### 2014 Community Health Assessment



# Rural Burleigh County

## North Dakota

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### **Executive Summary**

To help inform future decisions and strategic planning, the Burleigh County Board of Health, working with the Custer-Burleigh-Emmons-Kidder Regional Collaborative, conducted a community health needs assessment in the rural portion of Burleigh County. The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences facilitated the assessment, which included the solicitation of input from area community members and health care professionals as well as analysis of community health-related data. The regional coordinator from Custer-Burleigh-Emmons-Kidder Regional Collaborative helped to coordinate assessment activities.

To gather feedback from the community, residents of rural Burleigh County and local health care professionals were given the chance to participate in a survey. Approximately 31 community members and health care professionals took the survey. Additional information was collected through a Community Group comprised of community members and through key informant interviews with community leaders. Eighteen residents participated as a Community Group member, key informant interviewee, or both. The input from all of these residents represented the broad interests of the communities that make up rural Burleigh County. Together with secondary data gathered from a wide range of sources, the information gathered presents a snapshot of health needs and concerns in the county.

Approximately 8% of the population of rural Burleigh County is over age 65. This percentage is considerably less than the rate of North Dakota as a whole. The median age for rural Burleigh County residents is 36.7, compared to a state median age of 36.9. The median household income in Burleigh County (including the entire county) is higher than for the rest of North Dakota - \$61,811 compared to \$53,741. The average household size in Burleigh County is 2.34 individuals.

Data compiled by County Health Rankings show that with respect to health outcomes, Burleigh County as a whole performs well, landing in the top 10% of counties nationally on some self-reported measures of health and well-being. While residents report good overall health, however, the county fares more poorly on individual factors that influence health, such as health behaviors, clinical care, social and economic factors, and the physical environment. Factors on which Burleigh County was performing especially poorly included:

- Alcohol-impaired driving deaths 7% above the state rate
- Sexually transmitted infections almost 40 points higher than the state rate
- Violent crime almost 10 points higher than the state rate.

Results from the survey revealed that of 78 potential community and health needs set forth in the survey, rural Burleigh County residents taking the survey keyed in on issues related to the cost of, and access to, health care, as well as issues concerning older residents. The survey-takers chose the following eight needs as the most important:

- 1. Cost of health care services
- 2. Cost of health insurance
- 3. Availability of resources to help elderly stay in their homes
- 4. Cost of prescription drugs
- 5. Adequacy of health insurance
- 6. Being able to meet the needs of older population
- 7. Youth drug use and abuse
- 8. Not enough affordable housing

Echoing these concerns the survey also revealed that the biggest barriers to receiving health care as perceived by community members were the lack of health insurance and health care costs. When asked what the good aspects of the county were, respondents indicated that the top community assets were:

- friendly and helpful people
- a good place to raise kids
- healthy place to live
- the cleanliness of the area
- recreational and sports activities

Input from Community Group members and community leaders provided through a focus group and key informant interviews confirmed many of the concerns raised by survey respondents, but also highlighted additional community concerns. Thematic concerns emerging from these sessions were:

- Lack of transportation options
- Ineffective enforcement of environmental health standards
- Lack of outreach/human touch to elderly and homebound residents
- Concerns about availability of emergency services

Following careful consideration of the results and findings of this assessment, Community Group members were asked to rank identified community needs. Collectively, they determined that the most significant health needs or issues in the community are: (1) the elevated rate of excessive drinking, (2) the cost and adequacy of health insurance, (3) concerns about the availability of emergency services, (4) the cost of health care services, and (5) the availability of resources to help the elderly stay in their homes.

### **Overview and Community Resources**

The purpose of conducting a community health needs assessment is to describe the health of local people, identify areas for health improvement, identify use of local health care services, determine factors that contribute to health issues, identify and prioritize community needs, and help health care leaders identify potential action to address the community's health needs. A health needs assessment benefits the community by: 1) collecting timely input from the local community, providers, and staff; 2) providing an analysis of secondary data related to health-related behaviors, conditions, risks, and outcomes; 3) compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan; and 4) engaging community members about the future of health care. Completion of a health assessment also is a requirement for public health departments seeking accreditation.

With assistance from Custer Health the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences, the Burleigh County Board of Health completed a community health assessment in rural Burleigh County. Many community members and stakeholders worked together on the assessment. Among the resources and assets of rural Burleigh County are the public health department and a wide variety of programs and facilities, as explained in more detail below.

Other assessments have been conducted in the area in recent years. Sanford Health Bismarck conducted an assessment in the area dated 2012-13. St. Alexius Medical Center conducted an assessment that included Burleigh, Morton, and Ward counties; the assessment is dated 2010 and was published in 2012. Both assessments identified obesity and diabetes as significant community health needs, while the St. Alexius assessment also identified as priority needs cardiovascular disease, Alzheimer's disease, cancer, and respiratory disease. The current assessment differs from these previous regional assessments in that it specifically targeted the rural areas of Burleigh County for collection of primary data and expressly sought to identify health needs in the rural portion of the county.

### **Burleigh-Burleigh Public Health**

The Burleigh County Board of Health contracts services through Bismarck-Burleigh Public Health. Bismarck-Burleigh Public Health is committed to safeguarding the health of every citizen in the community. Bismarck-Burleigh Public Health plans and promotes health and safety for residents through disease and injury prevention. Public health is prevention, promoting health, and protecting the public, and the local unit strives to ensure the health and safety of the community and its citizens. Specific services provided by Bismarck-Burleigh Public Health are:

- <u>Health Services</u> Registered Nurses provide various health screening assessments and services such as:
  - o Immunizations/flu shots
  - Foot care
  - STD/HEP C/HIV testing and counseling
  - TB testing
  - o Injections
  - Medication set-up
  - Lactation counseling
  - Car seat safety education
  - Newborn home visits
  - Prenatal education and assessments
  - Blood pressure screenings
  - Cholesterol screening
- <u>Health Tracks Screenings</u> A Registered Nurse provides free prevention health screenings for Medicaid eligible clients from newborn to 21 years.
- <u>Health Maintenance</u> Registered nurses provide nursing care and case management in a client's home.
- <u>Nutrition Services</u> A Licensed Registered Dietician (LRD) provides healthy lifestyle and nutrition education services for individuals and/or groups.
- Tobacco prevention and cessation
- Emergency preparedness
- Women's Way

### **Other Community Resources**

Lincoln has a number of community assets and resources for the betterment of the

community residents. In terms of physical assets and features, the community includes several community parks, softball diamond, basketball courts, BMX course, horse shoe pits, Frisbee golf course, and many paved outdoor walking paths. Residents are able to reserve



the facilities and buildings for community events, family functions, and other outdoor gatherings.

About 21 miles north of Bismarck is the town of Wilton. Wilton is located on the border of McLean and Burleigh counties, and offers a variety of services for rural residents in



both. The physical offerings include four parks that feature two shelters, picnic tables, electrical hookups, modern playground equipment, and rest rooms. The surrounding area is also part of a game hunting area, with deer, pheasants, grouse, and partridge. Wilton has a volunteer ambulance and fire department that are on call 24 hours a day, as well as a local senior center, assisted living facility, and veterinary clinic. The business community includes a bank, post

office, convenience store/gas station, cafe, bars, greenhouse, and optometrist.

Other rural Burleigh community resources and programs include:

- The Bountiful Baskets program, which provides customers with fresh fruits and vegetables in season.
- An active set of community groups, including Women of Wilton (WOW), Wilton Tree Board, Lions Club, and American Legion Auxiliary.
- Sunne Evangelical Lutheran Church offers a Wilton Mentor program to assist middle and high school students with leadership, community volunteering, and service learning opportunities.

### **Assessment Process**

This assessment examines health needs and concerns in rural Burleigh County. Burleigh County, located in south central North Dakota, is home to Bismarck, the state's capital. Many of the necessary services for county residents are located in Bismarck, but several smaller communities throughout rural Burleigh County also have services for residents. According to the 2013 U.S. Census population estimates, Burleigh County has a population of 88,457, with Bismarck comprising 67,034 of the total. Rural Burleigh has several incorporated cities, including Lincoln (population 3,099), Wilton (population 732), Wing (population 159), and Regan (population 44). Unincorporated communities include Baldwin, Driscoll, McKenzie, Menoken, Moffit, and Sterling. Figure 1 illustrates the location of Burleigh County.



#### Figure 1: Burleigh County, North Dakota

The Center for Rural Health provided substantial support to Bismarck-Burleigh Public Health and Custer Health in conducting this needs assessment. The Center for Rural Health is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. As the federally designated State Office of Rural Health (SORH) for the state and the home to the North Dakota Medicare Rural Hospital Flexibility (Flex) program, the Center connects the School of Medicine and Health Sciences and the university to rural communities and their health institutions to facilitate developing and maintaining rural health delivery systems. In this capacity the Center works both at a national level and at state and community levels.

The assessment process was highly collaborative. The chairperson of the Burleigh County Board of Health, who resides in the rural area of the county, took part in planning the assessment. Along with the administrator of Kidder County District Health Unit – the public health unit that covers neighboring Kidder County – and the regional coordinator from Custer Health, the Burleigh County Board of Health chair was involved in planning and implementing the process. Representatives of Bismarck-Burleigh Public Health and Kidder County District Health Unit collaborated on developing a joint survey instrument that could be used in both counties, since the public health units in both counties were undertaking community needs assessments at the same time. Along with representatives from the Center for Rural Health and Custer Health, they met regularly by telephone conference and via email. The Community Group (described in more detail below) provided in-depth information and informed the assessment in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and health care services. Representatives from both Bismarck-Burleigh Public Health and Custer Health were involved considerably in planning and organizing the Community Group meetings. Members of the Community Group included primarily residents from outside the health department.

As part of the assessment's overall collaborative process, the Center for Rural Health spearheaded efforts to collect data for the assessment in a variety of ways: (1) a survey solicited feedback from area residents, including health care professionals; (2) community leaders representing the broad interests of the community took part in one-on-one key informant interviews; (3) the Community Group comprised of community leaders and area residents was convened to discuss area health needs and inform the assessment process; and (4) a wide range of secondary sources of data was examined, providing information on a multitude of measures including demographics; health conditions, indicators, and outcomes; rates of preventive measures; rates of disease; and at-risk behaviors.

A collaborative effort that took into account input from health organizations around the state led to the development of the survey instrument used in this assessment. The North Dakota Department of Health's public health liaison organized a series of meetings that garnered input from the state's health officer, local public health unit professionals from around North Dakota, representatives of the Center for Rural Health, and representatives from North Dakota State University. The collaborative process involved multiple revisions to the template survey instrument that in the end reflected

input from all of the constituency groups. Those providing input had diverse opinions on the best way to identify and collect data.

Detailed below are the methods undertaken to gather data for this assessment by convening a Community Group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

### **Community Group and Key Informant Interviews**

By serving in a Community Group, as a key informant, or both, 18 community members were afforded the opportunity, in addition to taking a survey, of providing in-depth insights and community information to help inform this assessment. A Community Group representing many facets of the community was convened and first met on July 14, 2014. During this first Community Group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about Burleigh County, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The Community Group met again on September 23, 2014. At this second meeting the group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data relating to the general health of the population in Burleigh County (and specifically in rural Burleigh County, where the data was available). The group was then tasked with identifying and prioritizing the community's health needs as well as brainstorming strategies to help meet prioritized needs.

Members of the Community Group represented the broad interests of the community served by Bismarck-Burleigh Public Health. They included representatives of local health services, local government, social service agencies, and the faith community. Included among the Community Group members was a public health professional with special knowledge in public health acquired through several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with populations with chronic diseases.

One-on-one interviews with key informants from Burleigh County were conducted in person in Bismarck, or by telephone, on July 15, 17, 18, and 28. A representative from the Center for Rural Health conducted the interviews. Interviews were held with selected members of the Community Group as well as other key informants who could provide insights into the community's health needs. Topics covered during the interviews

included the general health needs of the community, the general health of the community, community concerns, delivery of health care by local providers and health organizations, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.

### Survey

A survey was distributed to gather feedback from the community. The survey was not intended to be a scientific or statistically valid sampling of the population. Rather, it was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs.

The survey was distributed to various residents of rural Burleigh County. The survey tool was designed to:

- Learn of the good things in the community and the community's concerns;
- Understand perceptions and attitudes about the health of the community, and hear suggestions for improvement; and
- Learn more about how local health services are used by residents.

Specifically, the survey covered the following topics: residents' perceptions about community assets and challenges, levels of collaboration within the community, broad areas of community and health concerns, need for health services, awareness of available health services, barriers to using local health care, preferences for using local health care versus traveling to other facilities, travel time to a clinic and hospital, use of preventive care, use of public health services, suggestions to improve community health, and basic demographic information.

Approximately 600 community member surveys were available for distribution in Kidder County and rural Burleigh County. The surveys were distributed by Community Group members, through Custer Health, and at other local public venues. To help ensure anonymity, included with each survey was a postage-paid return envelope to the Center for Rural Health. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling Bismarck-Burleigh Public Health or Custer Health. The survey period ran from July 1 to August 15, 2014. Unfortunately, the rate of response from rural Burleigh County residents was very low. Only 30 completed paper surveys from Burleigh County were returned.

Area residents also were given the option of completing an online version of the survey. Only one online survey was completed. In total, counting both paper and online surveys, 31 Burleigh County surveys were completed.<sup>1</sup> Copies of the survey instruments, both the paper and online versions, are included in Appendix A.

### **Secondary Data**

Secondary data was collected and analyzed to provide descriptions of: (1) population demographics, (2) general health issues (including any population groups with particular health issues), and (3) contributing causes of community health issues. Data were collected from a variety of sources including the U.S. Census Bureau; the North Dakota Department of Health; the Robert Wood Johnson Foundation's County Health Rankings (which pulls data from 20 primary data sources); the National Survey of Children's Health Data Resource Center; the Centers for Disease Control and Prevention; the North Dakota Behavioral Risk Factor Surveillance System; and the National Center for Health Statistics.

<sup>&</sup>lt;sup>1</sup> The same survey also was available to residents of neighboring Kidder County, where the same assessment team conducted a similar assessment of Kidder County. Survey-takers were asked to identify their county of residence. In total, 114 surveys were completed, with 83 from Kidder County and 31 from Burleigh County. This report includes results only from Burleigh County.

### **Demographic Information**

Table 1 summarizes general demographic and geographic data about rural Burleigh County.

TABLE 1: RURAL BURLEIGH COUNTY:         INFORMATION AND DEMOGRAPHICS         (From 2010 Census/2012 American Community Survey; more recent estimates used where available)			
	Rural Burleigh County (excludes Bismarck)	North Dakota	
Population, 2013 est.	21,423	723,393	
Population change, 2010-2013	22.8%	7.6%	
Land area, square miles	1,602	69,001	
People per square mile, 2010	49.8	9.7	
White persons (not incl. Hispanic/Latino), 2013 est.	87.2%	87.3%	
Persons under 18 years, 2013 est.	25.2%	22.5%	
Persons 65 years or older, 2013 est.	8.2%	14.2%	
Median age, 2012 est.	36.7	36.9	
Non-English spoken at home, 2012 est.	4.1%	5.2%	
High school graduates, 2012 est.	94.2%	90.5%	
Bachelor's degree or higher, 2012 est.	31.3%	27.1%	
Live below poverty line, 2012 est.	4.4%	12.1%	

While the population of North Dakota has grown in recent years, Burleigh County, including the rural sections, has seen an even more rapid increase in population since 2010 than the state rate. Demographic information and trends that have implications for the community's health and the delivery of health care include:

• A high rate of population increase, especially during a three-year period, can indicate that services may not have the capacity or capability to meet the needs of all residents.

### **Health Conditions, Behaviors, and Outcomes**

As noted above, several sources of secondary data were reviewed to inform this assessment. The data are presented below in three categories: (1) County Health Rankings, (2) the public health community profile, and (3) children's health.

### **County Health Rankings**

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, Burleigh County is compared to North Dakota rates and national benchmarks on various topics ranging from individual health behaviors to the quality of health care.

The data used in the 2014 County Health Rankings are pulled from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Below is a breakdown of the variables that influence a county's rank. A model of the 2014 County Health Rankings – a flow chart of how a county's rank is determined – may be found in Appendix B. For further information, visit the County Health Rankings website at www.countyhealthrankings.org.

Health Outcomes	Health Factors (continued)		
Length of life	• Social and Economic Factors		
Quality of life	<ul> <li>Education</li> </ul>		
	o Employment		
Health Factors	o Income		
Health Behavior	<ul> <li>Family and social support</li> </ul>		
<ul> <li>Smoking</li> </ul>	<ul> <li>Community safety</li> </ul>		
<ul> <li>Diet and exercise</li> </ul>	Physical Environment		
<ul> <li>Alcohol and drug use</li> </ul>	<ul> <li>Air and water quality</li> </ul>		
<ul> <li>Sexual activity</li> </ul>	<ul> <li>Housing and transit</li> </ul>		
Clinical Care			
<ul> <li>Access to care</li> </ul>			
<ul> <li>Quality of care</li> </ul>			

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Burleigh County. It is important to note that these statistics describe the

population of a county, regardless of where county residents choose to receive their medical care. Further, County Health Rankings – as well as many of the primary sources of data on which it draws for its rankings – does not present data at a level more specific than the county level. In other words, information presented by County Health Rankings applies to Burleigh County as a whole, not just the rural portion of it. This limitation should be considered when examining the data.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2014. The Top Performer number marks the point at which only 10% of counties in the nation do better, i.e., the 90th percentile or 10th percentile, depending on whether the measure is framed positively (such as high school graduation) or negatively (such as adult smoking). Burleigh County's rankings within the state also are included in the summary below: Burleigh County ranks 20<sup>th</sup> out of 45 ranked counties in North Dakota on health outcomes and 1<sup>st</sup> on health factors.

The measures marked with a red checkmark ( $\checkmark$ ) in Table 2 are those where Burleigh County is not measuring up to the state rate; a blue checkmark ( $\checkmark$ ) indicates that the county is faring better than the North Dakota average, but not meeting the U.S. Top 10% rate. Measures that are not marked with a colored checkmark, but are marked with a smiling icon (O) indicate that the county is ranked in the Top 10% of counties nationally on that indicator.

TABLE 2: SELECTED MEASURI BURI	ES FROM <i>COUNTY HEA</i> LEIGH COUNTY	LTH RANKING	55 –
	Burleigh County (including Bismarck)	U.S. Top 10%	North Dakot
Ranking: Outcomes	20 <sup>th</sup>		(of 45)
Premature death	5,473 🗸	5,317	6,244
Poor or fair health	10% 🕲	10%	12%
Poor physical health days (in past 30 days)	2.8 🗸 🗸	2.5	2.7
Poor mental health days (in past 30 days)	2.4 🕲	2.4	2.4
Low birth weight	7% 🗸 🗸	6.0%	6.6%
% Diabetic	7%	-	8%
Ranking: Factors	1 <sup>st</sup>		(of 45)
Health Behaviors			
Adult smoking	13% 🕲	14%	18%
Adult obesity	27% 🗸	25%	30%
Food environment index	9.4 🕲	8.7	8.7
Physical inactivity	21% 🕲	21%	26%
Access to exercise opportunities	74% 🗸	85%	62%
Excessive drinking	19% 🗸	10%	22%
Alcohol-impaired driving deaths	53% 🗸 🗸	14%	46%
Sexually transmitted infections	397 🗸 🗸	123	358
Teen birth rate	24 🗸	20	28
Clinical Care			
Uninsured	10% 🕲	11%	12%
Primary care physicians	956:1 🕲	1,051:1	1,320:1
Dentists	1,340:1 🕲	1,392:1	1,749:1
Mental health providers	975:1 🗸	521:1	1,033:1
Preventable hospital stays	42 🕲	46	59
Diabetic screening	88% 🗸	90%	86%
Mammography screening	69% 🗸	71%	68%
Social and Economic Factors			
Unemployment	2.7% 🕲	4.4%	3.1%
Children in poverty	9% ©	13%	14%
Inadequate social support	15% 🗸	14%	16%
Children in single-parent households	25% 🗸	20%	26%
Violent crime	235 🗸 🗸	64	226
Injury deaths	55 🗸	49	63
Physical Environment			
Air pollution – particulate matter	9.8 🗸	9.5	10.0
Drinking water violations	0% 🕲	0%	1%
Severe housing problems	10% 🗸	9%	11%

✓ = Not meeting NorthDakota average

✓ = Not meeting U.S.Top 10% Performers

© = Meeting or exceeding U.S. Top 10% Performers The data from County Health Rankings show that Burleigh County is doing well as compared to the rest of North Dakota on measures of health *factors* – being ranked first in the state on health factors – and even landing in the top performing 10% of counties nationally for adult smoking, access to healthy food, physical activity, rates of health insurance and employment, children not living in poverty, and the ratio of dentists and primary care physicians. Burleigh County's unemployment rate is among the lowest in the nation. Burleigh County was not measuring up to the state rates, however, on alcohol-impaired driving deaths, sexually transmitted infections, and violent crime. Specifically:

- Alcohol-impaired driving deaths 7% above the state rate
- Sexually transmitted infections almost 40 points higher than the state rate
- Violent crime almost 10 points higher than the state rate.

While Burleigh County generally ranked very favorably on health *factors*, it was not rated quite as favorably on health *outcomes*. Burleigh County landed in the top performing 10% of counties nationally on self-reported poor or fair health and poor mental health days, but its rates were worse than North Dakota on low birth weight, and self-reported poor physical health days.

A concerning aspect of the information reported by County Health Rankings was trend data indicating that several measures are getting worse. For example, as shown in Figure 2, the adult obesity rate has increased since 2004, and if current trends continues, it soon may surpass the state and national averages.



Figure 2 – Rising rate of adult obesity in Burleigh County

Likewise, following a similar trend, the rate of violent crime also has seen recent increases, with the rate more than doubling since 2004. This trend is illustrated in Figure 3.





The rate of sexually transmitted infections in Burleigh County also has had a noticeable increase in recent years, increasing more rapidly than the state average, as shown in Figure 4.



Figure 4 – Rising rate of sexually transmitted infections in Burleigh County

On a positive note, within the last decade the level of preventable hospital stays has shown some improvement. This factor measures the number of patients being hospitalized for conditions that may amenable to outpatient care. This improvement may suggest a lessening tendency to overuse the hospital as a main source of care. Also showing a slightly positive trend, at least since 2003, is the rate of diabetic screenings, which is following a similar trend to the state and national averages. These more positive trends are illustrated in Figures 5 and 6.



Figure 5 – Level of preventable hospital stays in Burleigh County





#### **Public Health Community Health Profile**

Included as Appendix C is the North Dakota Department of Health's community health profile for Burleigh County. Prepared by the North Dakota Department of Health, the profile includes county-level information about population and demographic characteristics, birth and death data, behavioral risk factors, crime, and child health indicators. In Burleigh County, the most commonly reported causes of death were heart disease, cancer, Alzheimer's disease, stroke, chronic obstructive pulmonary disease, and unintentional injury. Suicide was the leading cause of death among those aged 15 to 24, while unintentional injury was the leading cause of death for residents aged 25 to 44. For those aged 45 to 84, cancer was the leading cause of death, followed by heart disease. A graph illustrating leading causes of death in various age groups in the county may be found in Appendix C.

With regard to adult behavioral risk factors, in comparison to North Dakota, Burleigh County was faring better than North Dakota on the following measures:

- Lower rate of binge drinking
- Lower rate of obesity
- Lower rate of those lacking health insurance coverage
- Lower rate of those lacking a personal doctor or health care provider
- Higher rate of seat belt use
- Higher rate of annual dental visits
- Lower rate of smoking

On the other hand, the county was faring worse than North Dakota on:

- Lower rate of those receiving a certain colorectal cancer screening test
- Higher rate of violent crime
- Higher rate of property crime

### **Children's Health**

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data are not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality health care, and information on the child's family, neighborhood, and social context. Data are from 2011-12. More information about the survey may be found at: www.childhealthdata.org/learn/NSCH.

Key measures of the statewide data are summarized below. The rates highlighted in **red** signify that the state is faring worse on that measure than the national average.

TABLE 3: SELECTED MEASURES REGARDING CHILDREN'S HEALTH (For children aged 0-17 unless noted otherwise)		
Health Status	North Dakota	National
Children born premature (3 or more weeks early)	10.8%	11.6%
Children 10-17 overweight or obese	35.8%	31.3%
Children 0-5 who were ever breastfed	79.4%	79.2%
Children 6-17 who missed 11 or more days of school	4.6%	6.2%
Health Care		
Children currently insured	<b>93.5%</b>	94.5%
Children who had preventive medical visit in past year	78.6%	84.4%
Children who had preventive dental visit in past year	74.6%	77.2%
Young children (10 mos5 yrs.) receiving standardized screening for developmental or behavioral problems	20.7%	30.8%
Children aged 2-17 with problems requiring counseling who received needed mental health care	86.3%	61.0%
Family Life		
Children whose families eat meals together 4 or more times per week	83.0%	78.4%
Children who live in households where someone smokes	29.8%	24.1%
Neighborhood		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	58.9%	54.1%
Children living in neighborhoods with poorly kept or rundown housing	12.7%	16.2%
Children living in neighborhood that's usually or always safe	94.0%	86.6%

The data on children's health and conditions reveals that while North Dakota is doing better than the national averages on a few measures, it is not measuring up to the national averages with respect to:

- Obese or overweight children
- Children with health insurance
- Preventive primary care and dentist visits
- Developmental/behavioral screening
- Children in smoking households

Importantly, more than one in five of the state's children are not receiving an annual preventive medical visit or a preventive dental visit. Lack of preventive care now affects these children's future health status.

Table 4 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS

COUNT data focus on main components of children's well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The year of the most recent data is noted.

The data show that Burleigh County is performing better than the North Dakota average on all of the examined measures. The most marked differences were on the measures of: Uninsured children in households below the 200% poverty rate; and Supplemental Nutrition Assistance Program (SNAP) recipients.

TABLE 4: SELECTED COUNTY-LEVEL MEASURES REGARDING CHILDREN'S HEALTH		
	Burleigh County	North Dakota
Uninsured children (% of population age 0-18), 2012	6.1%	7.3%
Uninsured children below 200% of poverty (% of population), 2012	48.7%	51.9%
Medicaid recipient (% of population age 0-20), 2013	23.1%	28.0%
Children enrolled in Healthy Steps (% of population age 0-18), 2013	2.4%	2.5%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2012	17.7%	23.0%
Licensed child care capacity (% of population age 0-13), 2014	41.5%	40.0%
High school dropouts (% of grade 9-12 enrollment), 2013	2.7%	2.8%

### **Survey Results**

As noted above, 31 community members completed the survey. Survey results are reported in seven categories: demographics; health care access; community assets, challenges, and collaboration; community concerns; delivery of health care; preventive care and public health services; and other concerns or suggestions to improve health.

### **Survey Demographics**

To better understand the perspectives being offered by survey respondents, surveytakers were asked a few demographic questions. Throughout this report, numbers (N) instead of percentages (%) are reported because percentages can be misleading with smaller sample sizes. Survey respondents were not required to answer all survey questions; they were free to skip any questions they wished.

With respect to demographics of those who chose to take the survey:

- About half (N=15) were aged 65 or older.
- A large majority (N=21) were female.
- Nearly half (N=14) had associate's degrees or higher, with a plurality of respondents (N=8) having high school diplomas.
- Nearly half (N=14) worked full-time, with a substantial number (N=12) retired.
- A minority of respondents (N=6) had household incomes of less than \$50,000.

Figure 7 shows these demographic characteristics. It illustrates how this assessment took into account input from parties who represent the varied interests of the community served, including wide age ranges, those in diverse work situations, and lower-income community members.



#### Figure 7: Demographics of Survey-Takers – Burleigh County

### **Education Level**

6

5

### Some high school

- High school diploma or GED
- Some college/technical degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree

### **Employment Status**



3 1 7

### **Household Income**

- \$0 to \$14,999
- \$15,000 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 and over
- Prefer not to answer

### **Health Care Access**

Community members were asked how far they lived from the hospital and clinic they usually go to. A large plurality (N=21) reported living within 10 to 30 minutes of the hospital they usually go to, while eight respondents indicated they live within 31 to 60 minutes from the hospital they usually go to. Driving distances, along with lack of transportation options, can have a major effect on access to health care services, especially in winter when weather conditions lead to hazardous driving conditions. With respect to distance to respondents' clinic of choice, a majority (N=19) said they lived 10 to 30 minutes from the clinic. Eight reported driving between 31 minutes and one hour to the clinic they usually go to. Figures 8 and 9 illustrate these results.









Community members also were asked what, if any, health insurance they have. Health insurance status often is associated with whether people have access to health care. One of the respondents reported having no health insurance or being under-insured. The

most common insurance types were insurance through one's employer (N=16), Medicare (N=15), and private insurance (N=8).



Figure 10: Insurance Status

### **Community Assets, Challenges, and Collaboration**

Survey-takers were asked what they perceived as the best things about their community in five categories: people, services and resources, quality of life, geographic setting, and activities. In each category, respondents were given a list of choices and asked to pick the top three. Respondents occasionally chose less than three or more than three choices within each category. The results indicate there is consensus (with at least half of the respondents agreeing) that community assets include:

- friendly and helpful people (N=26)
- a good place to raise kids (N=23)
- healthy place to live (N=21)
- the cleanliness of the area (N=21)
- recreational and sports activities (N=20)
- quality school systems and youth programming (N=18)
- health care (N=18)
- natural setting to enjoy outdoors and nature (N=16)
- activities for families and youth (N=16)

Figures 11 to 15 illustrate the results of these questions.



#### Figure 11: Best Things about the PEOPLE in Your Community







Figure 13: Best Things about the QUALITY OF LIFE in Your Community

Figure 14: Best Things about the GEOGRAPHIC SETTING of Your Community





#### Figure 15: Best Thing about the ACTIVITIES in Your Community

The survey also included the question, "What are other 'best things' about your community that are not listed in the questions above?" Specific responses included:

- Low joblessness.
- Economic development.
- Community pride.
- Overall people are friendly and willing to assist.
- Near Bismarck for all health needs and shopping.

In another open-ended question, residents were asked, "What are the major challenges facing your community?" Twenty-one respondents provided answers. The most common responses related to the growth in population (N=7) and the lack of infrastructure (such as overwhelmed roads, housing, and emergency services) (N=6).

Specific comments provide some insights into the reasoning behind these issues being singled out as community challenges:

- Rapid growth, which strains resources.
- Rapid population growth creates needs for more of everything.
- Fire department far away to get to us in time.
- Seems no matter where you shop or eat out, there is always a shortage of workers.
- The rapid growth keeping up with the infrastructure.
- Lack of activities for families. Lack of mental health services.

Those taking the survey generally agreed that when it comes to collaboration among various organizations and constituencies in the community, for many stakeholders there

was room for improvement. Respondents were asked to rate the level of collaboration, or "how well these groups work with others in the community," on a scale of 1 to 5. The results show that residents perceived schools, law enforcement, public health, and emergency services as having the most effective collaboration with other community stakeholders. Groups that were perceived as needing improvement in collaborating included business and industry, economic development organizations, and health and human services agencies.



#### Figure 16: Community Collaboration

Survey-takers were asked whether they believe health-related organizations in the community are working together to improve the overall health of the area population. As shown in Figure 17, by a wide margin residents answered this question in the affirmative.





To better understand residents' perceptions about better coordination and collaboration among health care organizations, they were asked what they thought would result from health entities working together. As shown in Figure 18, residents predicted that better collaboration would result in lower costs, better population health, better customer service, better patient care, and more complete and accurate health records. Respondents were less inclined to believe that better care coordination would mean fewer appointments, better coordination of appointments, or less duplication of care.



#### Figure 18: Potential Effects of Improved Collaboration among Health Entities

Residents also were asked if they had any suggestions for ways that health-related organizations could work together to provide better services and improve overall health in the area. Seven respondents offered suggestions, three of whom suggested the use of uniform medical records system.

The survey revealed that, by a large margin, residents learned about available health services through word of mouth from, for example, friends, family, co-workers, and neighbors. Those working in health care also were a common source of information about health services.



#### Figure 19: Sources of Information about Health Care Services

### **Community Concerns**

At the heart of this health needs assessment was a section of the survey asking surveytakers to review a wide array of potential community and health concerns in five categories and rank them each on a scale of 1 to 5, with 5 being more of a concern and 1 being less of a concern. The five categories of potential concerns were:

- community/environmental concerns
- concerns about health services
- physical, mental health, and substance abuse concerns
- concerns specific to youth and children
- concerns about the aging population

Echoing the weight of survey-takers' comments in response to the open-ended question about community challenges, the two most highly ranked concerns were cost of health care services (4.43 on a scale of 5.0) and cost of health insurance (4.36). These issues stood out as the most important in the health services category, with a large gap between these issues and the next most-noted concerns in any other category. The issues that had a mean ranking on the 1-to-5 scale of at least 4.0 include:

- cost of health care services (4.43)
- cost of health insurance (4.36)
- availability of resources to help elderly stay in their homes (4.20)
- cost of prescription drugs (4.14)
- adequacy of health insurance (4.13)
- being able to meet the needs of older population (4.07)
- youth drug use and abuse (4.07)
- not enough affordable housing (4.03)

Other issues ranked as highly concerning (with a mean ranking of at least 3.9) were:

- youth alcohol use and abuse (3.97)
- availability/cost of activities for seniors (3.97)
- youth obesity (3.93)
- availability of resources for family and friends caring for elders (3.90)

Figures 20 through 24 illustrate these results.


## Figure 20: Community/Environmental Concerns



### Figure 21: Concerns about Health Services



## Figure 22: Physical, Mental Health, and Substance Abuse Concerns



## Figure 23: Concerns Specific to Youth and Children

## Figure 24: Concerns about the Aging Population



# **Delivery of Health Care**

The survey asked community members why they seek health care services close to home and why they go out of the area for health care needs. Respondents were allowed to choose multiple reasons.

Convenience (N=23) and proximity (N=20) topped the list of reasons that residents sought care locally, with familiarity with providers (N=19), high quality of care (N=19), and health care providers accept their insurance (N=19) also garnering a substantial number of responses. With respect to the reasons community members seek health care services out of the area, the primary motivators for seeking care elsewhere was, to access a needed specialist (N=15), and due to a referral (N=12). These results are illustrated in Figures 25 and 26.







## Figure 26: Reasons Community Members Seek Services Out of the Area – Burleigh County

The survey also solicited input about what health care services should be added locally. Nine respondents provided suggestions. Requested most commonly were specialists (including gerontology, dermatology, and pediatric gastroenterology) (N=3) and mental health services (N=2).

The survey asked residents what they see as barriers to that prevent them or others from receiving health care. The most prevalent barrier perceived by residents was a lack of insurance or limited insurance (N=12). There was little variance in the frequency with which other potential barriers were selected, with more than half of them identified by five to seven respondents. Figure 27 illustrates these results.



## Figure 27: Perceptions about Barriers to Care

# **Preventive Care and Public Health Services**

To gauge the impact and effectiveness of Burleigh County's public health-oriented services in the community, the survey included questions specific to public health services.

Those taking the survey were asked whether they or a family member had any interaction with their local public health unit, and, in a separate question, what public health services they or a family member had used in the past year. The results show an inconsistency in survey results, as only six respondents reported an interaction with public health (involving themselves or a family member) in the previous year, while many more than that listed specific public health services that were accessed (by themselves or a family member). This discrepancy may be attributable to confusion over the survey wording, with respondents not equating "interaction" with accessing routine services. With regard to public health services that were accessed by respondents, the most common services, by a wide margin, were influenza shots (N=11), blood pressure checks (N=6), and immunizations (N=5). These results are shown in Figures 28 and 29.

Figure 28: Interaction with Local Public Health Unit in Last Year?



Figure 29: Use of Local Public Health Unit Services



Survey-takers also were asked where they turn for trusted health information. Overwhelmingly, residents identified their primary care provider (N=26) as the main source of trusted health information. Respondents also relied on other health care professionals (N=13) and word of mouth/from others (N=13) for health-related information. These results are shown in Figure 30.



#### Figure 30: Where Turn for Trusted Health Information

## **Other Concerns and Suggestions to Improve Local Health**

The survey concluded with an open-ended question that asked, "Overall, please share concerns and suggestions to improve the delivery of local health care." Fewer residents responded to this question than to other open-ended survey questions, with a total of four responses. Two of the responses offered criticisms of health care reform, or Obamacare. The other two comments requested better online information about clinic hours, more after-hours and weekend appointment times, public transportation in rural Burleigh County (or having public health nurses travel the county in a medical bus), and improved rural emergency services.

# Findings from Key Informant Interviews and Focus Group

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during a focus group session with the Community Group and during key informant interviews with community leaders and public health professionals. The themes that emerged from these sources were wide-ranging, with some directly associated with health care and others more rooted in other community matters. Generally, overarching thematic issues that developed during the interviews and focus group can be grouped into four categories (listed in no particular order):

- Lack of transportation options
- Ineffective enforcement of environmental health standards
- Lack of outreach/human touch to elderly and homebound residents
- Concerns about availability of emergency services

A more detailed discussion about these issues follows:

## • Lack of transportation options

While not a universally perceived need among interviewees and community group members, some with experience among older and lower income populations pointed to issues that arise due to lack of transportation. While this may not be a wide need applicable to a large number of residents, it appears that for those affected, it is an especially deep need, as it can mean the difference between receiving necessary health care and not receiving it. Many participants recognized that buses are available in Bismarck, but said that rural residents have far fewer options. Even for older residents who may be comfortable driving in their rural neighborhoods, the prospect of driving in Bismarck is worrisome. Some viewed the lack of transportation options as a core barrier, saying that an abundance of health-related services in the county is not helpful when there is no way to get to them.

Specific comments included:

- Buses only go to the city limits.
- Some Medicaid transportation providers don't go to the rural areas.
- Neighbors try to help when they can.

- It's hard for elderly people to get to appointments if they don't have a car or if they don't want to drive in Bismarck due to traffic.
- It's not uncommon for people to get lost in Bismarck, even if they lived their whole life here.
- Transportation can be a problem, especially for older folks or less wealthy folks who can't afford to drive in because gas is expensive or can't pay for services.
- Transportation is a huge issue.
- Some rely on the Emmons County transit, but it isn't available to everyone.
- WIC services, car seat checks are available, but people have to come to Bismarck. Some don't have the means to get to Bismarck.
- In many ways, overall health services are adequate. Getting to them is another issue.

# • Ineffective enforcement of environmental health standards

A topic raised often during key informant interviews, and discussed at length during the focus group, was that of inconsistent monitoring and control of environmental health regulations – especially those related to sewage disposal. The general consensus was that there is widespread confusion about what the regulations require, what inspectors are enforcing them, who is signing off on portions of construction permits, and what is being done to remedy the situation. Many participants told anecdotal stories about personally seeing or hearing first-hand stories about violations. Some said that projects moved forward without all necessary permits. Other said that due to topographical and water table features, some portions of Burleigh County were especially vulnerable to these types of violations. The information provided by residents left little doubt that a problem exists in the rural part of the county that if not addressed could result in serious harm.

Specific comments from participants included:

- There is inconsistent enforcement of water and sewage regulations.
- Raw sewage is being dumped on the ground. It exposes everyone else to it.
- Sometimes hard to enforce against neighbors because of relationships.
- Some areas (Moffit) have water problems. High tables, sodium.
- Keeping up with infrastructure is a concern. Roads, sewer, adequate water. They need to hire public workforce necessary to do the inspections out in the county.

- There is confusion about inspectors. Even those who work on this stuff can't adequately describe who has what duties throughout the county. It's a public health problem.
- Confusion about approvals of septic installations.
- This county employs the public health inspector in Morton County. But it's so busy in Morton County that the inspector can't be in Burleigh County.
- The city is swallowing up farm and ranch land, but needs better infrastructure.
- I'm not even sure who tests water anymore.
- With cattle and feedlots, chances of contamination are pretty good.

# • Lack of outreach/human touch to elderly and homebound residents

A common thread running through the discussion of many of the issues facing the rural part of the county involved the needs of the elderly. Participants keyed in on a few challenges in particular: a perceived lack of needed home care and the difficulty many older residents experience when interacting with the health care system. It was suggested by more than one participant that the health care system is losing its "human touch" and older residents especially are unprepared to interact with technology rather than people in connection with receiving health care system can be harder for older residents and resources may be needed to aid them in this regard.

In addition to the need for home health care, participants also pointed to a more general need among the elderly for greater social interaction. There is a sense of growing isolation among the elderly who remain in their homes, leading to depression, especially in winter months when it is more difficult to get out.

Participants' comments included:

- There is a need for more home health, based on needs, not formulas.
- Some elderly don't know how to make appointments. They only get a machine now when they call.
- Use mail, not websites, to get information to the elderly. Lots of people don't have computers. Lots of elderly people don't know how to use computers.
- There is lots of depression in the county because people are isolated. We need more outreach in this area.
- Not having someone to talk to is probably one of the most deadly things for elderly.

- The senior center in town has flu shots and does some health stuff, but it has fewer and fewer services for health.
- One of biggest challenges is helping people decide how long to live in their homes by themselves. People on farms especially have hard time getting home health or support they need to stay in home.
- There's no centralized place to look to find out what service are available.
- I'm not aware of any senior companion program but there is informal helping.
- Meals on wheels is mostly for people in town. Many on farms don't get that service.

# • Concerns about availability of emergency services

Emergency medical services were mentioned by several participants, with some specifically making note of the challenges of relying on volunteers for some emergency services. Some also expressed concern about the reliance on a metro-based ambulance service for rural needs, speculating whether an additional ambulance provider would better meet the needs of the rural residents. Also mentioned was the large geographic area that needs to be covered by rural emergency services, like fire departments. It was suggested that some emergency response assets are not distributed effectively, leaving many rural residents vulnerable.

Specific comments included:

- A big area of concern is EMS: Some services are functioning with volunteers and some areas only have one ambulance.
- There was an instance in Tuttle where both rigs were out and it took 55 minutes to get to an accident and EMT was in a pickup. There were significant injuries and stress could have been avoided.
- Staffing these agencies is difficult.
- The ambulance in Burleigh charges a lot of money.
- Some rural towns have first responders, but they can only stabilize and treat not transport patients.
- Services are not distributed well. Having emergency services in Bismarck doesn't seem to be enough.
- Some roads don't get cleared right away, which prevents emergency vehicles from getting to an emergency.
- I'm not sure about even calling ambulance. Would it be fast enough?

# **Priority of Health Needs**

The Community Group held its second meeting on September 23, 2014. Twelve members of the group attended the meeting. A representative from the Center for Rural Health presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the results of the survey (including perceived community health and community concerns, community collaboration, and barriers to care), and findings from the focus group and key informant interviews.

Following the presentation of the assessment findings, and after consideration of and discussion about the findings, all members of the group were asked to identify what they perceived as the top five community health needs. All of the potential needs were listed on poster boards, and each member was given five stickers to place next to the five needs they thought were the most significant. Group members were advised they could consider a number of criteria when prioritizing needs, such as a need's burden, scope, severity, or urgency, as well as disparities associated with the need and the overall importance the community places on addressing the need. The results were totaled, and the concerns most often cited were:

- Elevated rate of excessive drinking (6 votes)
- Cost/adequacy of health insurance (6 votes)
- Concerns about availability of emergency services (6 votes)
- Cost of health care services (5 votes)
- Availability of resources to help elderly stay in their homes (5 votes)

The next highest vote-getting issues, which each received three or four votes, were: Elevated rate of severe housing problems, ineffective environmental health services, elevated rate of violent crime, cost of prescription drugs, and lack of transportation options. A summary of this prioritization may be found in Appendix D.

Using a logic model, the group then began the second portion of the Community Group meeting: an abbreviated strategic planning session to think about ways to address the prioritized significant needs. Specifically, the group discussed ideas to address one of the identified significant needs: the elevated rate of excessive drinking. Much of the discussion focused on youth drinking and ways to develop family-centered and other activities to provide alternatives to those that revolve around drinking. The group expressed an interest in continued work to tackle the issues presented in the needs

assessment. This preliminary work is expected to continue through the process of developing a community health improvement plan.

## **Appendix A1 – Paper Survey Instrument**

## Kidder County & Rural Burleigh County Area Health Survey

Kidder County District Health Unit and Bismarck-Burleigh Public Health are interested in hearing from you about area health issues and concerns. The focus of this effort is to:

- Learn of the good things in your county as well as concerns in the county
- Understand perceptions and attitudes about the health of the county, and hear suggestions for improvement
- · Learn more about how local health services are used by you and other residents

If you prefer, you may take the survey online at www.tinyurl.com/kidder-burleigh\_Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Ken Hall at 701.777.6046.

Surveys will be accepted through July 31, 2014. Your opinion matters - thank you in advance!

#### County Assets and Collaboration

- Q1. What county do you live in?
  - Burleigh

Other (please specify) \_\_\_\_\_

Please tell us about your county by choosing up to three options you most agree with in each category below:

volved in	People who live here are involved		County is socially and culturally	
	their community		diverse or becoming more diverse	
difference	Sense that you can make a different		Feeling connected to people who live	
	through civic engagement	U	here	
minded	Tolerance inclusion open-minds		Forward-thinking ideas (social values,	
ninueu	rolerance, inclusion, open-minde		government)	
	Other (please	_		_
	specify)	U	Government is accessible	U U
			People are friendly, helpful,	П
			supportive	
nind			government) Government is accessible People are friendly, helpful,	

Q2. Considering the PEOPLE in your county, the best things are (choose up to THREE):

Kidder

Q3. Considering the SERVICES AND RESOURCES in your county, the best things are (choose up to THREE):

	Downtown and shopping (close by, good variety, availability of goods)	Public services and amenities
	Health care	Public transportation
	Opportunities to learn and/or go to college	Restaurants and healthy food
٥	Quality school systems and programs for youth	Other (please specify)

Q4. Considering the QUALITY OF LIFE in your county, the best things are (choose up to THREE):

Family-friendly; good place to raise kids	Job opportunities or economic opportunities
Healthy place to live	Safe place to live, little/no crime
Informal, simple, laidback lifestyle	Other (please specify)

Q5. Considering the ACTIVITIES in your county, the best things are (choose up to THREE):

Activities for families and youth	Specific events and festivals
Arts and cultural activities and/or cultural richness	Year-round access to fitness opportunities (indoor activities, winter sports, etc.)
Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)	Other (please specify)

Q6. Considering the GEOGRAPHIC SETTING in your county, the best things are (choose up to THREE):

Cleanliness of area (e.g., fresh air, lack of pollution and litter)	Natural setting: outdoors and nature
Climate and seasons	Relatively small size and scale of community I live in
General beauty of environment and/or scenery	Waterfront, rivers, lakes, and/or beaches
General proximity to work and activities (e.g., short commute, convenient access)	Other (please specify)

Q7. What are other "best things" about your county that are not listed in the questions above?

Q8. What are the major challenges facing your county?

Q9. For each choice on the next page please rank the level of collaboration, or how well these groups work with others in the county, on a scale of 1 to 5, with 1 being no collaboration (not working well with others) and 5 being excellent collaboration (working well with others).

Collaboration	No Excellent collaboration <u>collaboration</u>				Don't Know/Not Applicable	
	1	2	3	4	5	
Business and industry						
Clinics						
Economic development organizations						
Emergency services, including ambulance and fire						
Health and human services agencies						
Hospital(s)						
Law enforcement						
Long term care, including nursing homes and assisted living						
Other local health providers, such as dentists and chiropractors						
Pharmacies						
Public Health						
Schools						

Q10. Do you believe that health-related organizations in the county are working together to improve the overall health of the area population?

- 🗆 No
- Yes

Q11. Which, if any, of the following do you think would result from better collaboration among health care providers and health-related organizations? (Choose ALL that apply.)

- Better customer service
- Better patient care
- Less duplication of care □Lower costs □ Better overall health of the area's population □More complete and accurate health records Need for fewer appointments
- Coordination of appointments Other (Please specify)
- Q12. What suggestions do you have for health-related organizations to work together to provide better services and improve the overall health of the area population?

Q13. Where do you find out what health services are available in your area? (Choose ALL that apply.)

- Advertising
- From public health professionals
- Indian Health Service
- Newspaper
- Radio
- Word of mouth, from others (friends, neighbors, co-workers, etc.)
- From health care professionals
- Social media (Facebook, Twitter, etc.)
- Tribal Health
- Web searches
- Employer/worksite wellness
- Other (Please specify)\_\_\_\_\_

3

#### **County Concerns**

Q14. Regarding the conditions in your county, in the following series of categories please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

County/environmental concerns	Less	of ncerr		of	
county/environmental concerns	1	2	3	4	5
Active faith community	+-	~		-	
Attracting and retaining young families	1				
Not enough jobs with livable wages, not enough to live on					
Not enough affordable housing					
Poverty					
Changes in population size (increasing or decreasing)					
Crime and safety, adequate law enforcement personnel					
Water quality (well water, lakes, streams, rivers)					
Air quality					
Litter (amount of litter, adequate garbage collection)					
Having enough child daycare services					
Having enough quality school resources					
Not enough places for exercise and wellness activities					
Not enough public transportation options, cost of public transportation					
Racism, prejudice, hate, discrimination					
Seatbelt use					
Traffic safety, incl. speeding, road safety, and drunk/distracted driving					
Physical violence, domestic violence, sexual abuse					
Child abuse					
Bullying					

	Less of			More	of
Concerns about health services	a co	a concern		a conc	
	1	2	3	4	5
Ability to get appointments for health services					
Extra hours for appointments, such as evenings and weekends					
Availability of doctors and nurses					
Availability of public health professionals					
Ability to retain doctors and nurses in the area					
Availability of specialists					
Not enough health care staff in general					
Availability of providers that speak my language and/or have translators					
Availability of wellness and disease prevention services					
Availability of mental health services					
Availability of substance abuse/treatment services					
Availability of dental care					
Availability of vision care					
Different health care providers having access to health care information					
and working together to coordinate care					
Providers using electronic health records					

Concerns about health services	Less a co	More of a concern			
	1	2	3	4	5
Patient confidentiality					
Quality of care					
Emergency services (ambulance & 911) available 24/7					
Cost of health care services					
Cost of health insurance					
Adequacy of health insurance (concerns about out-of-pocket costs)					
Adequacy of Indian Health Service or Tribal Health services					
Understanding where and how to get health insurance					
Cost of prescription drugs					

Physical health, mental health, and substance	Less a co	of ncerr	n	More of a concer		
abuse concerns (Adults)	1	2	3	4	5	
Cancer						
Diabetes						
Heart disease						
Other chronic diseases						
Dementia/Alzheimer's disease						
Depression						
Stress						
Suicide						
Alcohol use and abuse						
Drug use and abuse (including prescription drug abuse)						
Smoking and tobacco use/exposure to second-hand smoke						
Not getting enough exercise						
Obesity/overweight						
Poor nutrition, poor eating habits						
Diseases that can be spread, such as sexually transmitted diseases or AIDS						
Wellness and disease prevention, including vaccine-preventable diseases						

		of		More of		
Concerns specific to youth and children	a co	a concern			cern	
	1	2	3	4	5	
Not enough youth activities						
Youth obesity						
Youth hunger and poor nutrition						
Youth alcohol use and abuse						
Youth drug use and abuse (including prescription drug abuse)						
Youth tobacco use						
Youth mental health						
Youth suicide						
Teen pregnancy						
Youth sexual health						
Youth crime						
Youth graduating from school						

Concerns about the aging population	Less a cor	of ncern	ı	More of a concern		
	1	2	3	4	5	
Being able to meet needs of older population						
Long-term/nursing home care options						
Assisted living options						
Availability of resources to help the elderly stay in their homes						
Availability/cost of activities for seniors						
Availability of resources for family and friends caring for elders						

#### **Delivery of Health Care**

- Q15. How long does it take you to reach the clinic you usually go to?
  - Less than 10 minutes
    11 to 30 minutes
- 31 to 60 minutes
   Over 1 hour
- Q16. How long does it take you to reach the hospital you usually go to?
  - Less than 10 minutes
    11 to 30 minutes
- 31 to 60 minutes
   Over 1 hour
- Q17. Please tell us why you seek health care services close to home. (Choose ALL that apply.)
  - Access to specialist
  - Confidentiality
  - Convenience
  - Disability access
  - Eligible for care from IHS
  - Familiar with providers
  - High quality of care
  - Less costly

- Location is nearby
- Loyalty to local care providers
- Open at convenient times
- They take my insurance
- They take new patients
- Transportation is readily available
- Other (Please specify)

Q18. Please tell us why you go out of the area for health care needs. (Choose ALL that apply.)

- Access to specialist
- Confidentiality
- Convenience
- Disability access
- Familiar with providers
- High quality of care
- Less costly
- Eligible for contract health services under IHS
- Eligible for care from IHS

- Loyalty to local service providers
- Not eligible for care from IHS
- Open at convenient times
- Proximity
- Referral
- They take my insurance
- They take new patients
- Transportation is readily available
- Other (Please specify)\_\_\_\_\_
- Q19. What specific health care services, if any, do you think should be added locally?

6

- Q20. What barriers prevent you or other county residents from receiving health care? (Choose ALL that apply.)
  - Can't get transportation services
  - Concerns about confidentiality
  - Distance from health facility
  - Don't know about local services
  - Not able to get appointment/limited hours
  - Not able to see same provider over time
  - Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)
- Not affordable
- No insurance or limited insurance
- Not enough doctors
- Not enough evening or weekend hours
- Not enough specialists
- Don't speak language or understand culture
- Other (Please specify)\_

#### Preventive care and public health services

Q21. In the past year, have you or a family member had any interaction with your local public health unit?

- 🗆 No
- Yes

Q21b. If yes, what interactions have you or a family member had with your local public health unit?

Q22. Which of the following public health services have you or a family member used in the past year? (Choose ALL that apply.)

- Blood pressure check
- Car seat program
- Flu shots
- Health Tracks (child health screening)
- Environmental health services (water, sewer, health hazard abatement)
- Home health
- Immunizations
- School nursing services
- Tobacco Prevention and Control
- WIC (Women, Infants & Children) Program

Q23. Where do you turn for trusted health information? (Choose ALL that apply.)

- Primary care provider (my doctor, nurse practitioner, physician assistant)
- Public health professional
- Other health care professionals (nurses, chiropractors, dentists, etc.)
- Web searches/Internet (WebMD, Mayo Clinic, Healthline, etc.)
- □ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- Other (Please specify) \_\_\_\_\_

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#### Demographic Information

Please tell us about yourself.

Q24. Health insurance status. (Choose ALL that apply.)

- Insurance through employer
- Medicaid
- Medicare
- Private insurance

#### Q25. Age:

- Less than 25 years
- 25 to 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- 65 to 74 years
- 75 years and older

Q26. Highest level of education:

- Some high school
- High school diploma or GED
- Some college/technical degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree

#### Q27. Gender:

- Female
- Male

- No insurance/not enough insurance
- Veteran's Health Care Benefits
- Other. Please specify:\_\_\_\_\_

Q29. Marital status:

- Divorced/separated
- Married
- □ Single/never married
- Widowed

Q30. Employment status:

- Full time
- Part time
- Homemaker
- Multiple job holder
- Unemployed
- Retired

Q31. Annual household income before taxes:

- Less than \$15,000
- \$15,000 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 and over
- Prefer not to answer

Q32. Overall, please share concerns and suggestions to improve the delivery of local health care.

## Thank you for assisting us with this important survey!

Q28. Your zip code: \_\_\_\_\_

## **Appendix A2 – Online Survey Instrument**

#### Default Question Block

Kidder County District Health Unit and Bismarck-Burleigh Public Health are interested in hearing from you about area health issues and concerns. The focus of this effort is to:

- Learn of the good things in your county as well as concerns in the county Understand perceptions and attitudes about the health of the county, and hear suggestions for improvement Learn more about how local health services are used by you and other residents

Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Ken Hall at 701.777.6046.

Surveys will be accepted through July 31, 2014. Your opinion matters - thank you in advance!

#### County Assets and Collaboration

Please tell us about your community by choosing up to three options you most agree with in each category.

What county do you live in?

- O Burleigh
- O Kidder
- Other (please specify)

Please tell us about your county by choosing up to three options you most agree with in each category below.

Considering the PEOPLE in your county, the best things are (choose up to THREE):

- County is socially and culturally diverse or becoming more diverse
- Feeling connected to people who live here
- Forward-thinking ideas (social values, government)
- Government is accessible
- People are friendly, helpful, supportive
- People who live here are involved in their community
- Sense that you can make a difference through civic engagement
- Tolerance, inclusion, open-minded

Other (please specify)

Health care

Considering the SERVICES AND RESOURCES in your county, the best things are (choose up to THREE):

Opportunities to learn and/or go to college Quality school systems and programs for youth

Public services and amenities

Restaurants and healthy food

Family-friendly; good place to raise kids

Job opportunities or economic opportunities

Informal, simple, laidback lifestyle

Safe place to live, little/no crime

Activities for families and youth

Specific events and festivals

Other (please specify)

Climate and seasons

Arts and cultural activities and/or cultural richness

Cleanliness of area (e.g., fresh air, lack of pollution and litter)

Public transportation

Other (please specify)

Healthy place to live

Other (please specify)

Considering the QUALITY OF LIFE in your county, the best things are (choose up to THREE):

Considering the ACTIVITIES in your county, the best things are (choose up to THREE):

Year-round access to fitness opportunities (indoor activities, winter sports, etc.)

Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)

Considering the GEOGRAPHIC SETTING in your county, the best things are (choose up to THREE):

Downtown and shopping (close by, good variety, availability of goods)

**Community Health Needs Assessment** 

	General	beauty	of	environment	and/or	scenery
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General proximity to work and activities (e.g., short commute, convenient access)

- Natural setting: outdoors and nature
- Relatively small size and scale of community I live in
- Waterfront, rivers, lakes, and/or beaches
- Other (please specify)

What are other "best things" about your county that are not listed in the questions above?

What are the major challenges facing your county?

For each choice below, please rank the level (	of collaboration, or how well these of	groups work with others in the county, on a scale of	E 1
		ellent collaboration (working well with others).	

	1 = No collaboration	2	3	4	5 = Excellent collaboration	Don't Know/Not Applicable
Business and industry	0	0	0	0	0	0
Clinics	0	0	0	0	0	0
Economic development organizations	0	0	0	0	0	0
Emergency services, including ambulance and fire	0	0	0	0	0	0
Health and human services agencies	0	0	0	0	0	0
Hospital(s)	0	0	0	0	0	0
Law enforcement	0	0	0	0	0	0
Long term care, including nursing homes and assisted living	0	0	0	0	0	0
Other local health providers, such as dentists and chiropractors	0	0	0	0	0	0
Pharmacies	0	0	0	0	0	0
Public Health	0	$\circ$	0	0	0	0
Schools	0	0	0	0	0	0

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Do you believe that health-related organizations in the county are working together to improve the overall health of the area population?

- O No
- O Yes

Which, if any, of the following do you think would result from better collaboration among health care providers and health-related organizations? (Choose ALL that apply.)

- Better customer service
- Better patient care
- Better overall health of the area's population
- Coordination of appointments
- Less duplication of care
- Lower costs
- More complete and accurate health records
- Need for fewer appointments
- Other (please specify in the box below)

What suggestions do you have for health-related organizations to work together to provide better services and improve the overall health of the area population?

Where do you find out what health services are available in your area? (Choose ALL that apply.)

- Advertising
- From public health professionals
- Indian Health Service
- Newspaper
- Radio
- Word of mouth, from others (friends, neighbors, co-workers, etc.)
- From health care professionals
- Social media (Facebook, Twitter, etc.)
- Tribal Health
- Web searches
- Employer/worksite wellness

Other (please specify in the box below)

## County concerns

Regarding the conditions in your county, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern
Active faith community	0	0	0	0	0
Attracting and retaining young families	0	0	0	0	0
Not enough jobs with livable wages, not enough to live on	0	0	0	0	0
Not enough affordable housing	0	0	0	0	0
Poverty	0	0	0	0	0
Changes in population size (increasing or decreasing)	0	0	0	0	0
Crime and safety, adequate law enforcement personnel	0	0	0	0	0
Water quality (well water, lakes, streams, rivers)	0	0	0	0	0
Air quality	0	0	0	0	0
Litter (amount of litter, adequate garbage collection)	0	0	0	0	0
Having enough child daycare services	0	0	0	0	0
Having enough quality school resources	0	0	0	0	0
Not enough places for exercise and wellness activities	0	0	0	0	0
Not enough public transportation options, cost of public transportation	0	0	0	0	0
Racism, prejudice, hate, discrimination	0	0	0	0	0
Seatbelt use	0	0	0	0	0
Traffic safety, including speeding, road safety, and drunk/distracted driving	0	0	0	0	0
Physical violence, domestic violence, sexual abuse	0	0	0	0	0
Child abuse	0	0	0	0	0
Bullying	0	0	0	0	0

#### Concerns about health services

Regarding the conditions in your county, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern
Ability to get appointments for health services	0	0	0	0	0
Extra hours for appointments, such as evenings and weekends	0	0	0	0	0
Availability of doctors and nurses	0	0	0	0	0
Availability of public health professionals	0	0	0	0	0
Ability to retain doctors and nurses in the area	0	0	0	0	0
Availability of specialists	0	0	0	0	0
Not enough health care staff in general	0	0	0	0	0
Availability of providers that speak my language and/or have translators	0	0	0	0	0
Availability of wellness and disease prevention services	0	0	0	0	0
Availability of mental health services	0	0	0	0	0
Availability of substance abuse/treatment services	0	0	0	0	0
Availability of dental care	0	0	0	0	0
Availability of vision care	0	0	0	0	0
Different health care providers having access to health care information and working together to coordinate care	0	0	0	0	0
Providers using electronic health records	0	0	0	0	0
Patient confidentiality	0	0	0	0	0
Quality of care	0	0	0	0	0
Emergency services (ambulance & 911) available 24/7	0	0	0	0	0
Cost of health care services	0	0	0	0	0
Cost of health insurance	0	0	0	0	0
Adequacy of health insurance (concerns about out-of-pocket costs)	0	0	0	0	0
Adequacy of Indian Health Service or Tribal Health services	0	0	0	0	0
Understanding where and how to get health insurance	0	0	0	0	0
Cost of prescription drugs	0	0	0	0	0

## Physical, mental health, and substance abuse concerns (Adults)

and 5 being more of a concern.					
	1 = less of a concern	2	3	4	5 = more of a concern
Cancer	0	0	0	0	0
Diabetes	0	0	0	0	0
Heart disease	0	0	0	0	0
Other chronic diseases	0	0	0	0	0
Dementia/Alzheimer's disease	0	0	0	0	0
Depression	0	0	0	0	0
Stress	0	0	0	0	0
Suicide	0	0	0	0	0
Alcohol use and abuse	0	0	0	0	0
Drug use and abuse (including prescription drug abuse)	0	0	0	0	0
Smoking and tobacco use/exposure to second-hand smoke	0	0	0	0	0
Not getting enough exercise	0	0	0	0	0
Obesity/overweight	0	0	0	0	0
Poor nutrition, poor eating habits	0	0	0	0	0
Diseases that can be spread, such as sexually transmitted diseases or AIDS	0	0	0	0	0
Wellness and disease prevention, including vaccine- preventable diseases	0	0	0	0	0

Regarding the conditions in your county, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

#### Concerns specific to youth and children

Regarding the conditions in your county, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern	
Not enough youth activities	0	0	0	0	0	
Youth obesity	0	0	0	0	0	
Youth hunger and poor nutrition	0	0	0	0	0	
Youth alcohol use and abuse	0	0	0	0	0	
Youth drug use and abuse (including prescription drug abuse)	0	0	0	0	0	
Youth tobacco use	0	0	0	0	0	
Youth mental health	0	0	0	0	0	
Youth suicide						

	0	0	0	0	0
Teen pregnancy	0	0	0	0	0
Youth sexual health	0	0	0	0	0
Youth crime	0	0	0	0	0
Youth graduating from school	0	0	0	0	0

#### Concerns about the aging population

Regarding the conditions in your county, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern
Being able to meet needs of older population	0	0	0	0	0
Long-term/nursing home care options	0	0	0	0	0
Assisted living options	0	0	0	0	0
Availability of resources to help the elderly stay in their homes	0	0	0	0	0
Availability/cost of activities for seniors	0	0	0	0	0
Availability of resources for family and friends caring for elders	0	0	0	0	0

### **Delivery of Health Care**

How long does it take you to reach the clinic you usually go to?

- O Less than 10 minutes
- 10 to 30 minutes
- O 31 to 60 minutes
- O More than 1 hour

How long does it take you to reach the hospital you usually go to?

- O Less than 10 minutes
- 10 to 30 minutes
- 31 to 60 minutes
- O More than 1 hour

Please tell us why you seek health care services close to home. (Choose ALL that apply.)

Access to specialist

- Confidentiality
- Convenience
- Disability access
- Eligible for care from IHS
- Familiar with providers
- High quality of care
- Less costly
- Location is nearby
- Loyalty to local care providers
- Open at convenient times
- They take my insurance
- They take new patients
- Transportation is readily available
- Other (please specify in the box below)

Please tell us why you go out of the area for health care needs. (Choose ALL that apply.)

- Access to specialist
- Confidentiality
- Convenience
- Disability access
- Familiar with providers
- High quality of care
- Less costly
- Eligible for contract health services under IHS
- Eligible for care from IHS
- Loyalty to local service providers
- Not eligible for care from IHS
- Open at convenient times
- Proximity
- Referral
- They take my insurance
- They take new patients
- Transportation is readily available
- Other (please specify in the box below)

What specific health care services, if any, do you think should be added locally?

What barriers prevent you or other county residents from receiving health care? (Choose ALL that apply.)

Can't get transportation services

Concerns about confidentiality

Distance from health facility

Don't know about local services

Not able to get appointment/limited hours

Not able to see same provider over time

Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)

Not affordable

No insurance or limited insurance

Not enough doctors

Not enough evening or weekend hours

Not enough specialists

Don't speak language or understand culture

Other (please specify)

#### Preventive care and public health services

In the past year, have you or a family member had any interaction with your local public health unit?

O No

O Yes

What interactions have you or a family member had with your local public health unit?

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Which of the following public health services have you or a family member used in the past year? (Choose ALL that apply.)

- Blood pressure check
- Car seat program
- Flu shots
- Environmental Health Services (water, sewer, health hazard abatement)
- Health Tracks (child health screening)
- Home health
- Immunizations
- School nursing services
- Tobacco Prevention and Control
- WIC (Women, Infants & Children) Program

Where do you turn for trusted health information? (Choose ALL that apply.)

- Primary care provider (my doctor, nurse practitioner, physician assistant)
- Public health professional
- Other health care professionals (nurses, chiropractors, dentists, etc.)
- Web searches/Internet (WebMD, Mayo Clinic, Healthline, etc.)
- Word of mouth, from others (friends, neighbors, co-workers, etc.)
- Other (please specify in the box below)

#### **Demographic Information**

Please tell us about yourself.

Health insurance status. (Choose all that apply.)

- Insurance through employer
- Medicaid
- Medicare
- Private insurance
- No insurance/not enough insurance
- Veteran's Health Care Benefits
- Other (please specify in the box below)

#### Age:

Less than 25 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 64 years 65 to 74 years 75 years and older

Highest level of education:

Some high school

High school diploma or GED

Some college/technical degree

Associate's degree

Bachelor's degree

Graduate or professional degree

#### Gender:

Female

Male

#### Your zip code:

Marital status:

Divorced/separated

Married

Single/never married

Widowed

#### Employment status:

Full time

Part time

- O Homemaker
- O Multiple job holder
- O Retired

Annual household income before taxes:

- O Less than \$15,000
- \$15,000 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 and over
- O Prefer not to answer

Overall please share concerns and suggestions to improve the delivery of local health care.

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## Appendix B - County Health Rankings Model

#### Appendix C – Burleigh District Community Health Profile

# Burleigh County Community Health Profile

POPULATION

The Demographic Section of this report comes from the US Census Bureau (www.census.gov). Most tables are derived either from the full (100%) census taken in 2010 or from the Community Population Survey aggregrated over a several year period. The table header describes the specific years from which the data is derived. The table showing percent population change uses census data from 2000 also. Tables present number of persons and percentages which in almost all circumstances represent the category specific percentage of all persons referenced by the table (e.g., percentage of persons age 15 and older who are married). Age specific poverty rates represent the percentage of each age group which is in poverty (e.g., percentage of children under five years in poverty).

Age Group	Burleigh	County	North Dakota		
	Number	Percent	Number	Percent	
0-9	10417	12.8%	84,671	12.6%	
10-19	10393	12.8%	87,264	13.0%	
20-29	12292	15.1%	108,552	16.1%	
30-39	10227	12.6%	77,954	11,6%	
40-49	10786	13.3%	84,577	12.6%	
50-59	11923	14.7%	96,223	14.3%	
60-69	7509	9.2%	61,901	9.2%	
70-79	4432	5.5%	39,213	5.8%	
80+	3329	4.1%	32,236	4.8%	
Total	81308	100.0%	672,591	100.0%	
0-17	18343	22.6%	149,871	22.3%	
65+	10913	13.4%	97,477	14.5%	





Age Group		County	male by Age, 2010 North Dakota		
	Number	Percent	Number	Percent	
0-9	5102	49.0%	41330	48.8%	
10-19	5179	49.8%	42277	48.4%	
20-29	6074	49.4%	50571	46.6%	
30-39	4923	48.1%	37144	47.6%	
40-49	5366	49.7%	41499	49.1%	
50-59	6177	51.8%	47283	49.1%	
60-69	3811	50.8%	30699	49.6%	
70-79	2521	56.9%	21453	54.7%	
80+	2163	65.0%	20471	63.5%	
Total	41316	50.8%	332727	49.5%	
0-17	9024	49.2%	73083	48.8%	
65+	6292	57.7%	55050	56.5%	

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Race, 2010 Census		2000			
	Burleigh	County	North Dakota		
Race	Number	Percentage	Number	Percentage	
Total	81,308	100.0%	672,591	100.0%	
White	75,634	93.0%	605,449	90.0%	
Black	483	0.6%	7,960	1.2%	
Am.Indian	3,393	4.2%	36,591	5.4%	
Asian	392	0.5%	6,909	1.0%	
Pac. Islander	27	0.0%	320	0.0%	
Other	228	0.3%	3,509	0.5%	
Multirace	1,151	1.4%	11,853	1.8%	





Community Health Needs Assessment

Household Populations, 2010				
	Burleigh	North I	Dakota	
Household Type	Number	Percentage	Number	Percentage
Total	78,776	100.0%	659,858	100.0%
In households	76,235	96.8%	634,679	96.2%
In family households:	61,621	78.2%	504,148	76.4%
In nonfamily households.	14,614	18.6%	130,531	19.8%
In group quarters	2,541	3.2%	25,179	3.8%
Institutionalized population	1,519	1.9%	9,675	1.5%
Noninstitutionalized population	1,022	1.3%	15,504	2.3%

Marital Status of Persons Age 15 and Older, 2006-2010 ACS							
	Burleigh	County	North Dakota				
Marital Status	Number	Percent	Number	Percent			
Total Age 15+	63,995	100.0%	538,799	100.0%			
Never Married	35,517	28.8%	163,256	30.3%			
Now Married	3,584	55.5%	288,257	53.5%			
Separated	5,824	1.1%	4,310	0.8%			
Widowed	704	5.6%	36,100	6.7%			
Divorced	18,431	9.1%	46,876	8.7%			

	Burleigh C	Burleigh County		kota
	Estimate	Percent	Estimate	Percent
Population 25 years and over	52,342	100.0%	429,333	100.0%
Less than 9th grade	2,198	4.2%	24,043	5.6%
9th to 12th grade, no diploma	1,989	3.8%	21,467	5.0%
High school graduate or GED	12,405	23.7%	120,643	28.1%
Some college, no degree	11,620	22.2%	99,176	23.1%
Associate's degree	7,171	13.7%	51,091	11.9%
Bachelor's degree	12,248	23.4%	83,291	19.4%
Graduate or professional degree	4,711	9.0%	29,624	6.9%

	Burleigh	North Dakota		
Group	Number	Percent	Number	Percent
Total	79,697	100.0%	660,611	100.0%
No Disability	71,762	90.0%	591,814	89.6%
Any Disability	7,935	10.0%	68,797	10.4%
Self Care Disability (Age 5+)	818	1.0%	11,348	1.7%
0-17 with any disability	871	4.7%	4,501	3.0%
18-64 with any disability	3,293	6.5%	31,994	7.6%
65+ with any disability	3,771	35.3%	32,302	35.1%

POPULATION

#### POPULATION

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	Burleigh	North Dakota		
Median Household Income	\$53,465		\$46,781	
Per Capita Income	\$28,784		\$25,803	
	Number	Percent	Number	Percent
Below Poverty Level	7,198	9.4%	78,405	12.3%
Under 5 years	843	15.6%	4,120	9.2%
5 to 11 years	854	12.3%	7,908	14.2%
12 to 17 years	363	6.0%	5,457	11.0%
18 to 64 years	4,027	8.5%	46,471	12.0%
65 to 74 years	307	5.6%	4,149	8.9%
75 years and over	804	14.8%	7,072	14.0%

	Burleigh County		North Dakota	
	Number	Percent	Number	Percent
Total Families	21,184	100.0%	170,477	100.0%
Families in Poverty	1,335	6.3%	12,274	7.2%
Families with Related Children	9,855	46.5%	78,224	45.9%
Families with Related Children in Poverty	1,074	5.1%	10,679	6.3%
Families with Related Children and Female Parent Only	1,959	9.2%	15,482	9.1%
Families with Related Children and Female Parent Only in Poverty	701	3.3%	6,022	3.5%
Total Known Children in Poverty (0-17)	2,060	11.2%	17,485	11.7%
Total Known Age 65+ in Poverty	1,111	10.2%	11,221	11.5%

Vital Statistics Data

BIRTHS AND DEATHS

Vital Statistics Data comes from the birth and death records collected by the State of North Dakota aggregated over a five year period. All births and deaths represent the county of residence not the county of occurrence. The number of events is blocked if fewer than six. Formulas for calculating rates and ratios are as follows:

Birth Rate = Resident live births divided by the total resident population x 1000.

**Pregnancies** = Live births + Fetal deaths + Induced termination of pregnancy.

Pregnancy Rate = Total pregnancies divided b the total resident population x 1000.

Fertility Rate = Resident live births divided by female population (age 15-44) x 1000.

Teenage Birth Rate = Teenage births (age <20) divided by female teen population x 1000. Teenage Pregnancy Rate = Teenage pregnancies (age<20) divided by female teen population x 1000.

Out of Wedlock Live Birth Ratio = Resident OOW live births divided by total resident live births x 1000.

Out of Wedlock Pregnancy Ratio = Resident OOW pregnancies divided by total pregnancies x 1000.

Low Weight Ratio = Low weight births (birth weight < 2500 grams) divided by total resident live births x 1000.

Infant Death Ratio = Number of infant deaths divided by the total resident live births x 1000.

Childhood & Adolescent Deaths = Deaths to individuals 1 - 19 years of age.

Childhood and Adolescent Death Rate = Number of resident deaths (age 1 - 19) divided by population (age 1 - 19) x 100,000.

Crude Death Rate = Death events divided by population x 100,000.

Age-Adjusted Death Rate = Death events with age specific adjustments x 100,000 population.

Births, 2006- 2010	1000000		100000000	see d
	Burleigh	County Rate or	North [	Dakota Rate or
	Number	Ratio	Number	Ratio
Live Births and Rate	5,251	13	44,427	13
Pregnancies and Rate	5,741	14	48,818	15
Fertility Rate		68		71
Teen Births and Rate	320	15	3,337	19
Teen Pregnancies and Rate	419	20	4,062	23
Out of Wedlock Births and Ratio	1,616	308	14,506	327
Out of Wedlock Pregnancies	2,024	353	18,103	371
Low Birth Weight Birth and Ratio	374	71	2,919	66

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Child Deaths, 2006-2010							
	Burleigh	County Rate or	North	Dakota Rate or			
	Number	Ratio	Number	Ratio			
Infant Deaths and Ratio	41	8	281	6			
Child and Adolescent Deaths	21	21	285	35			
Total Deaths and Crude Rate	2893	712	28,984	862			

### Vital Statistics Data

Deaths and Age Adjusted D	eath Rate by Cause, 20	06-2010
	Burleigh County Number (Adj. Rate)	
All Causes	2893 (622)	28,985 (689)
Heart Disease	676 (142)	7,122 (162)
Cancer	666 (146)	6,544 (162)
Stroke	150 (31)	1,696 (38)
Alzheimers Disease	295 (59)	1,936 (40)
COPD	147 (32)	1,607 (39)
Unintentional Injury	146 (34)	1,545 (42)
Diabetes Mellitus	89 (19)	1,072 (26)
Pneumonia and Influenza	47 (10)	702 (15)
Cirrhosis	22 (5)	289 (8)
Suicide	65 (16)	462 (14)

#### Vital Statistics Data BIRTHS AND DEATHS

Leading Causes of Death by Age, Burleigh County, 2006-2010					
Age	1	2	3		
	Anomaly	Unintentional Injury	Prematurity		
0-4	16		SIDS		
	Anomaly	Unintentional Injury			
5-14		Cancer	1000		
	Suicide	Unintentional Injury	Heart		
15-24	17	10			
	Unintentional Injury	Suicide	Heart		
25-34	17	15			
	Unintentional Injury	Cancer	Suicide		
35-44	19	12	10		
	Cancer	Heart	Unintentional Injury		
45-54	41	37	20		
10101000	Cancer	Heart	Diabetes		
55-64	113	52	16		
	Cancer	Heart	Stroke 22		
65-74	167	74	COPD 22		
	Cancer	Heart	Alzheimer's Dz		
75-84	209	191	81		
	Heart	Alzheimer's Dz	Cancer		
85+	304	198	118		

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Leading Causes of Death by Age Group for North Dakota, 2006-2010				
Age	1	2	3	
0-4	Congenital Anomaly	Prematurity	SIDS	
	69	44	40	
5-14	Unintentional Injury	Cancer	Congenital Anomaly	
	26	10	6	
15-24	Unintentional Injury	Suicide	Cancer	
	184	109	20	
25-34	Unintentional Injury	Suicide	Heart	
	166	91	32	
35-44	Unintentional Injury	Heart	Cancer	
	173	94	88	
45-54	Cancer	Heart	Unintentional Injury	
	493	335	194	
55-64	Cancer	Heart	Unintentional Injury	
	1001	579	137	
65-74	Cancer	Heart	COPD	
	1562	843	313	
75-84	Cancer	Heart	COPD	
	1992	1797	626	
85+	Heart	Alzheimer's Dz	Cancer	
	3421	1391	1352	

ADULT BEHAVIORAL RISK FACTORS 2007-2010

Adult Behavioral Risk Factor data are derived from aggregated data (the number of years specified is in the table) continuously collected by telephone survey from persons 18 years and older. All data is self-reported data. Numbers given are point estimate percentages followed by 95% confidence intervals. Statistical significance can be determined by comparing confidence intervals between two geographic areas. To be statistically significant, confidence may not overlap. For example the confidence intervals 9.3 (8.3-10.2) and 10.8 (10.0-11.6) overlap (see picture below) so the difference between the two numbers is not statistically significant. That means that substantial uncertainty remains whether the apparent difference is due to chance alone (due to sampling variation) rather than representing a true difference in the prevalence of the condition in the two populations. The less they overlap, the more likely it is that the point estimates represent truly different prevalences in the two populations.

		ALCOHOL	Burleigh County %	North Dakota %
	Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	17.4 (15.0-19.7)	21.2 (20.3-22.2)
	Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days	4.2 ( 3.0- 5.4)	4.9 ( 4.4- 5.3)
	Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days	4.3* ( 2.4- 6.1)	7.1 ( 6.0- 8.2)
		ARTHRITIS		
17	Chronic Joint Symptoms	Respondents who reported pain, aching of stiff in a joint during the past 30 days which started more than 3 months ago	32.7 (27.4-37.9)	31.7 (30.1-33.4)
	Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	16.0 (13.1-18.8)	17.4 (16.4-18.4)
	Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	26.9 (23.8-30.1)	27.1 (26.1-28.2)
		ASTHMA		
	Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	11.8 ( 9.8-13.8)	11.3 (10.7-12.0)
	Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	8.4 ( 6.5-10.3)	8.0 ( 7.4- 8.5)

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## ADULT BEHAVIORAL RISK FACTORS 2007-2010

		BODY WEIGHT	Burleigh County %	North Dakota %
	Overweight But Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight)	40.0 (37.1-42.9)	38.0 (37.1-39.0)
	Obese	Respondents with a body mass index greater than or equal to 30 (obese)	22.5 (20.3-24.8)	27.8 (26.9-28.7)
	Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese)	62.6 (59.6-65.5)	65.8 (64.8-66.8)
		CARDIOVASCULAR		
	Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	3.8 ( 3.1- 4.6)	4.1 ( 3.8- 4.3)
	Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	4.5 ( 3.6- 5.3)	4.0 ( 3.7- 4.3)
	Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	2.6 ( 2.0- 3.2)	2.5 ( 2.3- 2.7)
18	Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	8.1 ( 7.0- 9.2)	7.6 ( 7.2- 8.0)
		CHOLESTEROL		
	Never Cholesterol Test	cholesterol test	19.1 (15.2-23.0)	21.5 (20.0-22.9)
	No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years	22.8 (18.8-26.7)	25.9 (24.4-27.3)
	High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	37.1 (33.3-40.8)	35.9 (34.7-37.2)
		COLORECTAL CANCER		
	Fecal Occult Blood	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	87.3 (84.7-89.9)	80.9 (79.8-81.9)
	Never Sigmoidoscopy	Respondents age 50 and older who reported never having had a sigmoidoscopy or colonoscopy	37.0 (33.0-40.9)	40.5 (39.1-41.8)
	No Sigmoidoscopy in Past 5 Years	Respondents age 50 and older who reported not having a sigmoidoscopy or colonoscopy in the past five years.	48.4 (44.3-52.6)	50.3 (48.9-51.7)
		DIABETES		
	Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	6.0 ( 5.0- 6.9)*	7.2 ( 6.8- 7.6)

### ADULT BEHAVIORAL RISK FACTORS 2007-2010

	FRUITS AND VEGETABLES	Burleigh County %	North Dakota %
Five Fruits and	Respondents who reported that they do not	79.8	77.8
Vegetables	usually eat 5 fruits and vegetables per day	(76.7-82.8)	(76.7-78.9)
	GENERAL HEALTH		
Fair or Poor	Respondents who reported that their general	11.6	12.6
Health	health was fair or poor	(10.1-13.1)	(12.1-13.2)
Poor physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good	10.5 ( 8.7-12.2)	10.2 ( 9.7-10.8)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good	9.1 ( 7.5-10.7)	9.4 ( 8.8-10.0)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	5.8 ( 4.3- 7.2)	5.9 ( 5.5- 6.3)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	18.2 (16.1-20.3)	16.8 (16.1-17.5)
	HEALTH CARE ACCESS		
Health Insurance	Respondents who reported not having any form or health care coverage	7.2 (5.6-8.8)	11.3 (10.5-12.1)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	6.6 ( 5.1- 8.1)	6.5 ( 5.9- 7.0)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	18.7 (16.2-21.2)	23.3 (22.4-24.3)
	HYPERTENSION		
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	24.3 (21.5-27.1)	26.4 (25.3-27.4)
	IMMUNIZATION		
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year	28.6 (24.8-32.4)	29.6 (28.3-30.9)
Pneumococcal	Respondents age 65 or older who reported never	31.4	29.8
Vaccine	having had a pneumonia shot.	(27.4-35.4)	(28.5-31.2)
	INJURY		
Fall	Respondents 45 years and older who reported that they had fallen in the past 3 months	14.3 (11.8-16.9)	15.2 (14.3-16.1)
Seat Belt	Respondents who reported not always wearing their seatbelt	27.8 (24.1-31.5)	39.2 (37.8-40.7)

## Burleigh County Community Health Profile ADULT BEHAVIORAL RISK FACTORS 2007-2010

		ORAL HEALTH	Burleigh County %	North Dakota %	
Dental Visit		Respondents who reported that they have not had a dental visit in the past year	22.3 (19.2-25.4)	28.0 (26.7-29.3)	
Tooth Loss		Respondents who reported they had lost 6 or more permanent teeth due to gum disease or decay.	12.5 (10.5-14.5)	14.2 (13.5-14.9)	
		PHYSICAL ACTIVITY			
Recommend Physical Act		Respondents who reported that they did not get the recommended amount of physical activity	37.3 (33.3-41.2)	37.3 (35.9-38.7)	
No Leisure Physical Act	tivitv	Respondents who reported that they participated in no leisure time physical activity	5.8 (4.1-7.5)	6.4 (5.8-7.0)	
	ć	TOBACCO	, í	<i>i i</i>	
Current Smo	oking	Respondents who reported that they smoked every day or some days	14.5 (12.5-16.5)	18.8 (17.9-19.6)	
		WOMEN'S HEALTH			
Pap Smear		Women 18 and older who reported that they have not had a pap smear in the past three years	16.6 (10.7-22.5)	16.0 (14.4-17.6)	
Mammogram 40+	n Age	Women 40 and older who reported that they have not had a mammogram in the past two years	23.8 (19.9-27.8)	24.0 (22.6-25.4)	
* Approachir	ng stat	istical signifcance			
Shading - St	Shading - Statistically different than state				

ADULT BEHAVIORAL RISK FACTOR TRENDS 2001-2005, 2006-2010

	ALCOHOL	Burleigh County 2001-2005 %	Burleigh County 2006-2010 %
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	18.2 (16.0-20.4)	17.5 (15.4-19.6)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days	4.0 ( 2.9- 5.2)	4.2 (3.1-5.3)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days	3.5 ( 1.7- 5.4)	4.2 ( 2.7- 5.8)
	ARTHRITIS		
Chronic Joint Symptoms	Respondents who reported pain, aching of stiff in a joint during the past 30 days which started more than 3 months ago	40.2 (36.8-43.5)	32.7 (27.4-37.9)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	11.4 (9.3-13.4)	16.0 (13.2-18.8)*
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	29.1 (26.2-32.1)	26.9 (23.8-30.1)
	ASTHMA		
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	11.9 (10.1-13.7)	11.3 ( 9.5-13.0)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	8.6 (7.1-10.2)	8.1 (6.5-9.7)
	BODY WEIGHT		
Overweight But Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight)	38.3 (35.6-41.0)	38.8 (36.3-41.4)
Obese	Respondents with a body mass index greater than or equal to 30 (obese)	21.2 (18.9-23.4)	22.6 (20.5-24.6)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese)	59.4 (56.7-62.2)	61.4 (58.7-64.1)

#### ADULT BEHAVIORAL RISK FACTOR TRENDS 2001-2005, 2006-2010

	CARDIOVASCULAR	Burleigh County 2001-2005 %	Burleigh County 2006-2010 %
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	3.1 (2.0-4.2)	3.6 ( 2.9- 4.2)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	4.5 ( 3.0- 5.9)	4.3 ( 3.6- 5.1)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	1.5 ( 0.8- 2.3)	2.5 ( 1.9- 3.0)
Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	7.1 ( 5.4- 8.9)	7.8 ( 6.8- 8.8)
	CHOLESTEROL		
Never Cholesterol Test	Respondents who reported never having a cholesterol test	21.6 (18.9-24.3)	19.1 (15.2-23.0)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years	26.8 (24.0-29.7)	22.8 (18.8-26.7)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	29.9 (26.9-32.9)	37.1 (33.3-40.8)
	COLORECTAL CANCER		
Fecal Occult Blood	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	86.8 (83.2-90.4)	87.6 (85.2-89.9)
Never Sigmoidoscopy	Respondents age 50 and older who reported never having had a sigmoidoscopy or colonoscopy	40.5 (32.4-48.5)	38.6 (35.1-42.2)
No Sigmoidoscopy in Past 5 Years	Respondents age 50 and older who reported not having a sigmoidoscopy or colonoscopy in the past five years.	55.2 (49.7-60.7)	49.9 (46.2-53.6)
	DIABETES		
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	6.0 (4.2-7.8)	5.9 ( 5.0- 6.8)
	FRUITS AND VEGETABLES		
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day	78.9 (76.2-81.6)	79.8 (76.7-82.8)

#### ADULT BEHAVIORAL RISK FACTOR TRENDS 2001-2005, 2006-2010

		GENERAL HEALTH	Burleigh County 2001-2005 %	Burleigh County 2006-2010 %
	Fair or Poor Health	Respondents who reported that their general health was fair or poor	3.9 (2.8-5.1)	4.6 ( 3.6- 5.5)
	Poor physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good	9.6 ( 7.9-11.3)	10.8 (9.3-12.4)
	Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good	12.2 (10.1-14.2)	9.6 (8.1-11.1)
	Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	5.5 (4.1-6.8)	6.0 (4.7-7.2)
1	Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	14.5 (12.7-16.3)	17.6 (15.8-19.4)
•		HEALTH CARE ACCESS		
	Health Insurance	Respondents who reported not having any form or health care coverage	10.2 ( 8.3-12.0)	7.7 ( 6.2- 9.2)
	Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	6.0 ( 4.3- 7.7)	6.5 ( 5.2- 7.8)
	No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	20.9 (18.5-23.2)	19.4 (17.1-21.7)
		HYPERTENSION		
	High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	21.4 (18.8-24.1)	24.3 (21.5-27.1)
		IMMUNIZATION		
	Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year	29.1 (23.7-34.5)	29.4 (25.8-33.0)
	Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	29.5 (23.9-35.0)	32.8 (29.0-36.7)
		INJURY		
	Seat Belt	Respondents who reported not always wearing their seatbelt	42.7 (36.8-48.6)	29.4 (26.2-32.5)

ADULT BEHAVIORAL RISK FACTOR TRENDS 2001-2005, 2006-2010

		ORAL HEALTH	Burleigh County 2001-2005 %	Burleigh County 2006-2010 %
	Dental Visit	Respondents who reported that they have not had a dental visit in the past year	27.6 (24.3-30.8)	21.7 (19.1-24.3)*
	Tooth Loss	Respondents who reported they had lost 6 or more permanent teeth due to gum disease or decay.	13.9 (11.5-16.3)	12.0 (10.4-13.6)
		PHYSICAL ACTIVITY		
24	Recommend Physical Activity	i i i i i i i i i i i i i i i i i i i		46.8 (42.7-51.0)
	No Leisure Physical Activity	Respondents who reported that they participated in no leisure time physical activity	5.9 ( 4.0- 7.8)	5.8 (4.1-7.5)
		TOBACCO		
	Current Smoking	Respondents who reported that they smoked every day or some days	19.8 (17.6-22.0)	14.6 (12.9-16.4)
		WOMEN'S HEALTH		
	Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years	22.9 (17.6-28.2)	25.0 (21.5-28.6)
	Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years	10.0 ( 6.3-13.7)	13.5 (9.2-17.8)
	* Approaching stat Shading - Statistica	istical signifcance ally different than state		

Crime data is obtained from the North Dakota web site for the North Dakota Bureau of Criminal Investigation. The number of crimes are reported to BCI by local law enforcement agencies. Some years some agencies may not report so the data is designated as incomplete.

#### Burleigh County

	2006	2007	2008	2009	2010	5 year	5-Year Rate
Murder	1	2	2	3	1	9	2.3
Rape	19	30	25	19	31	124	31.6
Robbery	10	12	10	12	17	61	15.5
Aggrevated Assualt	121	84	140	137	177	659	167.8
Violent crime	151	128	177	171	226	853	217.2
Burglary	308	303	262	252	219	1,344	342.2
Larceny	1,350	1,284	1,441	1,422	1,376	6,873	1750.1
Motor vehicle theft	109	110	107	121	99	546	139.0
Property crime	1,767	1,697	1,810	1,795	1,694	8,763	2231.4
Total	1,918	1,825	1,987	1,966	1,920	9,616	2448.6

North Dakota							
	2006	2007	2008	2009	2010	5 year	5-Year Rate
Murder	8	16	4	15	11	54	1.7
Rape	184	202	222	206	222	1,036	32.3
Robbery	69	68	71	102	85	395	12.3
Aggrevated Assualt	525	599	738	795	847	3,504	109.2
Violent crime	786	885	1,035	1,118	1,165	4,989	155.5
Burglary	2,364	2,096	2,035	2,180	1,826	10,501	327.4
Larceny	8,884	8,672	8,926	8,699	8,673	43,854	1367.2
Motor vehicle theft	966	878	854	825	763	4,286	133.6
Property crime	12,214	11,646	11,815	11,704	11,262	58,641	1828.2
Total	13 000	12 531	12 850	12 822	12 427	63 630	1983 8

#### CHILD HEALTH INDICATORS

Child Health Indicators are selected from Kid's Count data reported on the web. The descriptive line tells what the number present and the part of the description in parentheses tells what the number in parentheses means. If the year of the data is different than other data in the table, the year is footnoted.

	Burleigh County	Burleigh County	North Dakota
Child Indicators: Education	2001	2010	2010
Children Ages 3 to 4 in Head Start			
(Percent of eligible 3 to 4 year olds)*	186 (55)	212 (68)	2,607 (65)
Enrolled in Special Education Ages 3-			
21 (Percent of persons ages 3-21)	1,239 (11)	1342 (12)	13,170 (14)
Speech or Language Impaired			
Children in Special Education			
(Percent of all special education			
children)	385 (31)	403 (30)	3,298 (25)
Mentally Handicapped Children in			
Special Education (Percentage of			
total special education children)	133 (11)	81 (6.0)	763 (5.8)
Children with Specific Learning			
Disability in Special Education			
(Percentage of total special education			
children)	442 (36)	421 (31)	4,143 (32)
High School Dropouts (Dropouts per			
1000 persons ages 16-24)	68 (1.9)	49 (1.3)	701 (2.2)
Average ACT Composite Score	21.8	21.8	21.5
Average Expenditure per Student in			
Public School	\$5,054	\$8,412	\$9,812
*Year 2008 data			

Child Indicators: Economic Health	Burleigh County	Burleigh County	North Dakota
2010	2001	2010	2010
TANF Recipients Ages 0-19 (Percent			
of persons ages 0-19)	1,020 (5.5)	794 (4.0)	7,819 (4.7)
SNAP Recipients Ages 0-19 (Percent			
of all children ages 0-19)	2,604 (15)	3,744 (20)	37,553 (24)
Children Receiving Free and Reduced			
Price Lunches (Percent of total			
school enrollment	2,161 (18)	2,738 (22)	33,870 (33)
WIC Program Participants	1,705	2,287	24,331
Medicaid Recipients Ages 0-20			
(Percent of all persons ages 0-20)	3,625 (18	4,952 (23)	49,110 (27)
Median Income for Families with			
Children Ages 0-17 *	53062¥	\$66,579	\$61,035
Children Ages 0-17 Living in Extreme			
Poverty (Percent of children 0-17 for			
whom poverty is determined)*	584 (3.4)¥	1,064 (6.3)	10,100 (7.2)
*Year 2009 data; #2003; ¥2000			



Child Indicators: Families and	Burleigh County	Burleigh County	North Dakota
Child Care 2010	2001	2010	2010
Child Care Providers	297	356	3,176
Child Care Capacity (As percent of al			
children 0-13 in child care)	4,325	5,283	41,478
Mothers with a Child Ages 0-17 in	, i		
Labor Force (Percent of all mothers			
with a child ages 0-17)*	7,437 (84)¥	7685 (87)	57,059 (82)
Children Ages 0-17 Living in a Single			
Parent Family (Percent of all children			
ages 0-17)*	3,297 (19)¥	3,643 (21)	30,058 (21)
Children in Foster Care (Percent of			
children ages 0-18)	253 (1.4)	251 (1.3)	1,912 (1.2)
Children Ages 0-17 with Suspected			
Child Abuse or Neglect (Cases per			
100 children 0-17)	747 (4.4)	1,000 (5.7)	6,399 (4.4)
Children Ages 0-17 Impact by			
Domestic Violence (Percent of all			
children ages 0-17)	392 (2.3)	897 (5.1)	4,180 (2.9)
Births to Mothers with Inadequate			
Prenatal Care**	50 (5.8)	47 (4.4)	389 (4.3)
* Year 2009 data; ¥2000			

#### CHILD HEALTH INDICATORS

Child Indicators: Juvenile Justice 2010	Burleigh County 2001	Burleigh County 2010	North Dakota 2010
Children Ages 0-17 Referred to			
Juvenile Court (Percent of all children			
ages 0-17)	791 (9.8)ŧ	949 (13)	5,139 (8.1)
Offense Against Person Juvenile			
Court Referral (Percent of total			
juvenile court referral)	84 (5.8)ŧ	129 (6.8)	784 (8.2)
Alcohol-Related Juvenile Court			
Referral (Percent of all juvenile court			
referrals)	303 (21)ŧ	260 (14)	1,464 (15)
± 2003			

## **Appendix D – Prioritization of Community's Health Needs**

#### Tier 1 (Significant Needs)

- Elevated rate of excessive drinking (6 votes)
- Cost/adequacy of health insurance (6 votes)
- Concerns about availability of emergency services (6 votes)
- Cost of health care services (5 votes)
- Availability of resources to help elderly stay in their homes (5 votes)

#### <u>Tier 2</u>

- Elevated rate of severe housing problems (4 votes)
- Ineffective environmental health services (esp. sewage disposal) (4 votes)
- Elevated rate of violent crime (3 votes)
- Cost of prescription drugs (3 votes)
- Lack of transportation options (3 votes)

#### <u>Tier 3</u>

- Youth drug use and abuse (2 votes)
- Being able to meet needs of older population (2 votes)
- Lack of outreach/human touch to elderly and homebound residents (2 votes)
- Elevated rate of alcohol-impaired driving deaths (1 vote)
- Not enough mental health providers (1 vote)
- Decreased rates of preventive screening (diabetic & mammogram) (1 vote)
- Elevated rate of inadequate social support (1 vote)
- Not enough specialists (1 vote)

#### (No Votes)

- Elevated rate of low birthweight births
- Elevated rate of adult obesity
- Limited access to exercise opportunities
- Elevated rate of sexually transmitted infections
- Elevated teen birth rate
- Elevated rate of children in single-parent households
- Elevated rate of injury deaths
- Elevated rate of air pollution particulate matter
- Not able to get appointments/limited hours