Hospitals involve smaller communities & organizations in their trainings

Essential Service 4: Mobilize Community Partnerships to Identify and Solve Health Problems

Mobilizing community partnerships to identify and solve health problems encompasses the following:

- Convening and facilitating partnerships among groups and associations (including those not typically considered to be health related).
- Undertaking defined health improvement planning process and health projects, including preventive, screening, rehabilitation, and support programs.
- Building a coalition to draw on the full range of potential human and material resources to improve community health.

Essential Service 4		No Activity	Minimal	Moderate	Significant	Optimal
4.1.1.	Maintain a complete and current directory of community organizations?			■		
4.1.2.	Follow an established process for identifying key constituents related to overall public health interests and particular health concerns?			■		
4.1.3.	Encourage constituents to participate in activities to improve community health?				■	
4.1.4.	Create forums for communication of public health issues?				■	
4.2.1.	Establish community partnerships and strategic alliances to provide a comprehensive approach to improving health in the community?				■	
4.2.2.	Establish a broad-based community health improvement committee?			■		
4.2.3.	Assess how well community partnerships and strategic alliances are working to improve community health?				■	

Partners/Stakeholders: Panhandle Equity, United Health Care, Aging Office of Western NE, ADRC, Disability Rights of NE, WCHR, Doves, Panhandle Partnership, Liberty Mobility Now, PPHD, SBCHD, Hospitals/providers/RNHN, Case Managers/DHHS, CAPWN, NCAP, Region I, Cirrus House, Schools/ESU 13, Nebraska Appleseed Foundation, Health insurers/Medicare/Medicaid, VOA, SSVF – veteran services/VA, faith based organizations, tribes, PWWC, Panhandle Prevention Coalition, WNCC, UNMC, Community Service Organizations, TCD/BBDC, PADD, Media, NDPP – lifestyle coaches and partner orgs, Community Walkability Coalitions, municipal governments, Legal Aid NE, businesses/employers, Heritage Health (MCOs), United Way, Trails Transportation, judicial systems, Dawes County Joint Planning, Early Development Network, regional treatment centers, Heartland Express Transportation, NE AIDS Project, Helping Hands, community groups, legislative representatives, all other partners

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Awareness of partners • New organizations seen in the partnerships • Continue to bring partners to the table • Purposeful Engagement • All-inclusive engagement • Communication outside of our siloes, always like others' input and feedback • Virtual connection • Have the human connection factor • Coming together example – this MAPP CHA/CHIP process • Knowing that when organizations participate that they will have each other's backs • New partnerships, i.e., Panhandle Trails & Liberty Mobility partnership • Education & awareness via sharing of evaluations, i.e., CHA & HFA • Continue with the positive conversations and partnerships happening now • There are some examples of decreased funding due to system evaluations showing improvements have been made in a given area • Utilization of common language of best practices, i.e., logic model integration	• Need to know where we fit with partners – all they do, hard to keep up and question duplication of services • Listserv overload may lead to missed opportunities • Hospital & other new partners kept aware of resources in the community • Workforce development • Funding siloes • Public awareness of resources • New partnerships sometimes come about later in planning process • Working with organization boards of directors to support participation buy-in • Established processes unknown for developing key constituents • Bring evaluation outcome measure to show impact on big health indicators • Community participation and involvement in feedback evaluation methods	• Maintaining the human connection • Identify partners and community directories • Building a partnership to address funders and lawmakers to match our area needs • Community and partner knowledge and use of the transportation partnership and services • Continue to share evaluation outcomes, data, and new opportunities (ongoing and growing)	• Build directory connections to one central access/central navigation • Idea for using hotline alerts as resource alerts to increase community knowledge, i.e., citywide calling or school calling databases • Sustain and expand individualized workgroups • Partnering in the community and service population surveys •

Essential Service 5: Develop Policies and Plans That Support Individual and Community Health Efforts

Developing policies and plans that support individual and community health efforts encompasses the following:

- Ensuring leadership development at all levels of public health.
- Ensuring systematic community-level and state-level planning for health improvement in all jurisdictions.
- Developing and tracking measurable health objectives from the (CHIP) as a part of a continuous quality improvement plan.
- Establishing joint evaluation with the medical healthcare system to define consistent policies regarding prevention and treatment services.
- Developing policy and legislation to guide the practice of public health.

Essential Service 5		No Activity	Minimal	Moderate	Significant	Optimal
5.1.1.	Support the work of the local health department (or other governmental local public health entity) to make sure the 10 Essential Public Health Services are provided?				■	
5.1.2.	See that the local health department is accredited through the PHAB's voluntary, national public health department accreditation program?				■	
5.1.3.	Ensure that the local health department has enough resources to do its part in providing essential public health services?				■	
5.2.1.	Contribute to public health policies by engaging in activities that inform the policy development process?			■		
5.2.2.	Alert policymakers and the community of the possible public health effects (both intended and unintended) from current and/or proposed policies?		■			
5.2.3.	Review existing policies at least every three to five years?				■	
5.3.1.	Establish a CHIP, with broad-based diverse participation, that uses information from the CHA, including the perceptions of community members?				■	
5.3.2.	Develop strategies to achieve community health improvement objectives, including a description of organizations accountable for specific steps?				■	
5.3.3.	Connect organizational strategic plans with the CHIP?				■	
5.4.1.	Support a workgroup to develop and maintain emergency preparedness and response plans?					■
5.4.2.	Develop an emergency preparedness and response plan that defines when it would be used, who would do what tasks, what standard operating procedures would be put in place, and what alert and evacuation protocols would be followed?			■		
5.4.3.	Test the plan through regular drills and revise the plan as needed, at least every two years?				■	

Partners/Stakeholders: Liberty Mobility Now, Doves, Panhandle Partnership, PWWC, PPHD, DHHS, economic development, RWMC, Region I BHA/local county coalitions, city governments, probation, education system, ESU 13, emergency response planners, first responders, law enforcement, American Planning Association (APA), municipal government, PADD & NROC, Aging Disability Resource Center, Aging Office, Disability Rights of NE, Legal Aid, Emergency Preparedness, Regional Emergency Managers (Ron Leal, Nan Thorton), regional call center coordinator (Ray Richards)

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Dedicated boards that oversee our health serving agencies • Broken down silos • PPHD is accredited! • Potential for funding preference because of accredited status • Relationships – longevity/lack of turnover • Open lines of communication with partners and statewide – groups that can advocate for our geography • Data driven (when available) policy work • We have a process • Divers participation • Hospital involvement – gives support and partnership • Communication • CHIP is utilized – not just on a shelf • Strategic planning improvement over the years – continue the work even if the funding goes away • Juvenile Justice planning group • Long term group in place – PRMRS • Stakeholder involvement • State guidance on plans and exercises	• People don't know who we are/what we do • Communication • Geography • Why does accreditation matter? • Health Impact Assessments • Knowledge/attention to what rural and frontier America looks like • Enforcement – resources • Political will for enforcement • Work can be hard in small communities • Funding constraints – population based funding limits our resources • Getting more non-traditional public health partners involved • Law enforcement and judicial system involvement • Need more mental health presence • Not all partners at the table • Communication gaps – geography, age demographics, technology accessibility	• Funding/awareness for opioid issues/prescription drug monitoring	• Engaged board • Communication • Educate county/local governments about impact of policies on public health • HIAs • Communication • Braid the strategic plans • Educate the public – what the system is doing and how to personally respond

Essential Service 6: Enforce Laws and Regulations That Protect Health and Ensure Safety

Enforcing laws and regulations that protect health and ensure safety encompasses the following:

- Enforcing sanitary codes, especially in the food industry.
- Protecting drinking water supplies.
- Enforcing clean air standards.
- Initiating animal control activities.
- Following-up hazards, preventable injuries, and exposure-related diseases identified in occupational and community settings.
- Monitoring quality of medical services (e.g., laboratories, nursing homes, and home healthcare providers).
- Reviewing new drug, biologic, and medical device applications.

Essential Service 6		No Activity	Minimal	Moderate	Significant	Optimal
6.1.1.	Identify public health issues that can be addressed through laws, regulations, or ordinances?				■	
6.1.2.	Stay up-to-date with current laws, regulations, and ordinances that prevent health problems or that promote or protect public health on the federal, state, and local levels?				■	
6.1.3.	Review existing public health laws, regulations, and ordinances at least once every three to five years?			■		
6.1.4.	Have access to legal counsel for technical assistance when reviewing laws, regulations, or ordinances?			■		
6.2.1.	Identify local public health issues that are inadequately addressed in existing laws, regulations, and ordinances?			■		
6.2.2.	Participate in changing existing laws, regulations, and ordinances, and/or creating new laws, regulations, and ordinances to protect and promote public health?				■	
6.2.3.	Provide technical assistance in drafting the language for proposed changes or new laws, regulations, and ordinances?				■	
6.3.1.	Identify organizations that have the authority to enforce public health laws, regulations, and ordinances?					■
6.3.2.	Ensure that a local health department (or other governmental public health entity) has the authority to act in public health emergencies?					■
6.3.3.	Ensure that all enforcement activities related to public health codes are done within the law?					■
6.3.4.	Educate individuals and organizations about relevant laws, regulations, and ordinances?				■	
6.3.5.	Evaluate how well local organizations comply with public health laws?					■

Partners/Stakeholders: Disability Rights of NE, Legal Aid, Panhandle Equality, State Patrol, local law enforcement, NEDHHS, licensing, PPHD, SBCHD, hospitals, Region I BHA (local coalitions and other advocacy groups), Political system – state and local, probation, municipal government and city boards, PPC, planning commissions, state/local veterinarians, substance abuse prevention/PPC, office of Highway Safety

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Getting guidance that things will change will help us prepare • Relationships with policymakers at all levels • Public health is seen as credible source for guidance • Active advocacy groups • Sample policies for adoption on local level • Ability to address public health issues without taking action in legal realm • We enforce the ones we are tasked with well • We know who the enforcing agencies are	• Time involvement for review • Frequency of change – we are unaware • Limited local level of work, we are more reactive than proactive • Limited access to legal counsel on boards • Ability to address… • Very limited responsibility for enforcement	• Federal philosophical changes – degregulation in short term • Talk to legislative staff more often • Get a firm hold on legal counsel options – more frequent review means less time spent reviewing	• Review more often – dynamic • Mechanism for uniform distribution once changes are made • Process for review • Engage more at local level • Get more involved in drafting laws/regs/ords locally • Improved communication between state and local when there are violations, also for other enforcing agencies • Education – CIA – are we not getting complaints because there are none, or because people don't know to report it?

Essential Service 7: Link People to Needed Personal Health Services and Assure the Provision of Healthcare When Otherwise Unavailable

Linking people to needed personal health services and assuring the provision of healthcare when otherwise unavailable (sometimes referred to as outreach or enabling services) encompass the following:

- Ensuring effective entry for socially disadvantaged and other vulnerable persons into a coordinated system of clinical care.
- Providing culturally and linguistically appropriate materials and staff to ensure linkage to services for special population groups.
- Ensuring ongoing care management.
- Ensuring transportation services.
- Orchestrating targeted health education/promotion/disease prevention to vulnerable population groups.

Essential Service 7		No Activity	Minimal	Moderate	Significant	Optimal
7.1.1.	Identify groups of people in the community who have trouble accessing or connecting to personal health services?			■		
7.1.2.	Identify all personal health service needs and unmet needs throughout the community?		■			
7.1.3.	Defines partner roles and responsibilities to respond to the unmet needs of the community?		■			
7.1.4.	Understand the reasons that people do not get the care they need?		■			
7.2.1.	Connect or link people to organizations that can provide the personal health services they may need?				■	
7.2.2.	Help people access personal health services in a way that takes into account the unique needs of different populations?		■			
7.2.3.	Help people sign up for public benefits that are available to them (e.g., Medicaid or medical and prescription assistance programs)?			■		
7.2.4.	Coordinate the delivery of personal health and social services so that everyone in the community has access to the care they need?			■		

Partners/Stakeholders: Panhandle Equity, United Health Care, Aging Office of Western NE, ADRC, Disability Rights of NE, WCHR, Doves, Panhandle Partnership, Liberty Mobility Now, PPHD, SBCHD, Hospitals/providers/RNHN, Case Managers/DHHS, CAPWN, NCAP, Region I, Cirrus House, Schools/ESU 13, Nebraska Appleseed Foundation, Health insurers/Medicare/Medicaid, VOA, SSVF – veteran services/VA, faith based organizations, tribes, PWWC, Panhandle Prevention Coalition, WNCC, UNMC, Community Service Organizations, TCD/BBDC, PADD, Media, NDPP – lifestyle coaches and partner orgs, Community Walkability Coalitions, municipal governments, Legal Aid NE, businesses/employers, Heritage Health (MCOs), United Way, Trails Transportation, judicial systems, Dawes County Joint Planning, Early Development Network, regional treatment centers, Heartland Express Transportation, NE AIDS Project, Helping Hands, community groups, legislative representatives, all other partners

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Advocate at the lawmaker level & how it will affect our population • Organizations are getting feedback and data on service utilization and needs • Reviewing high utilization populations in ERs and other services to identify needs • Movements in integrated care service model • EHR system utilization to identify needs and use resource referral pattern • Primary care integrated care model lends to a holistic view • Funding system is supportive of integrated care models • Partnerships and idea sharing • Smaller communities adapting to needs • Smaller communities having more readily available information for issues or problems	• Dental/Oral health care access • Egos and not seeing cultural differences is a barrier to identifying and meeting needs • Need 1 point of contact for services, or Central Navigation (No Wrong Door) • Not able to integrate substance abuse records with other EHR systems • Fail to recognize core problems and co-occurring problems (homelessness, mental health, antibiotics, daycare, etc., much bigger picture) • Focus on the immediate need becomes a barrier to discovering root cause of problems • Can we meet people where they are more? • No pay for case management • Integrated care occurring in pockets. Can we make it more region-wide standard? • Increase directory usage and knowledge of services and partners • Coverages and insurance – unknown payor	• Partnership with FBOs by Giving assistance in immediate crisis and connect to resources and health care as well • Remove stigma in immediate need in order to look for long term population in need (people avoid seeking help/services for fear of stigma) • Continue to grow referral database • Responsibility of all of us to help make linkages, know our partners • Advocating with lawmakers as a regional approach, and sharing what is happening	• Judicial system partnerships high utilization rates – can we meet them where they are? • Central navigation system • Working on stigma to get assistance and utilize resources • Link with new systems and partners, judicial, early childhood network, etc., to meet people where they are and address root causes

Essential Service 8: Assure a Competent Public Health and Personal Healthcare Workforce

Ensuring a competent public and personal healthcare workforce encompasses the following:

- Educating, training, and assessing personnel (including volunteers and other lay community health workers) to meet community needs for public and personal health services.
- Establishing efficient processes for professionals to acquire licensure.
- Adopting continuous quality improvement and lifelong learning programs.
- Establishing active partnerships with professional training programs to ensure community-relevant learning experiences for all students.
- Continuing education in management and leadership development programs for those charged with administrative/executive roles.

Essential Service 8		No Activity	Minimal	Moderate	Significant	Optimal
8.1.1.	Complete a workforce assessment, a process to track the numbers and types of LPHS jobs—both public and private sector—and the associated knowledge, skills, and abilities required of the jobs?				■	
8.1.2.	Review the information from the workforce assessment and use it to identify and address gaps in the LPHS workforce?			■		
8.1.3.	Provide information from the workforce assessment to other community organizations and groups, including governing bodies and public and private agencies, for use in their organizational planning?		■			
8.2.1.	Ensure that all members of the local public health workforce have the required certificates, licenses, and education needed to fulfill their job duties and comply with legal requirements?				■	
8.2.2.	Develop and maintain job standards and position descriptions based in the core knowledge, skills, and abilities needed to provide the 10 Essential Public Health Services?				■	
8.2.3.	Base the hiring and performance review of members of the public health workforce in public health competencies?			■		
8.3.1.	Identify education and training needs and encourage the public health workforce to participate in available education and training?				■	
8.3.2.	Provide ways for public health workers to develop core skills related to the 10 Essential Public Health Services?		■			
8.3.3.	Develop incentives for workforce training, such as tuition reimbursement, time off for attending class, and pay increases?			■		
8.3.4.	Create and support collaborations between organizations within the LPHS for training and education?				■	

8.3.5.	Continually train the public health workforce to deliver services in a culturally competent manner and understand the social determinants of health?		■
8.4.1.	Provide access to formal and informal leadership development opportunities for employees at all organizational levels?		■
8.4.2.	Create a shared vision of community health and the LPHS, welcoming all leaders and community members to work together?	■	
8.4.3.	Ensure that organizations and individuals have opportunities to provide leadership in areas where they have knowledge, skills, or access to resources?		■
8.4.4.	Provide opportunities for the development of leaders who represent the diversity of the community?	■	

Partners/Stakeholders: Panhandle Equity, Panhandle Partnership Training Academy, Legal Aid, Aging Office of Western NE, Disability Rights of NE, required continuing education/credentialing, PPHD, SBCHD, Minority Health, CAPWN, colleges, public schools, hospitals, PWWC, Dept of Labor Training Grants, WCHR, DOVES, VOC/Rehab, Job Corps, UNL Extension, CYN, unions, NCAP, regional economic development agencies, Panhandle Health Group

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Assessments are happening • More awareness of workforce shortages organizations are addressing • Licensure/credentials monitored by organizations • Emergency preparedness • Training academy – identifying and bringing in trainings • Community Health Needs Assessment • Leadership development – BPW, SCORE, Leadership Scottsbluff, DELTA, etc	• Assessment data not shared • Awareness that assessment is being done – are multiple orgs doing the same thing? • Aligning SP/WFD reviews • Competencies not used in reviews • Education – due to location • Cost/location of training is the knowledge returning to community? • Lack of awareness of core competencies • Shared vision – not there yet • Diversity • Seeking true community feedback	• Share results back to participants	• Assessment repository • Org participation in assessment = raise org awareness • Broad-based evaluation • Increase awareness of 10 Essential Services • PPHD involvement in raising awareness • Increasing awareness of 10 Essential Services • Overcome barriers to attend trainings – telehealth, Zoom, etc, offer at different times • PPHD offer/organize training – work with training academy? •

Essential Service 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services

Evaluating effectiveness, accessibility, and quality of personal and population-based health services encompasses the following:

- Assessing program effectiveness through monitoring and evaluating implementation, outcomes, and effect.
- Providing information necessary for allocating resources and reshaping programs.

Essential Service 9		No Activity	Minimal	Moderate	Significant	Optimal
9.1.1.	Evaluate how well population-based health services are working, including whether the goals that were set for programs and services were achieved?			■		
9.1.2.	Assess whether community members, including vulnerable populations, are satisfied with the approaches taken toward promoting health and preventing disease, illness, and injury?		■			
9.1.3.	Identify gaps in the provision of population-based health services?		■			
9.1.4.	Use evaluation findings to improve plans, processes, and services?			■		
9.2.1.	Evaluate the accessibility, quality, and effectiveness of personal health services?			■		
9.2.2.	Compare the quality of personal health services to established guidelines?				■	
9.2.3.	Measure user satisfaction with personal health services?				■	
9.2.4.	Use technology, like the Internet or electronic health records, to improve quality of care?			■		
9.2.5.	Use evaluation findings to improve services and program delivery?			■		
9.3.1.	Identify all public, private, and voluntary organizations that contribute to the delivery of the 10 Essential Public Health Services?			■		
9.3.2.	Evaluate how well LPHS activities meet the needs of the community at least every five years, using guidelines that describe a model LPHS and involving all entities contributing to the delivery of the 10 Essential Public Health Services?					■
9.3.3.	Assess how well the organizations in the LPHS are communicating, connecting, and coordinating services?			■		
9.3.4.	Use results from the evaluation process to improve the LPHS?		■			

Partners/stakeholders: United Health Care, CHNA, hospitals, public health, ministry collaboratives, Disability Rights of NE, Legal Aid of NE, Liberty Mobility Now, DHHS, Region I, Panhandle Partnership, SEOW, PPHD, UNMC COPH, Joint Commission, CAPWN, NCAP, Panhandle Health Group, schools, Human Services Inc, NEBSAC

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Reporting requirements and IT requirements • New software – driven by the government	• Are we structuring data collection to get accurate data? • Technology = less patient contact • Is exchange of info assessed?	•	• Reporting back evaluation of assessments • Evidence based services

Essential Service 10: Research for New Insights and Innovative Solutions to Health Problems

Researching new insights and innovative solutions to health problems encompasses the following:

- Establishing full continuum of innovation, ranging from practical field-based efforts to fostering change in public health practice to more academic efforts that encourage new directions in scientific research.
- Continually linking with institutions of higher learning and research.
- Creating internal capacity to mount timely epidemiologic and economic analyses and conduct health services research.

Essential Service 10		No Activity	Minimal	Moderate	Significant	Optimal
10.1.1.	Provide staff with the time and resources to pilot test or conduct studies to test new solutions to public health problems and see how well they actually work?			■		
10.1.2.	Suggest ideas about what currently needs to be studied in public health to organizations that conduct research?			■		
10.1.3.	Keep up with information from other agencies and organizations at the local, state, and national levels about current best practices in public health?				■	
10.1.4.	Encourage community participation in research, including deciding what will be studied, conducting research, and sharing results?		■			
10.2.1.	Develop relationships with colleges, universities, or other research organizations, with a free flow of information, to create formal and informal arrangements to work together?			■		
10.2.2.	Partner with colleges, universities, or other research organizations to conduct public health research, including community-based participatory research?			■		
10.2.3.	Encourage colleges, universities, and other research organizations to work together with LPHS organizations to develop projects, including field training and continuing education?			■		
10.3.1.	Collaborate with researchers who offer the knowledge and skills to design and conduct health-related studies?				■	
10.3.2.	Support research with the necessary infrastructure and resources, including facilities, equipment, databases, information technology, funding, and other resources?			■		
10.3.3.	Share findings with public health colleagues and the community broadly, through journals, web sites, community meetings, etc.?			■		
10.3.4.	Evaluate public health systems research efforts throughout all stages of work from planning to effect on local public health practice?			■		

Partners/Stakeholders: Region I BHA, PPHD, UNMC/UNL/UNO/UNK, Stanford Social Innovation Review, Legal Aid of NE, Disability Rights of NE, Liberty Mobility Now, Colleges, public schools, hospitals, public health, UNL Extension

Strengths	Weaknesses	Short Term Opportunities	Long Term Opportunities
• Technology, Telemedicine • Worksite Wellness, health coaching, NDPP, MAPP	• Data not available / provided • Room for more research opportunities	• Share local findings • Further partnering w/UNMC • Practicum	• Seeking research options • Room for more research • Labrat for research

• WNCC – Training Academy • Planning	• Data not compiled • seeking research options • numerous locations for similar data needing to be entered • not same data entered • sometimes different programs can't discuss finding • Implementing	• Report the good things that happen	